

ACCOUNTING THEORY AND PRACTICE

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**ACCOUNTING
THEORY
AND
PRACTICE**

*Dedicated
to the Sacred Memory
of
My Parents*

PREFACE To the Fourth Edition

It is my esteemed pleasure to place the fourth edition of the book, *Accounting Theory and Practice*, among the students and other readers. The earlier edition of the book has been highly appreciated by the students and the academic community. This fact has further inspired me to make the revised edition a highly valuable and student-friendly text.

Accounting Theory and Practice is intended to provide students with a contemporary and comprehensive course of study in accounting theory and practice. Financial accounting and theory has been in a constant state of evolution and many developments have taken place in this vital discipline. It is also true that without proper understanding of the subject of accounting theory, one will have difficulty in understanding and resolving accounting issues and problems and formulating useful accounting theory to improve financial accounting and reporting. Many efforts have been made to construct accounting theory and to develop a single generally accepted accounting theory. But these attempts are based on different assumptions and methodologies. A universally accepted accounting theory would contribute greatly in the development of accounting principles and standards.

There is also a need to develop adequate knowledge about different elements of financial statements and their recognition and measurement and emerging significant issues in the area of accounting theory and practice.

The text, *Accounting Theory and Practice*, discusses thoroughly principal approaches in accounting theory construction; accounting postulates, concepts, and principles; elements of financial statements; accounting standards setting; global convergence and international financial reporting standards; emerging issues of importance in accounting and reporting practices; cash flow statement.

The book is divided into five parts consisting of twenty five chapters.

Part One: Fundamentals has three chapters—Accounting: An Overview; Accounting Postulates, Concepts and Principles; Accounting Theory: Formulation and Classifications.

Part Two: Elements of Financial Statements has seven chapters and focuses on Income Concepts; Revenues, Expenses, Gains and Losses; Assets; Liabilities and Equity; Depreciation Accounting and Policy; Inventory; Accounting and Reporting of Intangibles.

Part Three: Accounting Standards deals with Accounting Standards Setting; Global Convergence and International Financial Reporting Standards.

Part Four: Corporate Financial Reporting has twelve chapters and presents discussion on some financial reporting issues. The issues covered are Financial Reporting: An Overview; Conceptual Framework; Accounting for Changing Prices; Fair Value Measurement; Segment Reporting; Interim Reporting; Human Resource Accounting; Corporate Social Reporting; Value Added Reporting; Environmental Accounting and Reporting Financial Reporting in Not-for-profit Organizations and Foreign Currency Translation.

Part Five: Specialized Topics focuses on Cash Flow Statement.

The materials and discussion in the book have been presented in a highly organised and lucid manner and the book provides a clear and detailed analysis of the concepts, approaches, issues and developments in the area of accounting theory. Illustrations have been given about Indian Corporate Practices in some chapters of the book. ‘Corporate Insight’ and ‘Research Insight’ have been given to focus on relevant corporate news and research evidences. Thought provoking, real life questions and multiple choice questions have been given at the end of the chapters.

The book will be very useful for M.Com., M.B.A., M. Phil and Ph.D., students of Indian Universities and Management Institutes. The book will also be useful to those who are preparing for professional accounting examinations and who wish to update their knowledge with current accounting issues and research.

I am grateful to my friends and colleagues who have provided useful suggestions and comments in the course of writing this book.

I owe a special gratitude to my family for showing great patience and understanding during the entire process of completing this project.

PROFESSOR JAWAHARLAL

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PART ONE

Fundamentals

- **Chapter 1 : Accounting : An Overview**
- **Chapter 2 : Accounting Postulates, Concepts and Principles**
- **Chapter 3 : Accounting Theory : Formulation and Classifications**

Accounting : An Overview

EVOLUTION OF ACCOUNTING

Accounting has evolved and emerged, as have medicine, law, and most other fields of human activity, in response to the social and economic needs of society. Bookkeeping and Accounting appeared not as a chance phenomenon, but distinctly in response to a world need.¹ This is true not only of the days of Paciolo² but also important for presentday accounting survival. Sieveking, one of the few historians who have paid attention to the subject, says that bookkeeping developed as a direct result of the establishment of partnership on a large scale.

For centuries after the system of double entry bookkeeping appeared, accounting was without methodology or any form of theory. It was during the nineteenth century that a move from bookkeeping to accounting—a move away from the relatively simple recording and analysis of transactions toward a comprehensive accounting information system—was seen. The end of the nineteenth century was marked by the most extraordinary expansion of the business. Company form of organisation, a phenomenon common in business world, grew at a great speed. Books about business transactions were written, conventions were followed and accounting was recognised as a system of analysing and maintaining record about business transactions. In part, the new significance of accounting gained recognition because of separation between ownership and control and also due to diversification in ownership. The increased reliance on capital as a factor of production necessitated extensive record keeping but, finally, in the nineteenth century, a theoretical framework began to develop. This framework or methodology provided a technical means to measure, evaluate, and communicate information of an economic and financial nature.

Modern business has continuity—never-ending flow of economic activities. Therefore, accounting has grown to meet a social requirement and to guide the business and industry accordingly. Accounting is moving away from its traditional procedural base, encompassing record keeping and such related work as the preparation of budgets and final accounts, towards the adoption of a role which emphasises its social importance. Welsch and Anthony³ comment:

“The growth of business organisations in size, particularly publicly-held corporation, has brought pressure from stockholders, potential investors, creditors, governmental agencies, and the public at large, for increased financial disclosure. The public’s right to know more about organisations that directly and indirectly affect them (whether or not they are shareholders) is being increasingly recognised as essential. An open society is

one that has a high degree of freedom at the individual level and typically evidences an effective commitment to measuring the quality of life attained. These characteristics make it essential that the members of that society, be provided adequate, understandable, and dependable financial information from the major institutions that comprise it.”

Profit calculation now is no longer a simple comparison of financial values at the beginning and end of a transaction or series of transactions. It is now related to a complex set of allocations and valuations pertaining to the operational activities of a business enterprise. The concept of accountancy or accounting is now broader to include the description of the recording, processing, classifying, evaluating, interpreting and supplying of economic financial information for financial statement presentation and decision making purposes. In its tasks, accounting has been successful technically and methodologically.

Refinements in cost and management accounting came later in the twentieth century along with large-scale production and high capital investment. These developments created a need to allocate costs correctly over the units of production, and also to provide a measure of productivity and efficiency. Thereafter, cost accounting evolved naturally to meet recognized managerial requirements of pricing and costing for competitive purposes, and to the determination and setting forth of operational information for decision making purposes.

Traditionally, government accounting was linked to taxation and revenue control, and to the recording of and accountability for receipts and expenditures. The twentieth century development in budgeting gave a much larger scope to the area of government accounting. The budget became a managerial and policy-making instrument and developed into a mechanism for the forward planning of receipts and expenditures. Budgeting nowadays has developed in such a manner that it forms one of the bases of, and is closely associated with economic planning and programming.

The use of enterprise accounting for the purpose of macro (economic or national) accounting is largely a development of this century. For purpose of economic policy and economic planning, these national data—to a large extent derived from commercial data—have become of great importance. They have given rise to a new concept of macro accounting which has presented the professional with a new sphere of operations and perspective. Macro accounting has particular importance in helping to build the bridge between economics and accounting, and thus offers accounting significant scope to make a contribution towards macroeconomic policy.⁴

Accounting, thus, has gone through many phases: simple double entry bookkeeping, enterprise, government, and cost and management accounting and recently towards social accounting. These phases have been largely a product of changing economic and social environments. As business and society have become more complex over the years, accounting has developed new concepts and techniques to meet the ever increasing needs for financial information. Without such information, many complex economic developments and social and economic programmes might never have been undertaken.

DEFINITION OF ACCOUNTING

What is accounting? This basic question has never been answered precisely and many definitions of the term 'accounting' are available.

Back in 1941, The Committee on Terminology of the American Institute of Certified Public Accountants (AICPA) formulated the following definition,⁵ which was widely quoted for many years:

"Accounting is the art of recording, classifying and summarising in a significant manner and in terms of money, transactions and events which are, in part at least, of a financial character, and interpreting the results thereof."

In 1966, The American Accounting Association (AAA), in order to emphasise the broader perspective of accounting, provided the following definition of accounting:⁶

"Accounting is the process of identifying, measuring and communicating economic information to permit informed judgements and decisions by users of the information."

More recently, in 1970, the AICPA of USA defined accounting with reference to the concept of information:⁷

"Accounting is a service activity. Its function is to provide quantitative information primarily financial in nature about economic activities that is intended to be useful in making economic decisions."

The term, 'quantitative information' used in the above definition is wider in scope than financial or economic information. Both the definitions, AAA (1966), and AICPA (1970) emphasise on using the information for the purposes of decision making. The modern accounting, therefore, is not merely concerned with record keeping but also with a whole range of activities involving planning, control, decision making, problem solving, performance measurement and evaluation, coordinating and directing, auditing, tax determination and planning, cost and management accounting.

Both, managers within an organisation and interested outside parties use accounting information in making decisions that affect the organisation. The today's accounting focuses on the ultimate needs of those, who use accounting information, whether these users are inside or outside the business itself.

Goldberg⁸ has looked at the purpose of accounting as to examine and understand the relationships which make up the social environment. He explains as follow:

"What, ultimately, is the objective in accounting: Or, more properly perhaps, is there discernible a teleological purpose to which the main recognized functions of accountants as accountants are directed, whether implicitly or explicitly ? One possible answer is that it is control. But control of what ? Since the subject matter of the accounting processes is the activities of human beings, it may seem logical to say that it is control of human beings in some of their activities, in relation, say, to resources of various kinds. But this may be open to misunderstanding. Some people may, indeed, use the results of the accounting processes to impose control over the activities of other people. But this attitude may seem unsavoury to some people who might argue that it is a misuse of accounting rather than its use to make it an instrument of control over human beings. To such people it may be more consonant with egalitarian views to say that the accounting processes enable people to show others with whom they have dealings, especially, for example, employees and managers, how control over resources may be attained. But what does control over resources means if it does not mean at least exerting some strong influence over the activities of some people who have access to or influence over the use or location or movement of the resources in question? And, since resources of all kinds come from materials and forces of nature, would it be too much to say that the ultimate object of accounting is to help people to control materials, or, in generalization, to help man to control and/or manage the physical environment in which the species is placed?

But it may be claimed that man has a social environment also. The role of accounting here is not so much to enable people to control their social environment. We should recognize that each human being has a social environment composed of people. With this in mind, we could say that the purpose of accounting here is to assist people to examine and understand the relationships which make up this social environment. Hence, we might say that the fundamental purpose of accounting – in this broad, social sense – is to help all human beings to understand and live at peace with their social environment.

In recent years, however, it has become clear to many people that some parts of our natural environment cannot endure prolonged 'control' and continued exploitation without becoming impaired, that is, without undergoing reactions which are inhospitable to humans, and indeed, to other species of life. Hence, it might be even more appropriate to say that the purpose of accounting in carrying out their accounting functions should be to help people to examine and understand both their natural and their social environment so that they may live in peace with both.

Perhaps another way of putting it is this: By communicating to others information resulting from an honest 'dealing with', accountants seek to elicit the cooperation of all recognizable parties within the community concerned with or affected by the control of resources, in attaining a consensually acceptable allocation and use of those resources.^{9"}

Others have also given their definitions of accounting, but none has succeeded in clearly establishing the nature and scope of accounting. Each definition has merit in that it describes essentially what accountants do, but the boundaries are fuzzy.* Of the several available definitions of accounting, the one developed by American Accounting Association Committee is perhaps the best because of its focus on accounting as an aid to decision making.¹⁰

ACCOUNTING AND BOOKKEEPING

Bookkeeping should be distinguished from accounting which has been defined clearly above. Bookkeeping is a process of accounting concerned merely with recording transactions and keeping records. Bookkeeping is a small and simple part of accounting. Bookkeeping is mechanical and repetitive while dealing with business transactions.

Accounting, on the other hand, aims at designing a satisfactory information system which may fulfill informational needs of different users and decision makers. It primarily focuses on measurement, analysis, interpretation and use of information. It highlights the relevance and relationship of the information produced by the accounting process and effects of different accounting alternatives. It includes budgeting, strategic planning, cost analysis, auditing, income tax preparation, performance measurement, evaluation, control, preparing managerial reports for decision making, etc.

ACCOUNTING AS AN INFORMATION SYSTEM

The term 'system' may be defined as a set of elements which operate together in order to attain a goal. A system does not

consist of random sets of elements but elements which may be identified as belonging together because of a common goal. A system contains three activities: (i) input, (ii) processing of input, and (iii) output. A business organisation is regarded as an open system which has a dynamic interplay with its environment from which it draws resources and to which it consigns its product and services.

Accounting comprises a series of activities linked together among themselves. The accounting activities form a progression of steps, beginning with observing, then collecting, recording, analysing and finally communicating information to its users. In other words, accounting process involves the accumulation, analysis, measurement, interpretation, classification, and summarisation of the results of each of the many business transaction that affected the entity during the year. After this processing, accounting then transmits or projects messages to potential decision makers. The messages are in the form of financial statements, and the decision makers are the users. Accounting generally does not generate the basic information (raw financial data) rather the raw financial data result from the day to day transactions of the enterprise.

As an information system, accounting links an information source or transmitter (generally the accountant), a channel of communication (generally the financial statements) and a set of receivers (external users). When accounting is looked upon as a process of communication, it is defined as "the process" of encoding observations in the language of the accounting system, of manipulating the signs and statements of the systems and decoding and transmitting the result."¹¹

Figure 1.1 displays how accounting as an information system helps in business and economic decisions made by userdecision makers. In this service activity, as shown in Fig. 1.1, accounting

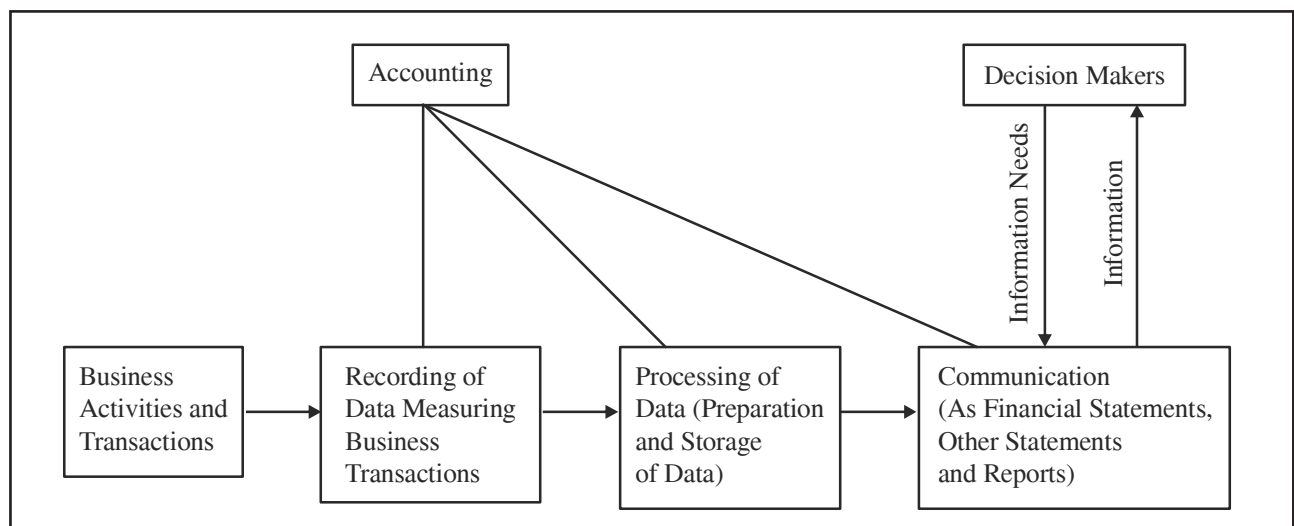


Fig. 1.1: Accounting as an Information System in Business and Economic Decisions.

*"A good definition, besides providing a description so that people have an understanding of what the object is, should establish clear cut boundaries. Any object that falls within the boundaries of the set is identified as a member of the set and any object that falls outside is then not a member of the set"— Vernon Kam, *Accounting Theory*, John Wiley and Sons, 1990, p. 33

assumes a link between business activities and transactions and the decision makers. First, accounting measures business activities and transactions through recording data. Second, the recorded data are processed and stored until needed. The processing can be done in such a manner or format as to become useful information. Alternatively, sometimes, the processed data are further processed or prepared to provide useful information to users. Thirdly, the processed and prepared information is communicated to users and decision makers in the forms of financial statements, other statements, reports, etc. In this accounting system, business transactions and activities are the input and statements and reports given to decision makers are the output.

Thus, as an information system accounting has a basic goal, *i.e.*, to provide information. In order to accomplish this goal, the accounting system should be designed to classify financial information on a basis suitable for decision making purposes and to process the tremendous quantities of data efficiently and accurately. Also, the information system must be designed to report the results periodically, in a realistic and concise format that is comprehensible to users who generally have only a limited accounting knowledge. Furthermore, the information system must be designed to accommodate the special and complex needs of internal management of the enterprise on a continuing basis. These internal needs extend primarily to the planning and control responsibilities of the managers of the enterprise. The information output is used by a group of decision makers, and therefore, it is evident that a decision-oriented information system should produce information which meets the needs of its users. It should be understood that information, in its most fundamental sense, is an economic good that assists in the allocation of society's resources—in the distribution of existing wealth and in the formation of productive capital.

ACCOUNTING AS A LANGUAGE

Accounting is often called the “language of business.” It is one means of communicating information about a business. As a new language is to be learnt to converse and communicate, so the accounting is to be learnt and practiced to communicate events about a business. Many accounting writers and researchers, accounting profession have referred to accounting as language of business. For instance, Yuji Ijiri¹² observes:

“As the language of business, accounting has many things in common with other languages. The various business activities of a firm are reported in accounting statements using accounting language, just as news events are reported in newspapers, in the English Language. To express an event in accounting or in English we must follow certain rules. Without following certain rules diligently, not only does one run the risk of being misunderstood but also risks a penalty for misrepresentation, lying or perjury. Comparability of statements is essential to the effective functioning of a language whether it is in English or in Accounting. At the same time, language has to be flexible to adopt to a changing environment.”

There are important similarities between a language and accounting. A language has broadly two components (*i*) symbols and (*ii*) rules, to make it purposeful. Symbols are the meaningful units or words identifiable in any language, known as linguistic objects and which are used to convey particular meaning or concepts. The arrangement of symbols in a systematic manner becomes a language. The rules which influence the usage and pattern of the symbols are known as grammar of language or grammatical rules.

In accounting too, there are two components (*i*) symbols and (*ii*) grammatical rules. In accounting, numerals and words and debits and credits are accepted as symbols which are unique to the accounting discipline.¹³ The grammatical rules in accounting refer to the general set of procedures followed to create all financial data for the business. Jain¹⁴ draws the similarities between grammatical rules of a language and accounting rules in the following words:

“The CPA (the expert in accounting) certifies the correctness of the application rules as does an accomplished speaker of a language for the grammatical correctness of the sentence. Accounting rules formalise the structure of accounting in the same way as grammar formalises the inherent structure of a natural language.”

Anthony and Reece¹⁵ also draw the following parallel between accounting and language:

“Accounting resembles a language in that some of its rules are definite whereas others are not. Accountants differ as to how a given event should be reported, just as grammarians differ as to many matters of sentence structure, punctuation and choice of words. Nevertheless, just as many practices are clearly poor English (language), many practices are definitely poor accounting. Languages evolve and change in response to the changing needs of society, and so does accounting.”

IS ACCOUNTING AN ART OR A SCIENCE?

The accounting literature has seen a long drawn debate over whether accounting is an art or science. Those who see accounting as an art suggest that the accounting skills necessary to be a good tradesmen should be taught and that a legalistic approach to accounting is required.

The advocates of accounting as science suggest instead the teaching of the accounting model of measurements to give the accounting students more conceptual insight into what conventional accrual accounting is attempting to do to meet the general objectives of serving users needs; and to provoke critical thought about the field and the dynamics of change in accounting. Certainly one can see that discussing accounting in terms of scientific method and the role of measurement theory in accounting potentially places accounting within the scientific domain.

In an important article and a follow-up book, Sterling a classical accounting writer has attempted to clarify the position of accounting relative to science. He points out that the arts rely

heavily on the personal interpretations of practitioners. For example, one painter might represent a model as having three eyes, whereas another painter might use the conventional two eyes – and a green nose – to represent the same subject. In science, however, he argues that there should be a relatively high amount of agreement among practitioners about the phenomena being observed and measured. (R.R. Sterling, *Toward a Science of Accounting*, Scholars Book Co., 1979).

Whether rigidly specified measurement procedures can be instituted to bring about a high degree of consensus among measurers in accounting is, of course, an extremely important question. However, scientists do not always come up with uniform measurements or interpretations of what they are measuring.¹⁶

Therefore, it can be said that science is not always exact and scientists do not always agree on the results of their work. Bearing that in mind, we can say, that accounting has the potential to become a science, an outcome that should be pleasing to all involved. However, accounting is largely concerned with the human element, which is less controllable than the physical phenomena measured in the natural sciences. Consequently, we can expect accounting, along with economics and other social sciences, to be less precise in its measurements and predictions than the natural sciences. It is a widely-held view that accounting is a fullfledged social science. Mautz¹⁷ argues:

“Accounting deals with enterprises, which are certainly social groups, it is concerned with transactions and other economic events which have social consequences and influence social relationships; it produces knowledge that is useful and meaningful to human beings engaged in activities having social implications; it is primarily mental in nature. On the basis of the guidelines available, accounting is a social science.”

USES AND USERS OF ACCOUNTING INFORMATION

Accounting is frequently viewed as a dry, cold, and highly analytical discipline with very precise answers that are either correct or incorrect. Nothing could be further from the truth. To take a simple example, assume two enterprises that are otherwise similar are valuing their inventory and cost of goods sold using different accounting methods. Firm A selects LIFO (last-in first-out) and Firm B selects FIFO (first-in, first-out) giving totally different but equally correct answers.

However, one might say that a choice among inventory methods is merely an “accounting construct” : the kinds of “games” accountants play that are solely of interest to them but have nothing to do with the “real world”. Once again this is totally incorrect. The LIFO versus FIFO argument has important income tax ramifications resulting – under LIFO – in a more rapid write-off of current inventory costs against revenues (assuming rising inventory prices), which generally means lower income taxes. Thus, an accounting construct has an important “social reality” : How much income tax is paid.¹⁸

Income tax payments are not the only social reality that accounting numbers affect. Here are some other examples :

(1) Income numbers can be instrumental in evaluating the performance of management, which can affect salaries and bonuses and even whether individual management members retain their jobs.

(2) Income numbers and various balance sheet ratios can affect dividend payments.

(3) Income numbers and balance sheet ratios can affect the firm’s credit standing and, therefore, the cost of capital.

(4) Different income numbers might affect the price of the firm’s securities if the securities is publicly traded and the market cannot “see through” the accounting methods that have been used.¹⁹

Accounting provides useful information about the activities of an entity to various individuals or groups for their use in making informed judgements and decisions. The users of accounting information can be broadly divided into three categories:

(1) Management or Managers.

(2) Users with Direct Financial Interest.

(3) Users with Indirect Financial Interest.

Figure 1.2 shows different users of accounting information and different decisions made by them.

(1) **Management:** Management is a group of people who are responsible for using the resources and managing the affairs of an entity to achieve the goals and objectives. Managers perform many managerial functions such as planning, controlling, directing, measuring, evaluating and taking corrective actions. Business managers need to decide continuously what to do, how to do it and whether the actual results tally the original plans and targets. Accounting provides timely and useful information to management for planning, control, performance measurement, decision making and for performing many activities and functions in the company. Due to this, management is one of the most important users of accounting information and a major function of accounting is to provide useful information to management.

(2) **Users with Direct Financial Interest:** The users who have direct financial interest in a company are existing and potential investors and creditors. These users do not participate in the actual management of the company but have interest in how a business has performed because they have invested or are thinking of investing in a company. Existing and potential investors are obviously interested in the past performance of a company and its earning potential and growth prospects in the future. For this, the company’s financial statements and other information should be analysed to decide and select a profitable investment opportunity.

Similarly, the existing and potential creditors require accounting information to make sound credit decisions, *i.e.*, whether to lend money to a company. The creditors are interested in knowing whether the company will have enough cash to pay interest charges and repay the debt at the due date. For this, the company’s liquidity and cash flow position should be analysed. Banks, finance companies, mortgage companies, investment companies, insurance companies, individual creditors and similar

other individuals and groups who lend money need accounting information to analyse a company's profitability, liquidity and financial position before making a loan to the company.

Besides the investors and creditors, there are other users such as employees, and suppliers who have direct financial interest in a company and accounting information as well. Employees decisions may be based on perceptions of a company's economic status acquired through financial statements. In particular, prospective and present employees may use the financial reports to assess risk and growth potential of a company, therefore job security and future promotional possibilities.

To suppliers, a business enterprise is a source of cash in the form of payment for goods or services supplied. Suppliers are

also interested in a company's ability to generate adequate cash flows for the payment of their goods and services, which in turn, can be decided on the basis of the company's financial statement.

(3) **Users with an Indirect Financial Interest:** There are some other users who have indirect interest in the business of a company or who use accounting information to help others having direct interest in a company's profitability and financial position. Such users are customers; taxation authorities; governmental and regulatory agencies; labour union; financial analysts and advisers; stock exchanges and brokers; underwriters; economists; planners; consumers' groups; general public and the financial press.

Customers may use financial statement data to forecast the likelihood and/or timing of a firm going bankrupt or being unable

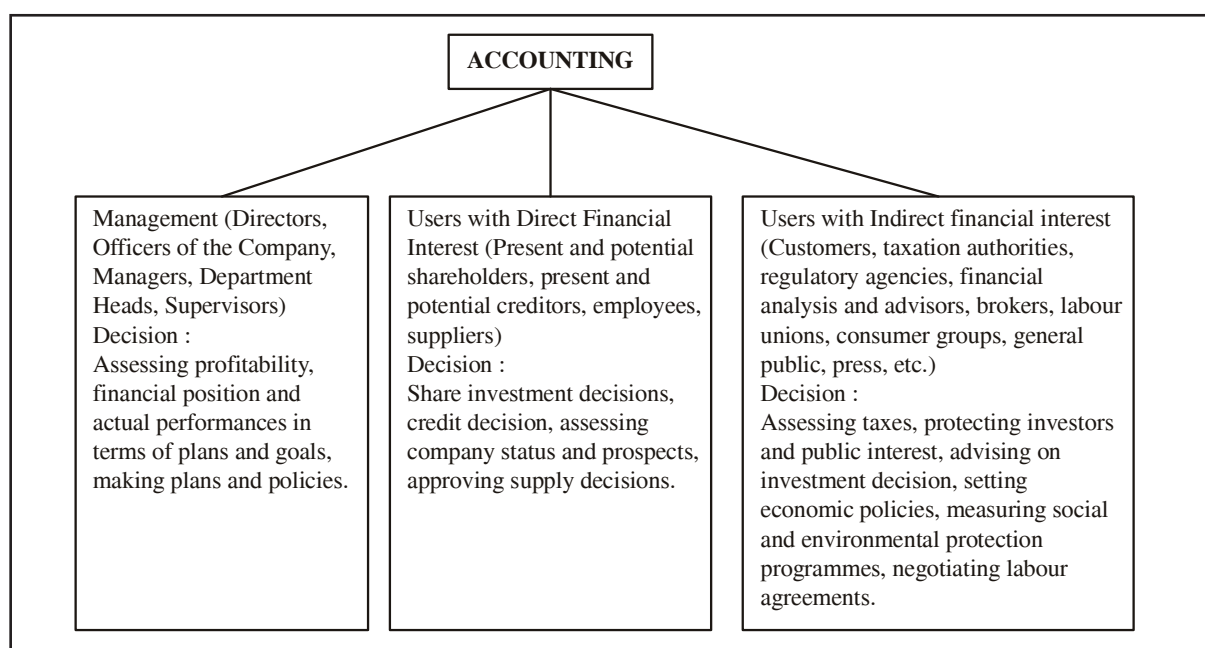


Fig. 1.2: Different Users of Accounting Information

to meet its commitments. This information may be important in estimating the value of a warranty or in predicting the availability of supporting services or continuing supply of goods over an extended period of time.

Taxation authorities require financial statements to ascertain tax liability of a company. Governmental and regulatory agencies are concerned with the financial activities of business organisations for purposes of regulation to protect the public interest. Labour Unions are also vitally interested in the stability and profitability of the organisation that hires them or in which the employees are working. Stockbrokers, financial analysts, investment advisors have an indirect interest in the financial performance and prospects of a company as they advise investors and creditors in their investment and lending decisions. Economic planners use accounting information to set economic policies, to forecast economic activities and to evaluate economic programmes undertaken in the country. The other users such as consumers' groups, economists, financial press and the general

public have become more concerned about business enterprises as well as with the effects that these enterprises have on the environment, social problems, inflation, and the quality of life.

FINANCIAL STATEMENTS

The end product of the financial accounting process is a set of reports that are called financial statements. The Ind AS1 titled 'Presentation of Financial Statements published in the Gazette of India' (Notification issued by Ministry of Corporate Affairs, dated 16th February 2015) contains the following narration on financial statements.

(1) Purpose of financial statements

Financial statements are a structured representation of the financial position and financial performance of an entity. The objective of financial statements is to provide information about the financial position, financial performance and cash flows of an entity that is useful to a wide range of users in making economic decisions. Financial statements also show the results of the

management's stewardship of the resources entrusted to it. To meet this objective, financial statements provide information about an entity's:

- (a) assets;
- (b) liabilities;
- (c) equity;
- (d) income and expenses, including gains and losses;
- (e) contributions by and distributions to owners in their capacity as owners; and
- (f) cash flows.

This information, along with other information in the notes, assists users of financial statements in predicting the entity's future cash flows and, in particular, their timing and certainty.

According to FASB (U.S.A.)'s SFAC No. 5 "Recognition and Measurement in Financial Statements of Business Enterprises":

"Financial statements are a central feature of financial reporting – a principal means of communicating financial information to those outside an entity. In external general purpose financial reporting, financial statement is a formal tabulation of names and amounts of money derived from accounting records that displays either financial position of an entity at a moment in time or one or more kinds of changes in financial position of the entity during a period of time. Items that are recognized in financial statements are financial representations of certain resources (assets) of an entity, claims to those resources (liabilities and owners' equity), and the effects of transactions and other events and circumstances that result in changes in those resources and claims. The financial statements of an entity are a fundamentally related set that articulate with each other and derive from the same underlying data." (1984, Para 5)

(2) Complete set of financial statements

A complete set of financial statements comprises:

- (a) a balance sheet as at the end of the period;
- (b) a statement of profit and loss for the period;
- (c) statement of changes in equity for the period;
- (d) a statement of cash flows for the period;
- (e) notes, comprising a summary of significant accounting policies and other explanatory information; and comparative information in respect of the preceding period as specified and
- (f) a balance sheet as at the beginning of the preceding period when an entity applies an accounting policy retrospectively or makes a retrospective restatement of items in its financial statements, or when it reclassifies items in its financial statements.

Although financial statements have essentially the same objectives as financial reporting, some useful information is better provided by financial statements and some is better provided, or can only be provided, by notes to financial statements or by supplementary information or other means of financial reporting:

- (a) Information disclosed in notes or parenthetically on the face of financial statements, such as significant accounting policies or alternative measures for assets or liabilities, amplifies or explains information recognized in the financial statements. That sort of information is essential to understanding the information recognized in financial statements and has long been viewed as an integral part of financial statements prepared in accordance with generally accepted accounting principles.
- (b) Supplementary information, such as disclosures of the effects of changing prices, and other means of financial reporting, such as management discussion and analysis, add information to that in the financial statements or notes, including information that may be relevant but that does not meet all recognition criteria." (SFAC No. 5, Recognition and Measurement in Financial Statements of Business Enterprises, FASB, 1984, Para 7)

(3) An entity shall present a single statement of profit and loss, with profit or loss and other comprehensive income presented in two sections. The sections shall be presented together, with the profit or loss section presented first followed directly by the other comprehensive income section.

(4) An entity shall present with equal prominence all of the financial statements in a complete set of financial statements.

(5) Many entities present, outside the financial statements, a financial review by management that describes and explains the main features of the entity's financial performance and financial positions, and the principal uncertainties it faces. Such a report may include a review of:

- (a) the main factors and influences determining financial performance, including changes in the environment in which the entity operates, the entity's, response to those changes and their effect, and the entity's policy for investment to maintain and enhance financial performance, including its dividend policy;
- (b) the entity's sources of funding and its targeted ratio of liabilities to equity; and
- (c) the entity's resources not recognized in the balance sheet in accordance with Ind ASs.

(6) Many entities also present, outside the financial statements, reports and statements such as environmental reports and value added statements, particularly in industries in which environmental factors are significant and when employees are regarded as an important user group. Reports and statements presented outside financial statements are outside the scope of Ind ASs.

(7) General features

Presentation of True and Fair View and compliance with Ind ASs.:

- (i) **Financial statements shall present a true and fair view of the financial positions, financial performance and**

cash flows of an entity. Presentation of true and fair view requires the faithful representation of the effects of transactions, other events and conditions in accordance with the definitions and recognition criteria for assets, liabilities, income and expenses set out in the *Framework*. The application of Ind ASs, with additional disclosure when necessary, is presumed to result in financial statements that present a true and fair view.

- (ii) An entity whose financial statements comply with Ind ASs shall make an explicit and unreserved statement of such compliance in the notes. An entity shall not describe financial statements as complying with Ind ASs unless they comply with all the requirements of Ind ASs.
- (iii) In virtually all circumstances, presentation of a true and fair view is achieved by compliance with applicable Ind ASs. Presentation of a true and fair view also requires an entity.
 - (a) to select and apply accounting policies in accordance with Ind AS 8, Accounting Policies, Changes in Accounting Estimates and Errors. Ind AS 8 sets out a hierarchy of authoritative guidance that management considers in the absence of an Ind AS that specifically applies to an item.
 - (b) to present information including accounting policies, in a manner that provides relevant, reliable, comparable and understandable information.
 - (c) to provide additional disclosures when compliance with the specific requirements in Ind ASs is insufficient to enable users to understand the impact of particular transactions, other events and conditions on the entity's financial position and financial performance.
- (iv) An entity cannot rectify inappropriate accounting policies either by disclosure of the accounting policies used or by notes or explanatory material.
- (v) In the extremely rare circumstances in which management concludes that compliance with a requirement in an Ind AS would be so misleading that it would conflict with the objective of financial statements set out in the *Framework*, the entity shall depart from that requirements in the manner set out in paragraph (vi) below if the relevant regulatory framework requires, or otherwise does not prohibit, such a departure.
- (vi) When entity departs from a requirement of an Ind AS in accordance with paragraph (v) above, it shall disclose:
 - (a) that management has concluded that the financial statements present a true and fair view of the entity's financial position, financial performance and cash flows;
 - (b) that it has complied with applicable Ind ASs, except that it has departed from a particular requirement to present a true and fair view;
 - (c) the title of the Ind AS from which the entity has departed, the nature of the departure, including the treatment that the Ind AS would require, the reason why that treatment would be so misleading in the circumstances that it would conflict with the objective of financial statements set out in the *Framework*, and the treatment adopted; and
 - (d) for each period presented, the financial effect of the departure on each item in the financial statements that would have been reported in complying with the requirement.
- (vii) When an entity has departed from a requirement of an Ind AS in a prior period, and that departure affects the amounts recognized in the financial statements for the current period, it shall make the disclosures set out in paragraph (vi)(c) and (d) above.
- (viii) Paragraph (vii) applies, for example, when an entity departed in a prior period from a requirement in an Ind AS for the measurement of assets or liabilities and that departure affects the measurement of changes in assets and liabilities recognized in the current period's financial statements.
- (ix) In the extremely rare circumstances in which management concludes that compliance with a requirement in an Ind AS would be so misleading that it would conflict with the objective of financial statements set out in the *Framework*, but the relevant regulatory framework prohibits departure from the requirement, the entity shall, to the maximum extent possible, reduce the perceived misleading aspects of compliance by disclosing:
 - (a) the title of the Ind AS in questions, the nature of the requirement, and the reason why management has concluded that complying with that requirement is so misleading in the circumstances that it conflicts with the objective of financial statements set out in the *Framework*; and
 - (b) for each period presented, the adjustments to each item in the financial statements that management has concluded would be necessary to present a true and fair view.
- (x) For the purpose of paragraphs (v) to (ix) above, an item of information would conflict with the objective of financial statement when it does not represent faithfully the transactions, other events and conditions that it either purports to represent or could reasonably be expected to represent and, consequently, it would be likely to influence economic decisions made by users of financial statements. When assessing whether complying with a specific requirement in an Ind AS would be so misleading

that it would conflict with the objective of financial statements set out in the *Framework*, management considers.

- (a) why the objective of financial statement is not achieved in the particular circumstances; and
- (b) how the entity's circumstances differ from those of other entities that comply with the requirement. If other entities in similar circumstances comply with the requirement, there is a rebuttable presumption that the entity's compliance with the requirement would not be so misleading that it would conflict with the objective of financial statements set out in the *Framework*.

COMPLEMENTARY NATURE OF FINANCIAL STATEMENTS

Financial statements of an entity individually and collectively contribute to meeting the objectives of financial reporting. Component parts of financial statements also contribute to meeting the objectives.

Each financial statement provides a different kind of information, and with limited exceptions the various kinds of information cannot be combined into a smaller number of statements without unduly complicating the information. Moreover, the information each provides is used for various purposes, and particular users may be especially interested in the information in one of the statements.

Financial statements interrelate (articulate) because they reflect different aspects of the same transactions or other events affecting an entity. Although each presents information different from the others, none is likely to serve only a single purpose or provide all the financial statement information that is useful for a particular kind of assessment or decision. Significant tools of financial analysis, such as rates of return and turnover ratios, depend on interrelationships between financial statements and their components.

Financial statements complement each other. For example:

- (a) Statements of financial position include information that is often used in assessing an entity's liquidity and financial flexibility, but a statement of financial position provides only an incomplete picture of either liquidity or financial flexibility unless it is used in conjunction with at least a cash flow statement.
- (b) Statements of earnings and comprehensive income generally reflect a great deal about the profitability of an entity during a period, but that information can be interpreted most meaningfully or compared with that of the entity for other periods or that of other entities only if it is used in conjunction with a statement of financial position, for example, by computing rates of return on assets or equity.
- (c) Statements of each flows commonly show a great deal about an entity's current cash receipts and payments, but a cash flow statement provides an incomplete basis for assessing prospects for future cash flows because it cannot show interperiod relationships. Many current cash receipts, especially from operations, stem from activities of earlier periods, and many

current cash payments are intended or expected to result in future, not current, cash receipts. Statements of earnings and comprehensive income, especially if used in conjunction with statements of financial position, usually provide a better basis for assessing future cash flow prospects of an entity than do cash flow statements alone.

(d) Statements of investments by and distributions to owners provide information about significant sources of increases and decreases in assets, liabilities, and equity, but that information is of little practical value unless used in conjunction with other financial statements, for example, by comparing distributions to owners with earnings and comprehensive income or by comparing investments by and distributions to owners with borrowings and repayments of debt.

(SFAC No. 5, Recognition and Measurement, 1984, Paras. 17-14.)

FACTORS INFLUENCING ACCOUNTING ENVIRONMENT

An understanding of financial accounting depends not only on delineation of accounting principles and features and objectives of accounting, but also on an understanding of the environment within which financial accounting operates and which it is intended to reflect.

To a large extent, corporate accounting and information disclosure practices are influenced by a variety of economic, social, and political factors. A model of the environmental influences is presented in Figure 1.3. These include the nature of enterprise ownership, the business activities of the enterprise, sources of finance and the stage of development of capital markets, the nature of the taxation system, the existence and significance of the accounting profession, the state of accounting education and research, the nature of the political system, the social climate, the stage of economic growth and development, the rate of inflation, the nature of the legal system, and the nature of accounting regulation. The nature of accounting systems at the country level will vary according to the relative influence of these environmental factors, such systems will, in turn, tend to reinforce established patterns of behavior.²⁰

Some significant factors influencing accounting system, rules and practices are as follows:

(1) **Economic and Social Factors** — Accounting operates in a socio-economic environment as a "service" function. The socio-economic activities and policies have a major bearing on accounting. As stated earlier, accounting has always been found adapting itself to the changing economic and social requirements of a society. When there is a drastic change in the political or economic system of the country, it is bound to change the objectives of accounting and financial reporting. In developing countries, the movement toward a market-oriented economy has necessitated a revision of financial reporting system. This revision in accounting and disclosure rules is considered essential for the success of economic reforms.



Fig. 1.3: Environmental Influence on Accounting Development

Source: Lee H. Radebaugh, Sidney J. Gray and Ervin L. Black, *International Accounting*, John Wiley and Sons, 2006, p. 16.

For example, the emergence of joint stock companies in the corporate world has led to the growth of a new group of people, namely, shareholders having an interest in the affairs of business enterprises but not engaging themselves in the management and control of those enterprises. Management and ownership are now separated and financial statements have become an important means for the provision of information to actual and potential shareholders.

Secondly, greater pressure on resources and concern with resource allocation between the major sectors of the economy led to demands to analyse and question the economic activities and effects of private and public sector organizations. Attention is now directed to issues such as the efficiency and effectiveness of business enterprises in the private and public sector, policies, legal rules and obligations relating to economic activities. There is a need for deliberate and coordinated actions by governments to spur economic development owing to scarcities of factors of production, income disparities, population pressures or other structural disequilibria identified by governments. Accordingly, governments may pursue direct action involving extensive economic planning and programming. Economic development planning can be referred to as a decision making process of a forward looking nature in which alternatives have to be measured, weighed, and outlined. An economic plan is a coherent whole of facts and figures indicating the most desirable courses of events. These economic and developmental requirements will influence the accounting system and information to be generated by it.

Thirdly, the wider recognition of social responsibility of business for the last few decades in the previous century has important implications for accounting and reporting practices. This has emphasized the efficient allocation of society's resources

and wealth. Further, due to socio-economic needs and compulsions, the concept of social responsibility has now become broader and includes employment generation, pollution control, civic amenities, protection of consumers interests, providing health and educational facilities, etc. Now, groups other than shareholders such as employees, local communities, social groups and the general public have interest in the accounting information. These are having vital influences on accounting and reporting.

(2) Legal and Statutory Requirements — Accounting, its methodology and practice are influenced strongly by requirements in Companies Acts and in legal and tax judgments. For example, in India the Companies Act has influenced greatly the preparation of accounts and reports by Indian Companies. This Act contains Schedule III relating to the preparation of profit and loss account and balance sheet. Amendments have been made in the Act from time to time with a view to improve accounting and reporting practices of Indian Companies. In other countries also, such as USA, UK, etc., laws on accounting and reporting are found. It is argued that the development of accounting should be promoted by appropriate laws and regulations on accounting. This would include laws that regulate the accounting profession, auditing laws that regulate financial reporting and accounting and tax-laws that affect accounting. In most developing countries, it is hard to visualize an orderly development of the accounting function without such legal help. In many developing countries where professional organizations exist, they are not too strong to develop and enforce their own standards of reporting and auditing. In some other countries there is no professional organization of any kind to guide and monitor accounting activities. Therefore, accounting and disclosure laws are framed to set forth accounting principles, methods and systems.

Companies' Acts in some countries set forth the economic significance, scope and content of financial statements, and the classification, valuation and other measurement procedures to be applied with sample reporting formats for industrial and commercial sectors. Other countries who are without effective legislation covering accounting and auditing standards and procedures, have accounting practices which vary at the behest of those who prepare the statements.

(3) Accounting Profession and Institutional Structures. — *Accounting* — its nature and growth—is greatly influenced by the professional institutes and accounting bodies operating in the country. In developed countries like USA and UK, the accounting institutes and accountants' bodies have been found since a long time. Therefore, in these countries, the accounting profession is highly developed. On the other hand, in most developing countries, the accounting profession is still in developing stage and has some drawbacks also. In India, the accounting profession is said to be developed and also there is well developed systems for accounting education. Yet, the profession has to meet emerging challenges of business and industry. The accounting needs (of developing countries) generally involve three main elements; (i) relevant accounting and auditing standards, (ii) effective training of accountants, and (iii) recognition of the accounting function as a tool for national economic development.

The accounting profession influences the institutions of a country and its accounting system. The way in which the profession is organised and society's attitudes towards accountants and auditors will tend to affect auditors' ability to influence or control the behaviour of companies and their reporting systems. The extent to which auditors are independent and their power relative to the companies which they audit are important. Whether auditors are seen as being independent, powerful professionals, or instead are seen as being under the control or influence of the companies they audit will affect the perceived value of financial statements, and this will happen even if these perceptions are wrong.²¹

There is an increasing awareness in most (developing) countries of the need for soundly functioning of accountancy institutes that set standards in accounting and auditing, design codes of practice, run training and educational programmes, give qualification tests and do research and exchange information with other accounting bodies. Extensive efforts should be made to build or strengthen an indigenous (local) profession in all countries. For this purpose, domestic regulations, laws and rules are needed. Regulations covering accountancy measurements and reporting may be designed and enforced by a government or by a semiprivate or private accounting association or institute. The existing institutional accountancy structures frequently suffer from insufficient professional interest, inadequate government encouragement, and lack of support and compliance by private and public institutions. In addition, a variety of professional accounting bodies may be organized without much substance

and influence.²² These may create problems in shaping a socially relevant financial accounting and reporting system.

(4) Corporate Financing System — Accounting rules and practices are influenced by financing system found in a country. Business enterprises are financed in different ways in different countries. The way in which a company is financed—debt or equity—affects accounting in a number of ways. If equity finance is more important than debt finance, accounting rules are more likely to be designed to provide relevant and forwardlooking information for investment decision purposes, made by the investors. If in a country debt finance is more popular, accounting may aim to protect the creditors and in this way accounting is likely to be conservative. The sophistication of investors and finance providers and the extent to which they depend upon financial statements for their economic decisions, influence accounting and disclosure rules.

Robert, Weetman and Gordon observe²³:

"From an accounting perspective, what is important is not only the size of the equity market but also its microstructure. The amount of active trading that occurs and the types of traders that exist, affect the level of demand for both financial information in general and for particular types of information. For example, if individual small shareholders are active investors then there will be more demand for financial statements oriented to relatively unsophisticated shareholders. If most shares are owned by a small number of pension funds or investment trusts more emphasis will probably be placed on investor-corporate relationships. Important concerns may then be protection of private shareholders and prevention of insider trading."

(5) International Factors — International factors are also bringing about changes in the environment that are creating harmonization in international accounting in contrast to the constraining influences operating at national levels. An evolutionary process of some complexity appears to be at work that is reflected in a growing number of international and regional influences. These include the activities of MNEs and intergovernmental organizations such as the United Nations (UN), the Organization of Economic Cooperation and Development (OECD), and the European Union. In the European context, the European Union is an especially significant influence in that any agreement on the harmonization of accounting and information disclosure eventually becomes legally enforceable through a process of implementation in the national laws of the member countries. Finally, the International Accounting Standards Board, an international organization dedicated to the convergence of accounting standards worldwide, is working hard to bridge the differences in accounting standards worldwide so that investors can make decisions based on common accounting standards and practices worldwide.

In addition, the influence of culture (i.e. societal or national values) has also been found on accounting practices and traditions in different countries.

According to Accounting Principles Board (USA), financial accounting is shaped to a significant extent by the environment, especially by:

- (1) The many uses and users which it serves.
- (2) The overall organisation of economic activity in society.
- (3) The nature of economic activity in individual business enterprises, and
- (4) The means of measuring economic activity.²⁴

Environmental conditions, restraints, and influences are generally beyond the direct control of businessmen, accountants and statement users. Needs and expectations of users of financial statements are a part of the environment that determines the type of information required of financial accounting. A knowledge of important classes of users, of their common and special needs for information, and of their decision processes is helpful in improving financial accounting information. On the relationship between environment and accounting, Enthoven observes:

“Accounting has passed through many stages.... These phases have been largely responses to economic and social environments. Accounting has adapted itself in the past fairly well to the changing demands of society. Therefore, the history of commerce, industry and government is reflected to a large extent in the history of accounting...? What is of paramount importance is to realize that accounting, if it is to play a useful and effective role in society, must not pursue independent goals... It must continue to serve the objectives of its economic environment. The historical record in this connection is very encouraging. Although accounting, generally, has responded to the needs of its surroundings, at times it has appeared to be out of touch with them.”²⁵

ACCOUNTING AND ECONOMIC DEVELOPMENT

Capital, although scarce, is needed for the economic development of a country. Capital formation in the form of domestic capital formation, foreign direct investment and/or foreign aid is necessary to increase gross national product (GNP). Therefore, in all developing countries, a high rate of capital formation is aimed to achieve objectives of development plans. Financial intermediaries such as commercial banks, development banks, investment and financial institutions, insurance, investment banks, etc., are needed to channelise savings and attract foreign investment to accelerate economic growth.

The growth of capital market is a prerequisite to stimulate and guide capital formation. Capital market helps in encouraging investment and providing vitality and dynamism to corporate organisations in the country. An efficient capital market helps the

investors and capital providers in getting information about investment opportunity, making sound investment decisions and to diversify and reduce risk. Belkaoui has observed that capital markets in developing countries are best characterised by thinness and poor management. As a result, the following consequences emerge:

1. The individual investor is reduced to financing his or her project out of their personal savings and to acting as the manager of the project.
2. The individual investor may shun risky investments and investments with long-term pay-off as a result of hampering the risk sharing fund of a financial market.
3. There is a lack of communication between the management and the shareholders leading the potential investor to be unsure of the price to pay and of the quality of the security.
4. The security's price is decomposed into fundamental value and noise. In the inefficient and thin capital markets of the developing countries, the lack of knowledge about the fundamental value of the security reduces the determination of the security price to “noise”. Investing in the capital market now has the equivalence of playing the lottery.²⁶

The working of capital markets, efficient allocation of resources and making of investment decisions require confidence among the investors and other segments about the corporate operation and functioning of capital market. Accounting plays a vital role in creating and sustaining the level of confidence needed for the success of capital market in a developing country. An adequate accounting system possessing the reliability and accuracy of the financial statements of business enterprises provides right climate of confidence for the functioning of capital markets.

The efficiency of capital markets, capital formation, efficient allocation of resources and economic development depend on the availability of financial information and financial reporting policies. Figure 1.4 shows the relationship among financial information disclosure, capital market efficiency and economic growth.

Gordian A. Ndubizu²⁷ explains the relationships depicted (a – g) as follows:

- (a) Accounting information disclosure minimizes the capital market uncertainty. This is accomplished through the disclosure of the value and risk of each asset traded on the capital market.
- (b) The reduced capital market uncertainty encourages more investors to buy and sell securities in the capital market. It has been documented that higher capital market uncertainty induces security buyers to under price high-quality security. Consequently the seller of such security will withdraw from the market, which reduces the size of the market.

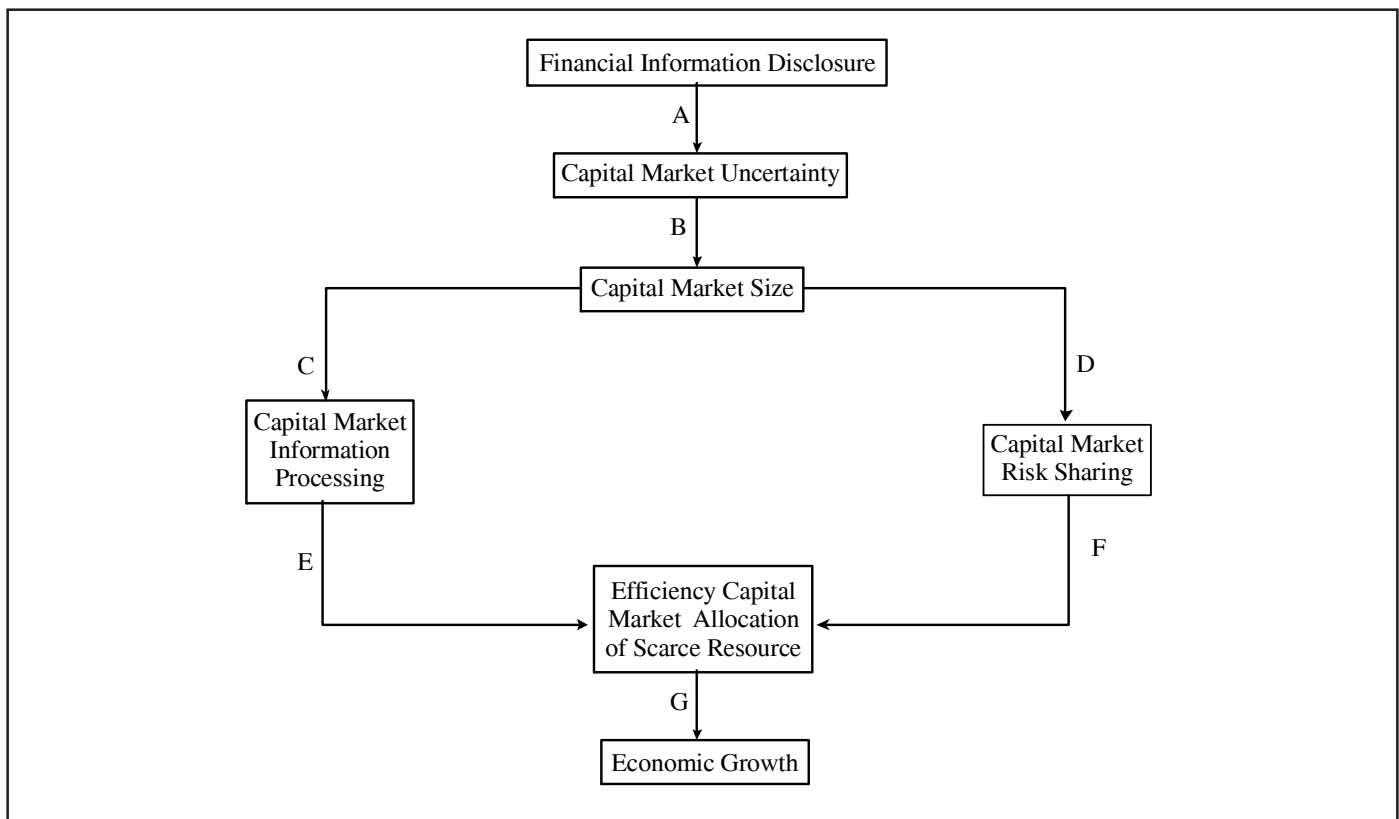


Fig. 1.4: The Role of Information in Economic Growth

Source : Gordian A. Ndubizu, "Accounting Disclosure Methods and Economic Development: A Criterion for Globalizing Capital Markets," *International Journal of Accounting Education and Research*, 27, 2 (1992), p. 153.

- (c) The capital market size affects both the market information processing (denoted *c*) risk sharing (denoted *d*). Other things being equal, the larger the capital market, the more efficient is the information processing. The capital market information processing generates the security prices. The security prices affect the ability of the capital market to efficiently allocate scarce resources (denoted *e*).
- (d) The larger the market portfolio, the smaller the market risk per asset is and the easier it is for investors to hold/purchase an efficient portfolio of securities. The optimal risk sharing leads to an efficient allocation of savings (denoted *f*).
- (g) The capital market helps in the development of savings which effect economic growth through investment. The capital market transfers the accumulated savings to the most efficient investment opportunity. This function of capital market stimulates economic growth.

REFERENCES

1. Maurice Moonitz and A.C. Littleton, *Significant Accounting Essays*, Englewood Cliffs: Prentice Hall, 1965, p. 12.
2. Franciscan Monk Paciolo is looked upon as the father of modern accounting, as his *Summa*, published in 1494 contained the first text on bookkeeping. Later on, bookkeeping spread throughout the world by a series of imitations of Paciolo.
3. Glenn A. Welsch and Robern N. Anthony, *Fundamentals of Financial Accounting*, Homewood: Richard D. Irwin, 1971, p. 19.
4. Dr. Adolf, J.H. Enthoven, *Accounting Education in Economic Development Management*, Amsterdam: North-Holland Publishing Company, 1981, p. 11.
5. Accounting Terminology Bulletin No. 1, *Review and Resume*, AICPA, 1953, Paragraph 9.
6. American Accounting Association, *A Statement of Basic Accounting Theory*, AAA, 1966, p. 1.
7. Accounting Principles Board, Statement No. 4, *Basic Concepts and Accounting Principles Underlying Financial Statements of Business Enterprises*, AICPA, 1970, para 40.
8. Louis Goldberg, *A Journey into Accounting Thought*, Routledge, 2001, pp. 322-323.
9. Louis Goldberg, *Ibid*.

10. Robert N. Anthony and James S. Reece, *Accounting Principles*, Richard D. Irwin, 1991, p. 8.
11. R.J. Chambers, *Accounting, Evaluation and Economic Behaviour*, Scholars Book Company, 1974, p. 184.
12. Yuji Ijiri, *Theory of Accounting Measurement*, Accounting Research Study No. 10, AAA, 1975, p. 14.
13. Daniel L. McDonald, *Comparative Accounting Theory*, Addison Welsley, 1972.
14. Trribhowan N. Jain, "Alternative Methods of Accounting and Decision Making," *The Accounting Review* (January 1973), p. 101.
15. Robert N. Anthony and James S. Reece, *Accounting Principles*, Richard D. Irwin, 1991, p. 14.
16. Jayne Godfry, Allan Hodgson, Scott Holmes and Ann Tarca, *Accounting Theory*, VIth Edition, 2006, John Wiley and Sono, p. 40.
17. R.K. Mautz, Accounting as a Social Science, *The Accounting Review* (April 1963), p. 319.
18. Richard Mattersich, Critique of Accounting: *Examination of the Foundations and Normative Structure of an Applied Science*, Quorum Books, 1995, pp. 41-58.
19. Harry I. Work, James L. Dodd and John J. Rozycki, *Accounting Theory, Conceptual Issues in a Political and Economic Environment*, VIIIth Edition, Sage Publications, 2013, p. 2.
20. Lee H. Radebaugh, Sidney J. Gray and Ervin L. Black, *International Accounting*, John Wiley and Sons, 2006, p. 15.
21. Clare Roberts, Paul Weetman and Paul Gordon, *International Financial Accounting*, Pearson Education, 2002, p. 23.
22. Adolf J.H. Enthoven, *Accounting Education in Economic Development*, North Holland Publishing Company, 1981, p. 24.
23. Clare Robert, Paul Weetman, Paul Gordon, *International Financial Accounting*, *ibid*, p. 21.
24. Accounting Principles Board, Statement No. 4, Basic Concepts and Accounting Principles Underlying Financial Statements of Business Enterprises, AICPA, 1970, para 42.
25. Adolf, J.H. Enthoven, *Accounting Systems in Third World Economies*, North Holland, 1977, p. 21.
26. Ahmed Riahi Belkaoui, *Accounting in Developing Countries*, Quorum Books, 1994, p. 96.
27. Gordian A. Ndubizu, Accounting Disclosure Methods and Economic Development: A Criterion for Globalizing Capital Markets, *International Journal of Accounting Education and Research* 27-2-1992, p. 153.
4. Discuss the role of accounting in the economic development of a country.
[M.Com., Delhi, 2009]
5. "Accounting systems operate within the economic, social and political framework, and have to be in tune with it." Explain clearly with the help of suitable illustrations how accounting has passed through different phases due to changing economic and social environment. [M.Com., Delhi]
6. "Since accounting operates in a socio-economic framework as a 'service' function, the socio-economic activities and policies have a major bearing on accounting structures and processes." In the light of above statement, explain how accounting systems are influenced by economic, social and legal environment.
7. "Accounting systems have to be in tune with economic and social environment." Discuss.
[M.Com., Delhi, 1992]
8. "The system of financial accounting and reporting is not static but responds to the environment in which it operates." Do you agree? Why or why not?
[M.Com., Delhi, 1996, 2011]
9. Describe how accounting has changed over the years in response to the changes in economic, legal and social environment.
[M.Com., Delhi, 2003]
10. "Accounting, when born, must not have been more dismal a subject than economics. At least, it has never been condemned as a 'Gospel of Mammon'. But later on, as all know, when economics aimed at the welfare of man as a member of society, it got popular and now occupies an important position among the social sciences. Accounting, however, continued serving individuals. As a result, the economist acted as thinker, author and orator on society; whereas the accountant worked at the desk, shabbily dressed and sincere to his master. The secret of this significant development in and popularity of economics lay in its social approach to the well-being of man, which unfortunately accounting failed to have." Do you agree with this statement? Why or why not ?
11. Explain the role of accounting profession in influencing the accounting system in a country.
12. What is a corporate financing system? How does it influence accounting environment?
13. Describe the relationship between accounting and economic development.
14. How does accounting information influence economic growth in a country?
15. Explain the factors influencing accounting environment in a country
[M. Com., Delhi, 2013]
16. "The purpose of accounting is to assist people to examine and understand the relationships which make up the social environment." Louis Goldberg. Comment on this statement.
17. "The purpose of accountants in carrying out their accounting functions should be to help people to examine and understand both their natural and their social environment so that they may live in peace with both" Louis Goldberg, Examine this statement.

QUESTIONS

1. Explain as to how accounting has changed overtime.
2. "Accounting is an information system." Explain this statement.
3. "An understanding of accounting and an ability to evaluate the information it produces, requires the understanding of the environment within which accounting operates and which it is intended to reflect." In the light of this statement, discuss the environmental factors influencing accounting development.

18. "By communicating to others information resulting from an honest dealing with, accountants seek to elicit the cooperation of all recognizable parties within the community concerned with or affected by the control of resources, in attaining a consensually acceptable allocation and use of those resources." Louis Goldberg. Do you agree with the above statement ? Why? or why not?
19. Is Accounting an art or a science ? Explain.
20. "Accounting is a fullfledged social science." Comment.
21. Define financial statements. What are included in financial statements ?
22. What are general features of financial statements as given in Ind AS 1 'Presentation of Financial Statement'.
23. Explain the importance of AS 1 'Presentation of Financial Statements' for Indian Companies.
24. "Is accounting theory really necessary for the making of accounting rules?" Discuss.
25. Every year, Financial Times, U.K. comes out with a much awaited ranking of colleges and universities around the world. Although there has been much criticism of the methodology that the newspaper employs as well as some "fudging" of the numbers by universities in their response to the questionnaire, this report represents what one calls a "social reality." What is meant by "social reality" and why does this college and university ranking provide a good analogy for accounting?
26. "Accounting rule making should only be concerned with information for investors and creditors." Discuss this statement.



Accounting Postulates, Concepts and Principles

POSTULATES, CONCEPTS AND PRINCIPLES

Terms such as postulates, concepts, principles (and others like procedure, rule) are widely used, but with no general agreement as to their precise meaning. Often, what is referred to as

‘postulates’ by some writers, are called as ‘concepts’ or ‘principles’ by other writers and *vice versa*. To give a few examples of such conflicting opinions, the views of Belkaoui, Anthony and Reece, Wolk *et al.* and Financial Accounting Standards Board (USA), The Institute of Chartered Accountants of India have been given below:

ACCOUNTING POSTULATES

1. Entity Postulate
2. Going Concern Postulate
3. Unit of Measure Postulate
4. Accounting Period Postulate

ACCOUNTING PRINCIPLES

1. Cost Principle
2. Revenue Principle
3. Matching Principle
4. Objectivity Principle
5. Consistency Principle
6. Full Disclosure Principle
7. Conservatism Principle
8. Materiality Principle
9. Uniformity and Comparability Principle

Source: Ahmed Belkaoui, *Accounting Theory*, Thomson Learning, 2000, pp. 161-182

ACCOUNTING CONCEPTS

1. Money Measurement	7. Conservatism
2. Entity	8. Realisation
3. Going Concern	9. Matching
4. Cost	10. Consistency
5. Dual-Aspect	11. Materiality
6. Accounting Period	

Source: Robert N. Anthony and James S. Reece, *Accounting Principles*, Richard D. Irwin 1991, p. 22

POSTULATES

1. Going Concern
2. Time Period
3. Accounting Entity
4. Monetary Unit

PRINCIPLES	
Input-oriented Principles I. General Underlying Rules of Operation 1. Recognition 2. Matching II. Constraining Principles 1. Conservatism 2. Disclosure 3. Materiality 4. Objectivity (also called Verifiability)	Output-oriented Principles I. Applicable to Users 1. Comparability II. Applicability to Preparers 1. Consistency 2. Uniformity
Source: Harry I. Wolk, James L. Dodd and John J. Rozycki, <i>Accounting Theory, Conceptual Issues in a Political and Economic Environment</i> , Sage, 2013, p. 148.	

FUNDAMENTAL CONCEPTS OF ACCOUNTING	
A. Assumptions of Accounting 1. Separate-entity assumption. 2. Continuity assumption. 3. Unit-of-measure assumption. 4. Time-period assumption.	B. Principles of Accounting 1. Cost Principle 2. Revenue Principle 3. Matching Principle 4. Full-disclosure Principle
Source: Financial Accounting Standards Board, USA, Statement of Financial Accounting Concepts No. 6, Elements of Financial Statements, December 1985.	
Note: Financial Accounting Standards Board (FASB) USA refers to assumptions and principles of accounting as 'Concepts of Accounting'.	

FUNDAMENTAL ACCOUNTING ASSUMPTIONS	
1. Going Concern 2. Consistency, and 3. Accrual	
CONSIDERATIONS IN THE SELECTION OF ACCOUNTING POLICIES	
1. Prudence 2. Substance over Form, and 3. Materiality	
Source: AS 1, Disclosure of Accounting Policies, issued by Accounting Standards Board of the Institute of Chartered Accountants of India in 1979	

Thus, it can be observed that finding a precise terminology has always been one of the most difficult task in accounting. Further, the lack of agreement about their precise meaning has affected, to some extent, the attempts made towards developing a theory for financial accounting.

The purpose of this chapter is not to engage the readers on a debate of suitable terminology but to explain something which are widely accepted as of greatest importance and widest applicability, whether as postulates, concepts or principles. But before this, an attempt has been made to define the terms postulates, concepts and principles.

Postulates

Accounting postulates are basic assumptions concerning the business environment. They are generally accepted as self-evident truths in accounting. Postulates are established or general truths which do not require any evidence to prove them. They are the propositions taken for granted. As basic assumptions, postulates cannot be verified. They serve as a basis for inference and a foundation for a theoretical structure that consists of propositions derived from them. Postulates in accounting are few in numbers and stem from the economic and political environments

as well as from the customs and underlying viewpoints of the business community.

Balkaoui¹ defines accounting postulates:

“as self-evident statements or axioms, generally accepted by virtue of their conformity to the objectives of financial statements, that portray the economic, political, sociological and legal environment in which accounting must operate.”

American Institute of Certified Public Accountants (USA) observes:

“Postulates are few in numbers and are the basic assumptions on which principles rest. They necessarily are derived from the economic and political environment and from the modes of thought and customs of all segments of the business community. The profession, however, should make clear their understanding and interpretation of what they are, to provide a meaningful foundation for the formulation of principles and the development of rules or other guides for the application of principles in specific situations.”²

According to Hendriksen³:

“Postulates are basic assumptions or fundamental propositions concerning the economic, political, and sociological environment in which accounting must operate. The basic criteria are that (1) they must be relevant to the development of accounting logic, that is, they must serve as a foundation for the logical derivation of further propositions, and (2) they must be accepted as valid by the participants in the discussion as either being true or providing a useful starting point as an assumption in the development of accounting logic. It is not necessary that the postulates be true or even realistic. For example, the assumption in economics of a perfectly competitive society has never been true, but has provided useful insights into the working of the economic system. On the other hand, an assumption of a monopolistic society leads to different conclusions that may also be useful in an evaluation of the economy. The assumptions that provide the greatest degree of prediction may be more useful than those that are most realistic.”

Concepts

Accounting concepts are also self-evident statements or truths. Accounting concepts are so basic that people accept them as valid without any questioning. Accounting concepts provide the conceptual guidelines for application in the financial accounting process, *i.e.*, for recording, measurement, analysis and communication of information about an organisation. These concepts provide help in resolving future accounting issues on a permanent or a longer basis, rather than trying to deal with each issue on an adhoc basis. The concepts are important because they (a) help explain the “why” of the accounting (b) provide guidance when new accounting situations are encountered and (c) significantly reduce the need to memorise accounting procedures when learning about accounting.⁴

Principles

Accounting principles or concepts are not laws of nature. They are broad areas developed as a way of describing current accounting practices and prescribing new and improved practices.

Accounting principles are general decision rules derived from the accounting concepts. According to AICPA (USA), principle means “a general law or rule adopted or professed as a guide to action; a settled ground or basis of conduct or practice.” Principles are general approaches used in the recognition and measurement of accounting events. Accounting principles are characterised as ‘how to apply’ concepts. Anthony and Reece⁵ Comment:

“Accounting principles are manmade. Unlike the principles of physics, chemistry and other natural sciences, accounting principles were not deducted from basic axioms, nor can they be verified by observation and experiment. Instead, they have evolved. This evolutionary process is going on constantly; accounting principles are not eternal truths.”

A principle is an explanation concisely framed in words to compress an important relationship among accounting ideas into a few words. Principles are concise explanations. Accounting principles do not suggest exactly as to how each transaction will be recorded. This is the reason that accounting practices differ from one enterprise to another. The differences in accounting practices is also due to the fact that GAAP (generally accepted accounting principles) provides flexibility about the recording and reporting of business transactions.

According to Wolk *et al.*⁶, accounting principles can be divided into two main types:

- (i) Input-oriented principles are broad rules that guide the accounting function. Input-oriented principles can be divided into two general classifications: general underlying rules of operation and constraining principles. As their names imply, the former are general in nature while the latter are geared to certain specific types of situations.
- (ii) Output-oriented principles involve certain qualities or characteristics that financial statements should possess if the input-oriented principles are appropriately executed.

Accounting principles influence the development of accounting techniques which are specific rules to record specific transactions and events in an organisation.

To explain the relationship among postulates, concepts and principles and accounting techniques, the example of cost principle is taken. Cost concept or principle emphasises historical cost which is based on going concern postulate and the going concern postulate says that there is no point in revaluing assets to reflect current values since the business is not going to sell its assets.

Accounting concepts or principles serve two purposes: First, they provide general descriptions of existing accounting practices. In doing this, they serve as guidelines in accounting. Thus, after learning how the concepts or principles are applied in a few situations, one can develop the ability to apply them in different

situations. Second, these concepts or principles help accountants analyse unfamiliar situations and develop procedures to account for those situations.

Larsen and Miller⁷ observe:

“As business practices have evolved in recent years, however, these concepts have become less useful as guides for accountants to follow in dealing with new and different types of transactions. This problem has occurred because the concepts are intended to provide general descriptions of current accounting practices. In other words, they describe what accountants currently do; they do not necessarily describe what accountants should do. Also, since these concepts do not identify weaknesses in accounting practices, they do not lead to major changes or improvements in accounting practices.”

DESCRIPTIVE AND PRESCRIPTIVE ACCOUNTING CONCEPTS

Larsen and Miller⁸ have expressed the opinion that sets of concepts differ in how they are developed and used. In general, when concepts are intended to describe current practice, they are developed by looking at accepted specific practices, and then making some general rules to encompass them. Such concepts are known as ‘Descriptive Accounting Concepts’ and are developed using bottomup approach. This bottom-up approach is diagrammed in Figure 2.1 which shows the arrows going from the practices to the concepts. The outcome of the process is a set of general rules that summarize practice and that can be used for

education and for solving some new problems. For example, this approach leads to the concept that assets are recorded at cost. However, these kinds of concepts often fail to show how new problems should be solved. For example, the concept that assets are recorded at cost does not provide much direct guidance for situations in which assets have no cost because they are donated to a company by a local government. Further, because these concepts are based on the presumption that current practices are adequate, they do not lead to the development of new and improved accounting methods. To continue the example, the concept that assets are initially recorded at cost does not encourage asking the question of whether they should always be carried at that amount.

In contrast, if concepts are intended to prescribe improvements in accounting practices, they are likely to be designed by a top-down approach (Figure 2.2). The top-down approach starts with broad accounting objectives. The process then generates broad concepts about the types of information that should be reported and known as ‘Prescriptive Accounting Concepts’. Finally, these concepts should lead to specific practices that ought to be used. The advantage of this approach is that the concepts are good for solving new problems and evaluating old answers; its disadvantage is that the concepts may not be very descriptive of current practice. In fact, the suggested practices may not be in current use.

Accounting bodies and standard setters like ASB (India), ASB (UK), FASB (USA), IASB, etc., generally use a top-down approach to develop conceptual framework and to resolve accounting and reporting issues.

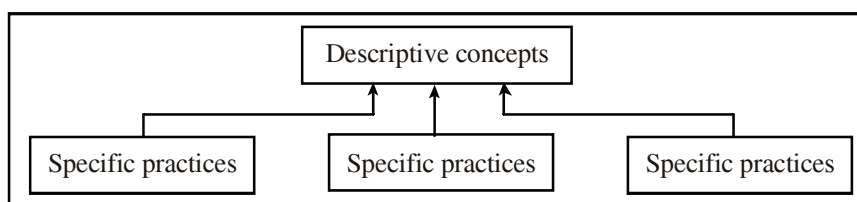


Fig. 2.1: A “Bottom-up” Process of Developing Descriptive Accounting Concepts

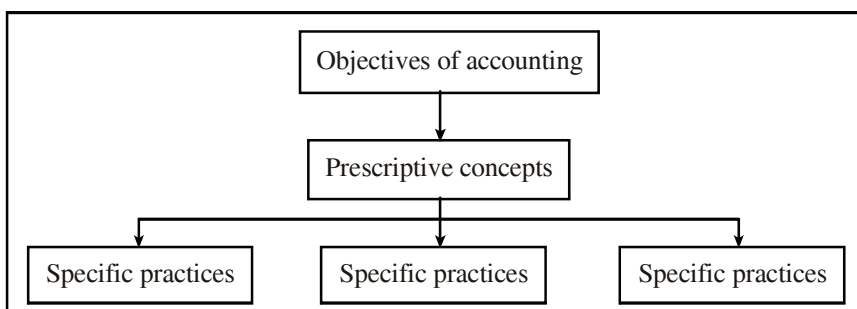


Fig. 2.2: A “Top-down” Process of Developing Prescriptive Accounting Concepts

ACCOUNTING POSTULATES

(1) **Entity Postulate:** The entity postulate assumes that the financial statements and other accounting information are for the specific business enterprise which is distinct from its owners. Attention in financial accounting is focused on the economic activities of individual business enterprises. Consequently, the analysis of business transactions involving costs and revenue is expressed in terms of the changes in the firm's financial conditions. Similarly, the assets and liabilities devoted to business activities are entity assets and liabilities. The transactions of the enterprise are to be reported rather than the transaction of the enterprise's owners. This concept therefore, enables the accountant to distinguish between personal and business transactions. The concept applies to sole proprietorship, partnerships, companies, and small and large enterprises. It may also apply to a segment of a firm, such as division, or several firms, such as when interrelated firms are consolidated.

The assumption of a business entity somewhat apart and distinct from the actual persons conducting its operations, is a concept which has been greatly deplored by some writers and staunchly defended by others. The distinction between the business entity and outside interests is a difficult one to make in practice in those business in which there is a close relationship between the business and the people who own it. In the case of small firms where the owners exert daytoday control over the affairs of the business and personal and business assets are intermingled, the definition of the business activity is more difficult for financial as well as managerial accounting purposes.

However, in the case of a company, the distinction is often quite easily made. A company has a separate legal entity, separate from persons who own it. One possible reason for making distinction between the business entity and the outside world is the fact that an important purpose of financial accounting is to provide the basis for reporting on stewardship. Owners, creditors, banks and others entrust funds to management and management is expected to use these funds effectively. Financial accounting reports are one of the principal means to show how well this responsibility, or stewardship, has been discharged. Also, one entity may be a part of a larger entity. For example, a set of accounts may be prepared for different major activities within a large organisation, and still another set of accounts may be prepared for the organisation as a whole.

(2) **Going Concern or Continuity Postulate:** The going concern postulate simply states that unless there is evidence to the contrary, it is assumed that the firm will continue indefinitely. As a result, under ordinary circumstances, reporting liquidation values for assets and equities is in violation of the postulate. However, the continuity assumption is simply too broad to lead to any kind of a choice among valuation systems, including historical cost. Because of the relative permanence of enterprises, financial accounting is formulated assuming that the business will continue to operate for an indefinitely long period in the future. Past experience indicates that continuation of operations

is highly probable for most enterprises although continuation cannot be known with certainty. An enterprise is not viewed as a going concern, if liquidation appears imminent.

The going concern concept justifies the valuation of assets on a non-liquidation basis and it calls for the use of historical cost for many valuations. Also, the fixed assets and intangibles are amortised over their useful life rather than over a shorter period in expectation of early liquidation.

The significance of going concern concept can be indicated by contrasting it with a possible alternative, namely, that the business is about to be liquidated or sold. Under the later assumption, accounting would attempt to measure at all times what the business is currently worth to a buyer; but under the going concern concept, there is no need to do this, and it is in fact not done. Instead, a business is viewed as a mechanism for creating value, and its success is measured by the difference between the value of its outputs (*i.e.*, sales of goods and service) and the cost of resources used in creating those outputs.

Ind AS 1 titled 'Presentation of Financial Statement', issued on 16th February, 2015 observes:

"When preparing financial statements, management shall make an assessment of an entity's ability to continue as a going concern. An entity shall prepare financial statements on a going concern basis unless management either intends to liquidate the entity or to cease trading, or has no realistic alternative but to do so. When management is aware, in making its assessment, of material uncertainties related to events or conditions that may cast significant doubt upon the entity's ability to continue as a going concern, the entity shall disclose those uncertainties. When an entity does not prepare financial statement on a going concern basis, it shall disclose that fact, together with the basis on which it prepared the financial statements and the reason why the entity is not regarded as a going concern. (Paragraph 25)

In assessing whether the going concern assumption is appropriate, management takes into account all available information about the future, which is at least, but is not limited to, twelve months from the end of the reporting period. The degree of consideration depends on the facts in each case. When an entity has a history of profitable operations and ready access to financial resources, the entity may reach a conclusion that the going concern basis of accounting is appropriate without detailed analysis. In other cases, management may need to consider a wide range of factors relating to current and expected profitability, debt repayment schedules and potential sources of replacement financing before it can satisfy itself that the going concern basis is appropriate." (Paragraph 26)

(3) **Money Measurement Postulate:** A unit of exchange and measurement is necessary to account for the transactions of business enterprises in a uniform manner. The common denominator chosen in accounting is the monetary unit. Money is the common denominator in terms of which the exchangeability of goods and services, including labour, natural resources, and capital, are measured. Money measurement concept holds that

accounting is a measurement and communication process of the activities of the firm that are measurable in monetary terms. Obviously, financial statements should indicate the money used.

Money measurement concept implies two limitations of accounting. First, accounting is limited to the production of information expressed in terms of a monetary unit; it does not record and communicate other relevant but nonmonetary information. Accounting does not record or communicate the state of chairman's health, the attitude of the employees, or the relative advantage of competitive products or the fact that the sales manager is not on speaking terms with the production manager. Accounting therefore does not give a complete account of the happenings in a business or an accurate picture of the condition of the business. Accounting information is perceived as essentially monetary and quantified, while nonaccounting information is non-monetary and nonquantified. Although accounting is a discipline concerned with measurement and communication of activities, it has been expanding into areas previously viewed as qualitative in nature. In fact, a number of empirical studies refer to the relevance of nonaccounting information compared with accounting information.

Secondly, the monetary unit concept concerns the limitations of the monetary unit itself as a unit of measure. The primary characteristics of the monetary unit—purchasing power, or the quantity of goods or services that money can acquire—is of concern. Traditionally, financial accounting has dealt with this problem by stating that this concept assumes either that the purchasing power of the monetary unit is stable over time or that the changes in prices are not significant. While still accepted for current financial reporting, the stable monetary unit concept is the object of continuous and persistent criticisms.

(4) **Time Period Postulate:** Business, as well as virtually every form of human and animal activity, operates within fairly rigidly specified periods of time. The financial accounting provides information about the economic activities of an enterprise for specified time periods that are shorter than the life of the enterprise. Normally, the time periods are of equal length to facilitate comparisons. The time periods are usually twelve months in length. Some companies also issue quarterly or half yearly statements to shareholders. They are considered to be interim, and essentially different from annual statements. For management use, statements covering shorter periods such as a month or week may be prepared. The time period idea is, nevertheless, somewhat artificial because it creates definite segments out of what is a continuing process. For business entities, the time period is the calendar or business year. As a result, of course, financial reports contain statements of financial condition, earnings, and funds flow over a year's time or a portion thereof. Since the year is a relatively short time in the life of most enterprises, the time period postulate has led to accrual accounting and to the principles of recognition and matching under historical costing.

Dividing business activities into specific time periods creates a number of measurement problems in financial accounting such

as allocation of cost of an asset to specific periods, determining income and costs associated with long term contracts covering several accounting periods, treatment of research and development costs, etc. Accounting measurements must be resolved in the light of particular circumstances. There is no easy, general solution. The accountant and manager rely upon their experience, knowledge, and judgement to come to the appropriate answer.

ACCOUNTING CONCEPTS AND PRINCIPLES

(1) **Cost Principle:** The cost principle requires that assets be recorded at their exchange price, *i.e.*, acquisition cost, or historical cost. Historical cost is recognised as the appropriate valuation basis for recognition of the acquisition of all goods and services, expenses, costs and equities. In other words, an item is valued at the exchange price at the date of acquisition and shown in the financial statements at that value or an amortised portion of it. For accounting purposes, business transactions are normally measured in terms of the actual prices or costs at the time the transaction occurs. That is, financial accounting measurements are primarily based on exchange prices at which economic resources and obligations are exchanged. Thus, the amounts at which assets are listed in the accounts of a firm do not indicate what the assets could be sold for. However, some accountants argue that accounting would be more useful if estimates of current and future values were substituted for historical costs under certain conditions. The extent to which cost and value should be reflected in the accounts is central to much of the current accounting controversy.

The historical cost concept implies that since the business is not going to sell its assets as such, there is little point in revaluing assets to reflect current values. In addition, for practical reasons, the accountant prefers the reporting of actual costs to market values which are difficult to verify. By using historical costs, the accountant's already difficult task is not further complicated by the need to keep additional records of changing market value. Thus, the cost concept provides greater objectivity and greater feasibility to the financial statements.

(2) **Dual-Aspect Principle:** This principle lies at the heart of the whole accounting process. The Accountant records events affecting the wealth of a particular entity. The question is—which aspect of this wealth are important? Since an accounting entity is an artificial creation, it is essential to know to whom its resources belong or what purpose they serve. It is also important to know what kind of resources it controls, *e.g.*, cash, buildings or land. Accounts recording systems have therefore developed so as to show two main things (a) the source of wealth and (b) the form it takes.

Suppose Mr. X decides to establish a business and transfers ₹ 1000 from his private bank account to a separate business account. He might record this event as follows:

Business entity records

<i>Liabilities</i>	₹	<i>Assets</i>	₹
<i>Source of Wealth</i>		<i>Form of Wealth</i>	
X's Capital	1,000	Cash at Bank	1,000

Clearly the source of wealth must be numerically equal to the form of wealth. Since they are simply different aspects of the same things, *i.e.*, in the form of an equation: S (sources) must equal F (forms).

Moreover, any transaction or event affecting the wealth of entity must have two aspects recorded in order to maintain the equality of both sides of the accounting equation. If business has acquired an asset, it must have resulted in one of the following:

- (a) Some other asset has been given up.
- (b) The obligation to pay for it has arisen.
- (c) There has been a profit, leading to an increase in the amount that the business owes to the proprietor or
- (d) The proprietor has contributed money for the acquisition of asset.

This does not mean that a transaction will affect both the source and form of wealth. There are four categories of events affecting the accounting equation:

<i>Liabilities</i>	₹	<i>Assets</i>	₹
<i>Source of Wealth</i>		<i>Form of Wealth</i>	
X's Capital	800	Cash	800

It is essential to appreciate why both sides of the equation decrease. By taking out cash, X automatically reduces his supply of private finance to the business and by the same amount.

<i>Source of Wealth</i>	₹	<i>Form of Wealth</i>	₹
X's Capital	800	Stocks	300
		Cash	500
	800		800

The two aspects of this transaction are not in the same direction but compensatory, an increase in stocks offsetting a decrease in cash.

<i>Source of Wealth</i>	₹	<i>Form of Wealth</i>	₹
X's Capital	600	Stocks	300
Y's Capital	200	Cash	500
	800		800

If however, X gives Y ₹ 200 in cash privately and Y then puts it into the business, both sides of equation would be affected, Y's capital of ₹ 200 being balanced by an extra ₹ 200 in cash, X's capital remaining at ₹ 800.

(3) **Accrual Principle:** According to Financial Accounting Standards Board (USA), "accrual accounting attempts to record

- (a) Both sources and forms of wealth increase by the same amount.
- (b) Both sources and forms of wealth decrease by the same amount.
- (c) Some forms of wealth increase while others decrease without any change in the source of wealth
- (d) Some sources of wealth increase while others decrease without any change in the form in which wealth is held.

The example given above illustrates category (a) since the commencing transaction for the entity results in the source of wealth and form of wealth, cash, both increasing from zero to ₹ 1000. By contrast, X might decide to withdraw ₹ 200 cash from the business. Then financial positions of business entity would result:

Suppose now that Mr. X buys stocks of goods for ₹ 300 with the available cash. His supply of capital does not change, but the composition of the business assets does,

Similarly sources of wealth also may be affected by a transaction. Thus, if X gives his son Y, ₹ 200 share in the business by transferring part of his own interest, the effect is as follows:

the financial effects on an enterprise of transactions and other events and circumstances that have cash consequences for the enterprise in the periods in which those transactions, events and circumstances occur rather than only in the periods in which cash is received or paid by the enterprise. Accrual accounting is concerned with the process by which cash expended on resources

and activities is returned as more (or perhaps less) cash to the enterprise, not just with the beginning and end of that process. It recognises that the buying, producing, selling and other operations of an enterprise during a period, as well as other events that affect enterprise performance, often do not coincide with the cash receipts and payments of the periods.”

A business enterprise's economic activity in a short period seldom follows the simple form of a cycle from money to productive resources to product to money. Instead, continuous production, extensive use of credit and longlived resources, and overlapping cycles of activity complicate the evaluation of periodic activities. As a result, non-cash resources and obligations change in time periods other than those in which money is received or paid. Recording these changes is necessary to determine periodic income and to measure financial position. This is the essence of accrual accounting.

Thus, accrual accounting is based not only on cash transactions but also on credit transactions, barter exchanges, changes in prices, changes in the form of assets or liabilities, and other transactions, events, and circumstances that have cash consequence for an enterprise but involve no concurrent cash movement. Although it does not ignore cash transactions, accrual accounting is primarily accounting for non-cash assets, liabilities, revenues, expenses, gains and losses.

(4) Conservatism Principle: Conservatism, from a preparer's if not a standard setter's orientation, is defined here as the attempt to select “generally accepted” accounting methods that result in any of the following: (a) slower revenue recognition, (b) faster expense recognition, (c) lower asset valuation, (d) higher liability valuation. This principle is often described as “anticipate no profit, and provide for all possible losses.” This characterisation might be viewed as the reactive version of the minimax managerial philosophy, *i.e.*, minimise the chance of maximum losses. The concept of accounting conservatism suggests that when and where uncertainty and risk exposure so warrant, accounting takes a wary and watchful stance until the appearance of evidence to the contrary. Accounting conservatism does not mean to intentionally understate income and assets; it applies only to situations in which there are reasonable doubts. For example, inventories are valued at the lower of cost or current replacement value.

In its applications to the income statement, conservatism encourages the recognition of all losses that have occurred or are likely to occur but does not acknowledge gains until actually realised. The procedure of reducing inventory values when market has declined below cost but the failure to countenance “write-ups” under reverse conditions can be attributed to conservatism. The early amortisation of intangible assets and the restrictions against recording appreciation of assets have also, at least to some extent, been motivated by Conservatism.

Conservatism concept is very vital in the measurement of income and financial position of a business enterprise. The accountant avoids the recognition and measurement of value changes and income until such time as they may be evidenced

readily. This concept may result in stating net income and net assets at amounts lower than would otherwise result from applying the pervasive measurement principles. This concept is extremely difficult to standardise or regulate. It may vary from entity to entity, depending on the particular attitudes of the different accountants and managers concerned. This concept is defended due to the uncertainty of the future, which in turn raises doubts about the ultimate realisability of unrealised value increments. It is argued that accountants are practical men who have to deal with practical problems, and so they have a tendency to avoid the somewhat speculative area of accounting for unrealised gains. They have also inherited role of acting as a curb on the enthusiasm of businessmen who want to report to ownership as successful story as possible. Also, traditional accounting reports are intended primarily for stewardship purposes, a function which incurs no legal obligation to report beyond the facts of realised transaction.

(5) Matching Principle: The matching concept in financial accounting is the process of matching (relating) accomplishments or revenues (as measured by the selling prices of goods and services delivered) with efforts or expenses (as measured by the cost of goods and services used) to a particular period for which the income is being determined. This concept emphasises which items of cost are expenses in a given accounting period. That is, costs are reported as expenses in the accounting period in which the revenue associated with those costs is reported. For example, when the sales value of some goods is reported as revenue in a year, the cost of that goods would be reported as an expense in the same year.

Matching concept needs to be fulfilled only after realisation (accrual) concept has been completed by the accountant; first revenues are measured in accordance with the realisation concept and then costs are associated with these revenues. Costs are matched with revenues, not the other way around. The matching process, therefore, requires cost allocation which is significant in historical cost accounting. Past (historical) costs are examined and, despite their historic nature, are subjected to a procedure whereby elements of cost regarded as having expired service potential are allocated or matched against relevant revenues. The remaining elements of costs which are regarded as continuing to have future service potential are carried forward in the historical balance sheet and are termed as assets. Thus, the balance sheet is nothing more than a report of unallocated past costs waiting expiry of their estimated future service potential before being matched with suitable revenues.

The most important feature of the matching concept is that there should be some positive correlation between respective revenues and costs. There is, however, much difficulty inherent in this exercise because of the subjectiveness of the cost allocation process which results from estimating the existence of unexpired future service potential in the historic costs concerned. A variety of allocation practices is available, and each one is capable of producing different cost aggregates to match against revenues (the main areas of difficulty affecting inventory valuation and fixed assets depreciation policies). Matching is, therefore, not as

easy or as straight forward as it looks, and consequently much care and expertise is required to give the allocated figures sufficient credibility to satisfy their users.

(6) **Consistency Principle:** This principle requires that once an organisation has decided on one method, it should use the same method for all subsequent transactions and events of the same nature unless it has sound reason to change methods. If accounting methods are frequently changed, comparison of its financial statements for one period with those of another period would be difficult. The consistent use of accounting methods and procedures over time will check the distortion of profit and loss account and balance sheet and the possible manipulation of these statements. Consistency is necessary to help external users in comparing financial statements of a given firm over time and in making their decisions.

(7) **Materiality Principle:** Materiality concept implies that the transactions and events that have material or insignificant effects, should not be recorded and reported in the financial statements. It is argued that the recording of insignificant events cannot be justified in terms of its subsequent poor utility to users.

There is no agreement as to the meaning of materiality and what can be said to be material or immaterial events and transactions. It is for the preparer of accounts to interpret what is and what is not material. Probably the materiality of an event or transaction can be decided in terms of its impact on the financial position, results of operations, changes in the financial position of an organisation and on evaluations or decisions made by users.

(8) **Full-disclosure Principle:** Disclosure refers to the presentation of relevant financial information both inside and outside the main body of the financial statements themselves, including methods employed in financial statements where more than one choice exists or an unusual or innovative selection of methods arises. The principal outside categories include:

- Supplementary financial statement schedules.
- Disclosure in footnotes of information that cannot be adequately presented in the body of financial statements themselves.
- Disclosure of material or major post-statement events in the annual report.
- Forecasts of operations for the forthcoming year.
- Management's analysis of operations in the annual report.

The concept of full disclosure requires that a business enterprise should provide all relevant information to external users for the purpose of sound economic decisions. This concept implies that no information of substance or of interest to the average investors will be omitted or concealed from an entity's financial statements.

The concept of full disclosure has been further discussed in Chapter 13 "Financial Reporting: An Overview".

GENERALLY ACCEPTED ACCOUNTING PRINCIPLES

General purpose financial statements prepared by the business enterprises communicate the results of the business operations during the financial year and the state of financial affairs as at the end of the financial year. These financial statements are used by the investors, lenders and others in taking their economic and business decisions connected with the dealings with such enterprises. The users who use such information and rely on such data have a right to be assured that the data are reliable, free from bias and inconsistencies, whether deliberate or not. In this task, GAAP plays a vital role and financial accounting information can be meaningful only when prepared according to some agreedon principles and procedures, *i.e.*, Generally Accepted Accounting Principles.

The phrase "Generally Accepted Accounting Principles" (GAAP) is a technical accounting term that encompasses the conventions, rules and procedures necessary to define accepted accounting practices at a particular point in time. It includes not only broad guidelines of general application, but also detailed practices and procedures. Those conventions, rules and procedures provide a standard to measure presentations in the financial statements. GAAP are the ground rules for financial reporting. These principles provide the general framework in determining what information is presented in the financial statements and how the information is to be presented. The phrase "GAAP" encompasses the basic objectives of financial reporting as well as numerous broad concepts and many detailed rules. Accounting Principle Board⁹ of USA states:

"Generally accepted accounting principles incorporate the consensus at a particular time as to which economic resources and obligations should be recorded as assets and liabilities by financial accounting, which changes in assets and liabilities should be recorded, when these changes are to be recorded, how the assets and liabilities and changes in them should be measured, what information should be disclosed and which financial statements should be prepared."

GAAP guide the accounting profession in the choice of accounting techniques and in the preparation of financial statements in a way considered to be good accounting practice. GAAP are simply guides to action and may change overtime. They are not immutable laws like those in the physical sciences. Sometimes specific principles must be altered or new principles must be formulated to fit changed economic circumstances or changes in business practices. In response to changing environments, values and information needs, GAAP are subject to constant examination and critical analysis. Changes in the principles occur mainly as a result of the various attempts to provide solutions to emerging accounting problems and to formulate a theoretical framework for the accounting discipline. Accounting principles originate from problem situations such as changes in the law, tax regulations, new business organisational arrangements, or new financing or ownership techniques. In

response to the effect such problems have on financial reports, certain accounting techniques or procedures are tried. Through comparative use and analysis, one or more of these techniques are judged most suitable, obtain substantial authoritative support and are then considered a generally accepted accounting principle. Walgenbach *et al.*,¹⁰ comments:

“Because no basic natural accounting law exists, accounting principles have developed on the basis of their usefulness. Consequently, the growth of accounting is more closely related to experience and practice than to the foundation provided by ultimate law. As such, accounting principles tend to evolve rather than be discovered, to be flexible rather than precise and to be subject to relative evaluation rather than be ultimate or final.”

Similarly APB Statement No. 4 observes:

“Present generally accepted accounting principles are the result of an evolutionary process that can be expected to continue in the future.... Generally accepted accounting principles change in response to changes in the economic and social conditions, to new knowledge and technology, and to demand of users for more serviceable financial information. The dynamic nature of financial accounting—its ability to change in response to changed conditions—enables it to maintain and increase the usefulness of the information it provides.”¹¹

In India, Organisations like Accounting Standards Board (ASB), Institute of Chartered Accountants of India, Ministry of Corporate Affairs (Government of India), Securities and Exchange Board of India (SEBI), Institute of Costs Accountants of India, Institute of Company Secretaries, Stock Exchange, and the literature each publishes—are instrumental in the development of most accounting principles. In USA, Financial Accounting Standards Board (FASB), American Institute of Certified Public Accountants (AICPA), Securities and Exchange Commission (SEC), Internal Revenue Service and the American Accounting Association are instrumental in the formulation of accounting principles.

The authority of accounting principles rests on their general acceptance by the accounting profession. The general acceptability of accounting principles is not decided by a formal vote or survey of practising accountants and auditors. An accounting principle must have substantial authoritative support to qualify as generally accepted. Reference to a particular accounting principle in authoritative accounting literature constitute substantive evidence of its general acceptance.

SELECTION OF ACCOUNTING PRINCIPLES

Generally Accepted Accounting Principles are primarily relevant to financial accounting. In management accounting, the main objective of using GAAP is to help management in making decision, and in operating effectively and therefore, in the area of management accounting it is frequently useful to depart from accounting principles used in financial accounting. On many occasions, financial accounting data are reassembled or altered

to be most useful in solving internal business problems and in making decision. Similarly, different accounting principles may need to be used for financial reporting purposes and income tax reporting purposes. That is, accounting principles useful for determining taxable income under the income tax regulations may differ from the accounting principles used for determining income acceptable for financial reporting, business reporting purposes. The considerations which guide the selection of accounting principles for financial reporting purposes are as follows¹²:

(1) **Accurate Presentation:** One of the criteria for assessing the usefulness of accounting information is accuracy in presentation of the underlying events and transactions. This criterion may be used by the firm as a basis for selecting accounting principles and methods. For example, assets have been defined as resources having future service potential and expenses defined as a measurement of the cost of services consumed during the period. In applying the accuracy criterion, the firm would select the inventory cost flow assumption and depreciation method that most accurately measure the amount of services consumed during the period and the amount of services still available at the end of period. As a basis for selecting an accounting principle, this approach has at least one serious limitation. It is difficult to know accurately the services consumed and the service potential remaining. Without this information, the accountant cannot ascertain which accounting principles lead to the most accurate presentation of the underlying events. This criterion can serve only as a normative criterion toward which the development and selection of accounting principles should be directed.

(2) **Conservatism:** In choosing among alternative generally acceptable principles, the firm may select the set that provides the most conservative measure of net income. Considering the uncertainties involved in measuring benefits received as revenues and services consumed as expenses, some have suggested that a conservative measure of earnings should be provided. Conservatism implies that those methods should be chosen that minimize cumulative reported earnings. That is, expenses should be recognised as quickly as possible and the recognition of revenues should be postponed as long as possible. This reporting objective, for example, would lead to selecting an accelerated depreciation method, selecting the LIFO cost flow assumption if periods of rising prices are anticipated, expensing research development cost in the year incurred.

(3) **Profit Maximization:** A reporting objective having an effect opposite to conservatism may be employed in selecting among alternative generally accepted accounting principles. Somewhat loosely termed reported profit maximization, this criterion suggests the selection of accounting principles that maximize cumulative reported earnings. That is revenue should be recognized as quickly as possible, and the recognition of expense should be postponed as long as possible. For example, the straight-line method of depreciation would be used, and when periods of rising prices were anticipated, the FIFO cost flow assumption would be selected. The use of profit maximization as

a reporting objective is an extension of the notion that the firm is in business to generate profits, and it should present as favourable a report on performance as possible within currently acceptable accounting methods. Some firm's managers whose compensation and salary depends in part on reported earnings, prefer larger reported earnings to smaller. Profit maximization is subject to a similar criticism as the use of conservatism as a reporting objective. Reporting income earlier under the profit maximization criterion must mean that smaller income will be reported in some later period.

(4) **Income Smoothing:** A final reporting objective that may be used in selecting accounting principles is income smoothing. This criterion suggests selecting accounting methods that result in the smoothest earnings trend over time. Advocates of income smoothing suggest that if a company can minimize fluctuations in earnings, the perceived risk of investing in shares of its stock will be reduced and, all else being equal, its stock price will be higher. It is significant to note that this reporting criterion suggests that net income, net revenues and expenses individually, is to be smoothed. As a result, the firm must consider the total pattern of its operations before selecting the appropriate accounting principles and methods. For example, the straight-line method of depreciation may provide the smoothest amount of depreciation expense on a machine over its life. If, however, the productivity of the machine declines with age so that revenues decrease in later years, net income using the straight-line method may not provide the smoothest net income stream.

Due to the flexibility permitted in selecting accounting principles, it is generally now required that business enterprises will disclose the accounting principles used in preparing financial statements, either in a separate statement or as a note to the principal statements.

Although a business firm can use different accounting principles for different purposes, this does not necessarily mean that business enterprises may keep more than one set of records to satisfy the different requirements. In most cases, certain items taken for financial accounting purposes may have to be omitted and certain other items may have to be included for determining taxable income and tax liability. Even if an organisation maintains different sets of records and books, one for financial reporting purposes and the other for income tax reporting purposes, this practice cannot be said to be illegal or unethical. In fact, there is nothing wrong or illegal about keeping separate records to fulfil separate needs, so long as all the records and books are open to examination by the appropriate parties. However, as stated earlier, business enterprises attempt to meet the different requirements of shareholders and investors (through financial reporting) and tax authorities (through tax reporting) using the same set of data.

DISCLOSURE OF ACCOUNTING POLICIES

Ind AS 1 'Presentation of Financial Statement', issued in February, 2015, makes the following provisions on disclosure of accounting policies for the Indian companies.

(1) As entity shall disclose in the summary of significant accounting policies:

- (a) the measurement basis (or bases) used in preparing the financial statements, and
- (b) the other accounting policies used that are relevant to an understanding of the financial statements.

(2) It is important for an entity to inform users of the measurement basis or bases used in the financial statements (for example, historical cost, current cost, net realizable value, fair value or recoverable amount) because the basis on which an entity prepares the financial statement significantly affects users' analysis. When an entity uses more than one measurement basis in the financial statement, for example when particular classes of assets are revalued, it is sufficient to provide an indication of the categories of assets and liabilities to which each measurement basis is applied.

(3) In deciding whether a particular accounting policy should be disclosed, management considers whether disclosure would assist users in understanding how transactions, other events and conditions are reflected in reported financial performance and financial position. Disclosure of particular accounting policies is especially useful to users when those policies are selected from alternatives allowed in Ind ASs. An example is disclosure of a regular way purchase or sale of financial assets using either trade date accounting or settlement date accounting (see Ind AS 109, Financial Instruments). Some Ind ASs specifically require disclosure of particular accounting policies, including choices made by management between different policies they allow. For example, Ind AS 16 requires disclosure of the measurement bases used for classes of property, plant and equipment.

(4) Each entity considers the nature of its operations and the policies that the users of its financial statements would expect to be disclosed for that type of entity. For example, users would expect an entity subject to income taxes to disclose its accounting policies for income taxes, including those applicable to deferred tax liabilities and assets. When an entity has significant foreign operations or transactions in foreign currencies, users would expect disclosure of accounting policies for the recognition of foreign exchange gains and losses.

(5) An accounting policy may be significant because of the nature of the entity's operations even if amounts for current and prior periods are not material. It is also appropriate to disclose each significant accounting policy that is not specifically required by Ind ASs but the entity selects and applies in accordance with Ind AS 8.

(6) An entity shall disclose, in the summary of significant accounting policies or other notes, the judgements, apart from those involving estimations (see paragraph 9), that management has made in the process of applying the entity's accounting policies and that have the most significant effect on the amounts recognised in the financial statements.

(7) In the process of applying the entity's accounting policies, management makes various judgements, apart from those

involving estimations, that call significantly affect the amounts it recognises in the financial statements. For example, management makes judgements in determining:

- (a) when substantially all the significant risks and rewards of ownership of financial assets and lease assets are transferred to other entities;
- (b) whether, in substance, particular sales of goods are financing arrangements and therefore do not give rise to revenue, and
- (c) whether the contractual terms of a financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

(8) Some of the disclosures made in accordance with paragraph 6 are required by other Ind ASs. For example, Ind AS 112, Disclosure of Interests in Other Entities, requires an entity to disclose the judgments it has made in determining whether it controls another entity. Ind AS 40, Investment Property, requires disclosure of the criteria developed by the entity to distinguish investment property from owner-occupied property and from property held for sale in the ordinary course of business, when classification of the property is difficult.

Sources of estimation uncertainty

(9) An entity shall disclose information about the assumptions it makes about the future, and other major sources of estimation uncertainty at the end of the reporting period, that have a significant risk of resulting in a material adjustment to the carrying amounts of assets and liabilities within the next financial year. In respect of those assets and liabilities, the notes shall include details of:

- (a) **their nature, and**
- (b) **their carrying amount as at the end of the reporting period.**

(10) Determining the carrying amounts of some assets and liabilities requires estimation of the effects of uncertain future events on those assets and liabilities at the end of the reporting period. For example, in the absence of recently observed market prices, future oriented estimates are necessary to measure the recoverable amount of classes of property, plant and equipment, the effect of technological obsolescence on inventories, provisions subject to the future outcome of litigation in progress, and long-term employee benefit liabilities such as pension obligations. These estimates involve assumptions about such items as the risk adjustment to cash flows or discount rates, future changes in salaries and future changes in prices affecting other costs.

(11) The assumptions and other sources of estimation uncertainty disclosed in accordance with paragraph 9 relate to the estimates that require management's most difficult, subjective or complex judgements. As the number of variables and assumptions affecting the possible future resolution of the uncertainties increases, those judgements become more subjective

and complex, and the potential for a consequential material adjustment to the carrying amounts of assets and liabilities normally increases accordingly.

(12) The disclosures in paragraph 9 are not required for assets and liabilities with a significant risk that their carrying amounts might change materially within the next financial year if, at the end of the reporting period, they are measured at fair value based on a quoted price in an active market for an identical asset or liability. Such fair values might change materially within the next financial year but these changes would not arise from assumptions or other sources of estimation uncertainty at the end of the reporting period.

(13) An entity presents the disclosures in paragraph 9 in a manner that helps users of financial statements to understand the judgements that management makes about the future and about other sources of estimation uncertainty. The nature and extent of the information provided vary according to the nature of the assumption and other circumstances. Examples of the types of disclosures an entity makes are:

- (a) the nature of the assumption or other estimation uncertainty;
- (b) the sensitivity of carrying amounts to the methods, assumptions and estimates underlying their calculation, including the reasons for the sensitivity;
- (c) the expected resolution of an uncertainty and the range of reasonably possible outcomes within the next financial year in respect of the carrying amounts of the assets and liabilities affected; and
- (d) an explanation of changes made to past assumptions concerning those assets and liabilities, if the uncertainty remains unresolved.

(14) This Standard does not require an entity to disclose budget information or forecasts in making the disclosures in paragraph 9.

(15) Sometimes it is impracticable to disclose the extent of the possible effects of an assumption or another source of estimation uncertainty at the end of the reporting period. In such cases, the entity discloses that it is reasonably possible, on the basis of existing knowledge, that outcomes within the next financial year that are different from the assumption could require a material adjustment to the carrying amount of the asset or liability affected. In all cases, the entity discloses the nature and carrying amount of the specific asset or liability (or class of assets or liabilities) affected by the assumption.

(16) The disclosures in paragraph 6 of particular judgements that management made in the process of applying the entity's accounting policies do not relate to the disclosures of sources of estimation uncertainty in paragraph 9.

(17) Other Ind ASs require the disclosure of some of the assumptions that would otherwise be required in accordance with paragraph 9. For example, Ind AS 37 requires disclosure, in specified circumstances, of major assumptions concerning future

events affecting classes of provisions. Ind AS 113, *Fair Value Measurement*, requires disclosure of significant assumptions (including the valuation technique(s) and inputs) the entity uses when measuring the fair values of assets and liabilities that are

carried at fair value. Appendix 2A presents salient features of Ind AS 8 on accounting policies.

Figure 2.3 exhibits disclosure of significant accounting policies made by Reliance Industrial Infrastructure Limited in its published Annual Report, 2013-14.

Reliance Industrial Infrastructure Ltd.

A. BASIS OF PREPARATION OF FINANCIAL STATEMENTS

- (i) The financial statements are prepared under the historical cost convention, except for certain fixed assets which are revalued, in accordance with generally accepted accounting principles in India and the provisions of the Companies Act, 1956.
- (ii) The Company generally follows the mercantile system of accounting and recognizes significant items of income and expenditure on accrual basis.

B. USE OF ESTIMATES

The preparation of financial statements requires estimates and assumption to be made that affect the reported amount of assets and liabilities on the date of the financial statements and the reported amount of revenues and expenses during the reporting period. Difference between the actual results and estimates are recognised in the period in which the results are known/materialised.

C. OWN FIXED ASSETS

- (i) Fixed Assets are stated at cost net of recoverable taxes and includes amounts added on revaluation, less accumulated depreciation and impairment loss, if any. All costs including financing costs, up to the date of commissioning and attributable to the fixed assets are capitalized.
- (ii) Compensation paid to various land owners/occupiers for acquisition of Right of User in the lands along the pipeline route under the Petroleum and Minerals Pipelines (Acquisition of Right of User in Lands) Act, 1962 has been included in Plant and Machinery.
- (iii) Intangible assets are stated at cost of acquisition, less accumulated amortization.

D. LEASED ASSETS

In respect of fixed assets given on finance lease, assets are shown as receivable at an amount equal to net investment in the lease. Initial direct costs are recognized immediately as expenses in the Statement of Profit and Loss. Income from leased assets is accounted by applying the interest rate implicit in the lease to the net investment.

E. DEPRECIATION AND AMORTISATION

Depreciation on Fixed Assets is provided on straight line method at the rates and in the manner prescribed in Schedule XIV to the Companies Act, 1956 except that:

- (i) On plant and machinery comprising of transport facilities and monitoring systems (for petrochemical products and for raw water) and on old construction machinery, depreciation has been provided on written down value method at the rates and in the manner prescribed in Schedule XIV to the Companies Act, 1956;
- (ii) On revalued assets, depreciation has been provided on written down value method and charged over the residual life of the assets;
- (iii) The cost of leasehold and is amortised over the period of lease.
- (iv) Cost of pipeline corridor structure is amortised over the residual life of the asset.
- (v) Intangible assets comprising of Software are amortised over the period of 10 years.

F. IMPAIRMENT OF ASSETS

An asset is treated as impaired when the carrying cost of asset exceeds its recoverable value. An impairment loss is charged to the Statement of Profit and Loss in the year in which an asset is identified as impaired. The impairment loss recognized in prior accounting period is reversed if there has been a change in the estimate of recoverable amount.

G. FOREIGN CURRENCY TRANSACTIONS

- (i) Transactions denominated in foreign currencies are recorded at the exchange rate prevailing on the date of the transaction.
- (ii) Monetary items denominated in foreign currencies, if any at the year end are restated at year end rates.
- (iii) Non monetary foreign currency items are carried at cost.
- (iv) Any income or expense on account of exchange difference either on settlement or on translation is recognized in the Statement of Profit and Loss.

H. INVESTMENTS

Current Investments are carried at the lower of cost or quoted/fair value, computed category-wise. Long-term investments are stated at cost. Provision for diminution in the value of long-term investments is made only if such decline is other than temporary.

I. INVENTORIES

Inventories are measured at lower of cost or net realisable value. Cost is determined on weighted average basis.

J. EMPLOYEE BENEFITS

- (i) Short-term employee benefits are recognized as an expenses at the undiscounted amount in the Statement of Profit and Loss of the year in which the related service is rendered.
- (ii) Post employment and other long-term employee benefits are recognised as an expense in the Statement of Profit and Loss for the year in which the employee has rendered services. The expense is recognized at the present value of the amounts payable determined using actuarial valuation techniques. Actuarial gains and losses in respect of post employment and other long-term benefits are charged to the Statement of Profit and Loss.

K. BORROWING COST

Borrowing costs that are attributable to the acquisition or constructions of qualifying assets are capitalised as part of the cost of such assets. A qualifying asset is one that takes necessarily substantial period of time to get ready for intended use. All other borrowing costs are charged to the Statement of Profit and Loss.

L. PROVISION FOR CURRENT TAX AND DEFERRED TAX

Provision for current tax is made after taking into consideration benefits admissible under the provisions of the Income Tax Act, 1961. Deferred tax resulting from “timing differences” between the taxable and accounting income in accounted for using the tax rates and laws that are enacted or substantively enacted as on the balance sheet date. The deferred tax asset is recognized and carried forward only to the extent that there is a virtual/reasonable certainty that the assets will be realised in future.

M. PROVISION, CONTINGENT LIABILITIES AND CONTINGENT ASSETS

Provisions involving substantial degree of estimation in measurement are recognized when there is a present obligation as a result of past events and it is probable that there will be an outflow of resources. Contingent Liabilities are not recognised but are disclosed in notes. Contingent Assets are neither recognised nor disclosed in the financial statements.

Source: Reliance Industrial Infrastructure Ltd., Annual Report 2013-14, pp. 49-50.

Fig. 2.3: Significant Accounting Policies

MEASUREMENT IN ACCOUNTING

It is generally recognized that accounting is a measurement as well as a communication discipline. The financial accounting process consists of a series of accounting operations that are carried out systematically in each accounting period. The broad operating principles guide these accounting operations which may be listed as follows:

(1) **Selecting the events:** Events to be accounted for are identified. Not all events that affect the economic resources and obligations of an enterprise are, or can be, accounted for when they occur.

(2) **Analyzing the events:** Events are analyzed to determine their effects on the financial position of an enterprise.

(3) **Measuring the effects:** Effects of the events on the financial position of the enterprise are measured and represented by money amounts.

(4) **Classifying the measured effects:** The effects are classified according to the individual assets, liabilities, owners' equity items, revenue, or expenses affected.

(5) **Recording the measured effects:** The effects are recorded according to the assets, liabilities, owners' equity items, revenue, and expenses affected.

(6) **Summarizing the recorded effects:** The amounts of changes recorded for each asset, liability, owners' equity item, revenue, and expense are summed and related data are grouped.

(7) **Adjusting the records:** Remeasurements, new data, corrections, or other adjustments are often required after the events have been initially recorded, classified, and summarised.

(8) **Communicating the processed information:** The information is communicated to users in the form of financial statements.

The above accounting operations although listed separately overlap conceptually among themselves and some of the accounting operations may be performed simultaneously.

Measurement of the effects of business transactions (events) is one of the most important accounting activities before the accounting information is communicated to users of information. Measurement is the assignment of numerals to objects or events according to rules. It is the assignment of numbers to characteristics or properties of objects being measured, which is exactly what accountants do. According to Hendriksen¹³:

“Measurement in accounting has traditionally meant the assignment of numerical values to objects or events related to an enterprise and obtained in such a way that they are suitable for aggregation (such as the total valuation of assets) or disaggregation as required for specific situations. However, measurement also involves a process of classification and identification, and accountants have recognised the need for many years for the presentation of information that is nonquantifiable in nature, such as disclosure frequently placed in footnotes or elsewhere in the statements.”

Wolk *et al.*¹⁴ illustrate in the following manner while defining measurement:

“Objects (which are being measured by the accountants) themselves have numerous attributes or properties. For example, assume a manufacturing firm owns a lathe. The lathe has properties such as length, width, height and weight. If we eliminate purely physical attributes (because accounting measures are made in money) there are still several others to which values could be assigned. These would include historical cost, replacement cost of the lathe in its present conditions, selling price of the lathe in its present condition and present value of the future cash flows that the lathe will help to generate. Attributes or properties are particular characteristics of objects. It should be clear that we do not measure objects themselves but rather something that might be termed the dollar “numerosity” or “how muchness” that relates to a particular attribute of the object.”

Accounting measurements help in determining a general framework for accounting theory. It also emphasises the importance of a market system in an exchange economy as a valuable source of quantitative data. Since goods and services are generally exchanged in terms of money, a monetary measurement of economic data can be assumed to be useful in decision-making, particularly for those decisions relating to wealth and changes in wealth and the production of goods and services. Traditionally, accounting has looked to the transactions or exchanges directly affecting the accounting entity itself for its monetary measurements.

However, many recent proposals have suggested that market prices determined by exchanges between other entities may be relevant for the measurement of goods and services for a specific accounting entity. However, in terms of economic decisions, current and future exchange prices are more relevant than past exchange prices. At the same time, due to existence of uncertainty and the need for objectivity and verifiability, current market prices may be more reliable than future prices, and in many cases, past exchange prices may be more reliable than current prices. Ijiri¹⁵ comments that “accounting measurement characterised as primarily economic performance measurement, in the future, may be extended to include the performance measurement of social goods or even engineering goals.”

DIFFICULTIES IN ACCOUNTING MEASUREMENTS

There are some measurement constraints in accounting which make the accounting information less accurate and less reliable. Accounting information generated in financial accounting have the following limitations:

(1) The objectives of financial reporting are affected not only by the environment in which financial reporting takes place but also by the characteristics and limitations of the kind of information that financial reporting, and particularly financial statements, can provide. The information is to a significant extent financial information based on approximate measures of the financial effects

on individual business enterprise of transactions and events that have already happened; it cannot be provided or used without incurring a cost.

(2) The information provided by financial reporting is primarily financial in nature—it is generally quantified and expressed in units of money. Information that is to be formally incorporated in financial statements must be quantifiable in units of money. Other information can be disclosed in financial statements (including notes) or by other means, but financial statements involve adding, subtracting, multiplying, dividing numbers depicting economic things and events and require a common denominator. The numbers are usually exchange prices or amounts derived from exchange prices. Quantified nonfinancial information (such as number of employees or units of product produced or sold) and non-quantified information (such as descriptions of operations or explanations of policies) that are reported normally relate to or underlie the financial information. Financial information is often limited by the need to measure in units of money or by constraints inherent in procedures, such as verification, that are commonly used to enhance the reliability or objectivity of the information.

(3) The information provided by financial reporting pertains to individual business enterprises, which may comprise two or more affiliated entities, rather than to industries or an economy as a whole or to members of society as consumers. Financial reporting may provide information about industries and economies in which an enterprise operates but usually only to the extent the information is relevant to understanding the enterprise. It does not attempt to measure the degree to which the consumption of wealth satisfies consumer wants. Since business enterprises are producers and distributors of scarce resources, financial reporting bears on the allocation of economic resources to producing and distributing activities and focuses on the creation of, use of, and rights to wealth and the sharing of risks associated with wealth.

(4) The information provided by financial reporting often results from approximate, rather than exact, measures. The measures commonly involve numerous estimates, classifications, summarizations, judgements, and allocations. The outcome of economic activity in a dynamic economy is uncertain and results from combinations of many factors. Thus, despite the aura of precision that may seem to surround financial reporting in general and financial statements in particular, with few exceptions, the measures are approximations, which may be based on rules and conventions rather than exact amounts.

(5) The information provided by financial reporting largely reflects the financial effects of transactions and events that have already happened. Management may communicate information about its plans or projections, but financial statements and most other financial reporting are historical. For example, the acquisition price of land, the current market price of a marketable equity security, and the current replacement price of an inventory are all historical data—no future prices are involved. Estimates resting on expectations of the future are often needed in financial reporting, but their major use, especially of those formally

incorporated in financial statements is to measure financial effects of past transactions or events or the present status of an asset or liability. For example, if depreciable assets are accounted for at cost, estimates of useful lives are needed to determine current depreciation and the current undepreciated cost of the asset. Even the discounted amount of future cash payments required by a long-term debt contract is, as the name implies, a “present value” of the liability. The information is largely historical, but those who use it may try to predict the future or may use the information to confirm or reject their previous predictions.

(6) Financial reporting is but one source of information needed by those who make economic decisions about business enterprises. Business enterprises and those who have economic interests in them are affected by numerous factors that interact with each other in complex ways. Those who use financial information for business and economic decisions need to combine information provided by financial reporting with pertinent information from other sources, for example, information about general economic conditions or expectations, political events and political climate or industry outlook.

(7) The information provided by financial reporting involves a cost to provide and use, and generally the benefits of information provided should be expected to at least equal the cost involved. The cost includes not only the resources directly expended to provide the information but may also include adverse effects on an enterprise or its shareholders from disclosing it. For example, comments about a pending lawsuit may jeopardize a successful defence, or comment about future plans may jeopardize a competitive advantage. The collective time needed to understand and use information is also a cost. Sometimes, a disparity between costs and benefits is obvious. However, the benefits from financial information are usually difficult or impossible to measure objectively, and the costs often are; different persons will honestly disagree about whether the benefits of the information justify its costs.

Devine¹⁸ observes

“There are many unsettled questions of measurement in accounting. Perhaps the most interesting and important applications arise in scaling future prospects into some system of values. The actual rules for recognizing value changes require the definition of new concepts and operations to be substituted for the value construct. Revenue is defined operationally by *naming* the things to be done to identify and measure it. Expenses are related to rules for measuring cost (sacrifice) and then to further rules for allocating cost to current revenues and to future expected revenues. Thus, we agree on a set of instructions for measuring cost and agree to accept the resulting quantity as a measure of sacrifice. Another set of rules is then devised to measure the cost to be matched with revenues. This second type of measurement is an attempt to reflect prospects sacrificed to procure the new values represented by revenues and requires a scaling of expected benefits and the application of the ratio of benefits expired to expected total benefits to the costs to be

allocated. The resulting system of definitions and relations is related to time periods and the results are given in income reports. Income, defined in terms of these operations, may differ considerably from non-accounting definitions! Thus in order to measure value added (or decreased), accountants exhibit a whole series of substitute constructs with rules of correspondence to the empirical world. In each case these constructs themselves require their own scaling and measurement rules. Accountants then devise and issue instruction for combining the intermediate definitions and agree that the result of these measurements shall represent the change in *value* from operations. The resulting construct of *value* added, for example, is not quite the same as the one defined as income because of disagreement over capital gains and losses and realization rules.”

REFERENCES

1. Ahmed Riahi Belkaoui, *Accounting Theory*, Thomson Learning, 2000, p. 163.
2. American Institute of Certified Public Accountants, *The Basic Postulates of Accounting*, Accounting Research Study, No 1, AICPA, 1961.
3. Eldon S. Hendriksen, *Accounting Theory*, Richard D. Irwin, 1984, p. 61.
4. Glenn A. Welsch and Daniel G. Short, *Fundamental of Financial Accounting*, Irwin, 1987, p. 144.
5. Robert N. Anthony and James S. Reece, *Accounting Principles*, Irwin, 1991, p. 15.
6. Harry I. Wolk, James L. Dodd and John J. Rozyeki, *Accounting Theory*, Sage Publication, 2013, p. 147.
7. Kermit D. Larsen and Paul B.W. Miller, *Financial Accounting*, Irwin, 1995, p. 602.
8. Kermit D. Larsen and Paul B.W. Miller, *Financial Accounting*, *Ibid*, pp. 602-603.
9. Accounting Principles Board, Statement No. 4, *Basic Concepts Underlying Financial Statements of Business Enterprises*, AICPA, 1970.
10. Paul H. Walgenbach, Ernst I. Hanson and Norman E. Dittrich, *Financial Accounting: An Introduction*, Harcourt Brace Jovanovich. 1988. p. 443.
11. Accounting Principles Board, Statement No. 4.
12. Sidney Davidson *et al.*, *Financial Accounting*, The Dryden Press, 1984, pp. 629-631.
13. Eldon S. Hendriksen. *Accounting Theory*, Homewood: Irwin, 1984, p 75
14. Harry I. Wolk, *et al.*, *Ibid*, p. 7.
15. Yuji Ijiri, *The Theory of Accounting Measurement*, AAA, 1975, p. 34.
16. Ahmed Riahi Belkaoui, *Accounting Theory*, Thomson Learning, 2000, pp. 37-38.
17. Richard Mattersich, *Accounting and Analytical Methods*, Irwin, 1964, p. 79
18. Carl Devine, “Accounting – A System of Measurement Rules”, *Essays in Accounting Theory*, Vol. 1, 1985, pp. 115-126.

QUESTIONS

1. "Measurement in accounting has traditionally meant the assignment of numerical values to objects or events related to an enterprise and obtained in such a way that they are suitable for aggregations (such as the total valuation of assets) or disaggregation as required for specific situations" In the light of the above statement, explain the role of measurement in the development of accounting theory, also state briefly some of the measurement constraints.

(M.Com., Delhi, 2012)

2. Discuss the following accounting postulates:

- (i) Money measurement postulate
- (ii) Going concern postulate

3. Critically examine the following:

- (i) Cost principle
- (ii) Accrual principle
- (iii) Matching principle
- (iv) Conservatism.

4. Discuss the significance of measurement as an accounting activity.

5. What do you mean by Generally Accepted Accounting Principles? Discuss the factors to be considered in the selection of accounting principles for financial reporting purposes.

(M.Com., Delhi, 2008)

6. Frequently advanced as a basic postulate is a general proposition dealing with "objectivity." Under what conditions, in general, is information arising from a financial transaction considered to be objective in nature?

7. How does accrual accounting affect the determination of income? Include in your discussions what constitutes an accrual and a deferral, and give appropriate example of each.

8. Contrast accrual accounting with cash accounting.

9. Distinguish between concepts and standards.

(M.Com., Delhi, 1999)

10. Discuss the suggestion contained in AS-1 Disclosure of Accounting Policies issued by ICAI.

11. What are the fundamental accounting assumption as per AS-1?

12. Describe the areas in which different accounting policies are encountered.

13. What considerations have been suggested by AS-1 for selection of accounting policies?

14. List the recommendations as given in Ind AS-1 regarding selection and disclosure of accounting policies.

15. Describe the major considerations governing the selection and application of accounting policies as laid down in Accounting Standard issued by ICAI. Is it mandatory?

(M.Com., Delhi, 1999)

16. If a reporting entity prepares financial statements based on the 'going concern' assumption, when it is actually not so, this has serious reflection on 'truth and fairness' of financial statements. Examine the statement in the light of the significance of the going concern concept and indicate the circumstances where the statement is not valid.

(M.Com., Delhi, 2003)

17. Discuss the process of developing accounting concepts.
18. Discuss descriptive and prescriptive accounting concepts.
19. What are "bottom-up" and "top-down" process of developing accounting concepts?
20. What are the salient features of Ind AS 1.
21. Identify problems in accounting measurements.
22. "There are many unsettled questions of measurement in accounting". Comment.

MULTIPLE CHOICE QUESTIONS

Select the correct answer for the following multiple choice questions:

1. Conventionally accountants measure income
 - (a) By applying a value added concept
 - (b) By using a transaction approach
 - (c) As a change in the value of owners equity
 - (d) As a change in the purchasing power of owners equity.

(M.Com., Delhi)

Ans. (b)

2. In the transaction approach to income determination, income is measured by subtracting the expenses resulting from specific transactions during the period from revenues of the period also resulting from transactions Under a strict transactions approach to income measurement, which of the following would not be considered a transaction?
 - (a) Sale of goods on account at 20 per cent markup.
 - (b) Exchange of inventory at a regular selling price for equipment.
 - (c) Adjustment of inventory in lower of cost or market inventory valuations when market is below cost.
 - (d) Payment of salaries.

Ans. (c)

3. Consolidated financial statements are prepared when a parent-subsidiary relationship exists in recognition of the accounting concept of
 - (a) Materiality
 - (b) Entity
 - (c) Objectivity
 - (d) Going Concern

Ans. (b)

4. Which of the following is the best theoretical justification for consolidated financial statements?
 - (a) In form the companies are one entity; in substance they are separate.
 - (b) In form the companies are separate; in substance they are one entity.
 - (c) In form and substance the companies are one entity.
 - (d) In form and substance the companies are separate.

Ans. (b)

(M.Com., Delhi, 1999)

Appendix 2A

Indian Accounting Standard (Ind AS) 8 on Accounting Policies, Changes in Accounting Estimates and Errors –

Salient Features

1. Definitions

The following terms are used in this Standard with the meanings specified:

Accounting policies are the specific principles, bases, conventions, rules and practices applied by an entity in preparing and presenting financial statements.

A *change in accounting estimate* is an adjustment of the carrying amount of an asset or a liability, or the amount of the periodic consumption of an asset, that results from the assessment of the present status of, and expected future benefits and obligations associated with, assets and liabilities. Changes in accounting estimates result from new information or new developments and, accordingly, are not corrections of errors.

2. Accounting policies

Selection and application of accounting policies

(i) When an Ind AS specifically applies to a transaction, other event or condition, the accounting policy or policies applied to that item shall be determined by applying the Ind AS.

(ii) Ind ASs set out accounting policies that result in financial statements containing relevant and reliable information about the transactions, other events and conditions to which they apply. Those policies need not be applied when the effect of applying them is immaterial. However, it is inappropriate to make, or leave uncorrected, immaterial departures from Ind ASs to achieve a particular presentation of an entity's financial position, financial performance or cash flows.

(iii) Ind ASs are accompanied by guidance that is integral part of Ind AS to assist entities in applying their requirements. Such guidance is mandatory.

(iv) In the absence of an Ind AS that specifically applies to a transaction, other event or condition, management shall use its judgement in developing and applying an accounting policy that results in information that is:

- (a) relevant to the economic decision making needs of users; and
- (b) reliable, in that the financial statements:
 - (i) represent faithfully the financial position, financial performance and cash flows of the entity;
 - (ii) reflect the economic substance of transactions, other events and conditions, and not merely the legal form;

- (iii) are neutral, i.e., free from bias;
- (iv) are prudent; and
- (v) are complete in all material respects.

3. Consistency of accounting policies

An entity shall select and apply its accounting policies consistently for similar transactions, other events and conditions, unless an Ind AS specifically requires or permits categorisation of items for which different policies may be appropriate. If an Ind AS requires or permits such categorisation, an appropriate accounting policy shall be selected and applied consistently to each category.

4. Changes in accounting policies

(i) An entity shall change an accounting policy only if the change:

- (a) is required by an Ind AS; or
- (b) results in the financial statements providing reliable and more relevant information about the effects of transactions, other events or conditions on the entity's financial position, financial performance or cash flows.

(ii) Users of financial statements need to be able to compare the financial statements of an entity over time to identify trends in its financial position, financial performance and cash flows. Therefore, the same accounting policies are applied within each period and from one period to the next unless a change in accounting policy meets one of the criteria in paragraph 4(i).

(iii) The following are not changes in accounting policies:

- (a) the application of an accounting policy for transactions, other events or conditions that differ in substance from those previously occurring; and
- (b) the application of a new accounting policy for transactions, other events or conditions that did not occur previously or were immaterial.

5. Applying changes in accounting policies

- (a) an entity shall account for a change in accounting policy resulting from the initial application of an Ind AS in accordance with the specific transitional provisions, if any, in that Ind AS; and
- (b) when an entity changes an accounting policy upon initial application of an Ind AS that does not include specific transitional provisions applying to that change, or changes an accounting policy voluntarily, it shall apply the change retrospectively.



Accounting Theory : Formulation and Classifications

CONCEPT OF 'THEORY' AND 'ACCOUNTING THEORY'

Theory

The simplest form of a theory is a statement of a belief expressed in a language. A theory is a logical combination of interrelated concepts, definitions and propositions that describe a systematic view of phenomena by establishing relations among variables, with the purpose of explaining and predicting the phenomena. The term 'theory' emphasises generalisations which help in systematic organisation and grouping of data and thereby establish significant relationships in respect of such data.

The theory is "a cohesive set of hypothetical, conceptual, and pragmatic principles forming a general frame of reference for a field of study."¹ According to Most², "a theory is a systematic statement of the rules or principles which underlie or govern a set of phenomena. A theory may be viewed as a framework permitting the organisation of ideas, the explanation of phenomena and the prediction of future behaviour."

Choi and Mueller assert that theory is:

- (i) An integrated group of fundamental principles underlying a science or its practical applications.
- (ii) Abstract knowledge of any art as opposed to the practice of it.
- (iii) A closely reasoned set of propositions derived from and supported by established evidence and intended to serve as an explanation for a group of phenomena.
- (iv) An arrangement of results or a body of theorems presenting a systematic view of some subject.³

Theories are logical arguments; their concluding statements of belief (whether they are explanations, predictions or prescriptions) are hypotheses, such theories comprise a set of premise (statements) that are logically connected to give rise to one or more hypotheses. Although the terms 'theory', 'proposition' and 'hypothesis' are often used interchangeably, strictly speaking they have different meanings. *Theory* is the logical flow of argument leading from fundamental assumptions and connected statements to final conclusions. It includes assumptions, statements, the argument connecting the assumptions and statements to come to conclusions, and the conclusions.

Propositions are statements emanating from a theory that are expressed in conceptual terms (e.g., a theory about managers'

reporting incentives might lead to the conclusion 'Managers are likely to use profit-increasing methods of accounting when their remuneration increases as a consequence'). *Hypotheses* are propositions that have been operationalised so that they can be tested (e.g., the proposition about managers' reporting incentives could be operationalised as 'Firms with profit-based compensation plans use straight-line depreciation rather than accelerated depreciation'; this hypothesis can be tested by observing which methods of depreciation are used by firms with profit-based management compensation plans).

The rules or principles which are found in theory are based upon knowledge preferably derived from research which is conducted to test certain hypotheses. A theory, therefore, is essentially a set of acceptable hypotheses. The formulation and establishment of theories requires the application of logic and reasoning about the problems implied in the data under observation, as a means of sorting out the most basic relationships. The relationship between theory and practice is essential to the establishment of a good theory. In fact, the reliability of a theory depends not only upon the facts and practices to which it refers, but also upon an interpretation of those facts which need to be continuously evaluated to ensure its accuracy and validity.

Accounting Theory

According to Webster's Third New International Dictionary, theory represents "the coherent set of hypothetical, conceptual, and pragmatic principles forming the general frame of reference for a field of inquiry."

The term 'accounting theory' has been defined by many. Hendriksen⁴ defines accounting theory as:

"Logical reasoning in the form of a set of broad principles that (1) provide a general frame of reference by which accounting practice can be evaluated, and (2) guide the development of new practices and procedures. Accounting theory may also be used to explain existing practices to obtain a better understanding of them. But the most important goal of accounting theory should be to provide a coherent set of logical principles that form the general frame of reference for the evaluation and development of sound accounting practices."

The goal of accounting theory is to provide a set of principles and relationships that explains observed practices and predicts unobserved practices. That is, accounting theory should be able to both explain why business organizations elect certain accounting methods over other alternatives and predict the

attributes of firms that elect various accounting methods. Accounting theory should also be verifiable through accounting research. However, theory cannot be divorced from practice. The theory underlies practices, explains and attempts to predict them. There is not and cannot be any basic contradiction between theory and facts. A theory is an explanation. However, every explanation is not a theory in the scientific meaning of the word.⁵ The objective of accounting theory is to explain and predict accounting practice. Explanation provides reasons for observed practice. For example, an accounting theory should explain why certain firms use LIFO method of inventory rather than the FIFO method. Prediction of accounting practices means that the theory can also predict unobserved accounting phenomena. Unobserved phenomena are not necessarily future phenomena; they include phenomena that have occurred but on which systematic evidence has not been collected.⁶ It is significant to observe that accounting theory may be based on empirical evidence and practices as well as accounting theory may be formulated using hypothetical and speculative interpretations.

ROLE OF ACCOUNTING THEORY

Accounting theory has great utility for improving accounting practices, resolving complex accounting issues and contributing in the formulation of a useful accounting theory. Accounting theory has many advantages. Some of them are listed below:

(1) Accounting theory has a great amount of influence on accounting and reporting practices and thus serves the informational requirements of the external users. In fact, accounting theory provides a framework for (i) evaluating current financial accounting practice and (ii) developing new practice. Whenever the need for a new application of practice arises, the accounting theory should provide accountants with guidance on the most appropriate procedures to adopt in the circumstances. If accounting practices emerges from the application of rigorously constructed accounting theory, then practice has been tested for logic, consistency and usefulness. The corporate managements and accountants, after having knowledge of accounting theories, may respond to the needs of users of accounting information. Many users, especially external, use annual reports to make investment and other decisions. Investors, creditors, lenders have to assess the earnings prospects of companies by examining the implications of the different accounting procedures. All the users are interested to know the effect of alternative reporting methods, on their decisions (welfare). For example, corporate executives want to know how straight-line method of depreciation affects their welfare *vis-a-vis* accelerated depreciation. Similarly, if a company is concerned about the market value of its shares, the accounting methods effects on share prices are to be analysed. The corporate executives search accounting theory which better explain the relationship between external annual reports and share prices.

However, determining the relationship between accounting procedures and users benefits is very difficult. For example, the relation between accounting alternatives and company share

prices is complex and cannot be determined just by observing whether share prices change when accounting procedures change. Likewise, the effects of alternative accounting procedures and reporting methods on business profit and other variables are complex and cannot be determined by mere observation. For example, share price changes may not be necessarily due to changes in accounting procedures or *vice versa*; that is, changes in both could be result of some other event. In such a case, changing accounting procedures would not necessarily produce a share price effect. Such situations and other similar experiences require accounting theory that explains the relation between the variables and determine the significance of a particular variable. Nevertheless, there are good reasons why certain things (practices) rather than others, should be done; and there are reasons why certain ways are superior to other ways. These reasons make up the theory. Whether we are conscious of them or not, there are reasons beneath everything we do. Knowing what they are, will provide a better understanding of our aims and thus help us to discriminate among possible actions.⁷

To conclude, accounting theory aims to serve practice even when it advances reasons against a familiar practice. A knowledge of accounting theory equips a person to exercise independent judgement with confidence besides enabling him to react according to the circumstances.

(2) Secondly, accounting theory literature is useful to accounting policymakers who are interested in making the accounting information useful. The researches, empirical evidence and investigation can be used and incorporated by the policy-makers in formulating accounting policies. Theories are helpful as they apprise policymakers of the underlying issues and clarify the trade-offs implicit in various theory approaches. According to Taylor and Underdown:⁸

“...The system of financial accounting and reporting is not static but responds to the characteristics of the environment in which it operates. It must be stressed, however, that all changes in financial accounting and reporting do not occur in a random way. It is one of the functions of accounting policymakers such as the accountancy profession, accounting standards setting bodies, the formulators of company law, and bodies like the Stock Exchange to evaluate current practice and formulate and implement proposals for its reform. They are guided in this by accounting theory. Although there is no single, generally accepted body of accounting theory, much work has been done by academics and policymakers to develop accounting theory in ways which might facilitate the improvement of financial accounting and reporting.”

However, according to American Accounting Association's Committee on Accounting Theory and Theory Acceptance (1977), the primary message to policymakers is that until consensus is available, the utility of accounting theories in aiding policy decisions is partial. Competing theories merely provide a basis for forming opinions on what must remain inherently conflicting and subjective judgements. While it is true that consensus will frequently develop on certain points, usually this consensus only

narrows the range of disagreement; it often does not resolve the basic issue that gives rise to the underlying problem.

In the absence of consensus acceptance, it is unrealistic to expect accounting theory to provide unequivocal policy guidance. Different theories will point to different policies. These theories arise from different sets of situations (paradigms). Since there is no rigorous analytical means for choosing between paradigms, there is similarly no rigorous means for choosing between theories or their derivative policy implications. In fact, in accounting theory debate there is no ultimate theoretical truths. Therefore, it is difficult to impose theory consensus. Whatever future influences theory have on policymaking, will be achieved by continued argumentation, new theory development, and debate, not by fiat.

Accounting theory is developed and refined by the process of accounting research. Accounting theory or theories are formulated as a result of both theory construction and theory verification. A given accounting theory explains and predicts accounting phenomena, and when such phenomena occur, they prove and verify the theory. If a given theory does not act in practice and fails to produce the expected results, it is replaced by a (new) better or more useful theory. The purpose of the new theory or the improved theory is to make the unexpected expected, to convert the anomalous occurrence into an expected and explained occurrence.⁹

CLASSIFICATIONS (LEVELS) OF ACCOUNTING THEORY

At present, a single universally accepted accounting theory does not exist in accounting. Instead, different theories have been proposed and continue to be proposed in the accounting literature. The following are the main classifications of accounting theory:

- (1) 'Accounting Structure' Theory
- (2) 'Interpretational' Theory
- (3) 'Decision Usefulness' Theory

'Accounting Structure' Theory

'Accounting structure' theory, known by different names such as classical theory, descriptive theory, traditional theory, attempt to explain current accounting practices and predict how accountants would react to certain situations or how they would report specific events. This theory relates to the structure of the data collection process (accounting) and financial reporting. Thus, this theory is directly connected with accounting practices, *i.e.*, what does exist or what accountants do. The principal contributors to the accounting structure theory are identified chronologically as follows:

William A. Paton, *Accounting Theory with Special Reference to Corporate Enterprise* (1922).

Henry Rand Hatfield, *Accounting—Its Principles and Problems* (1927).

Henry W. Sweeney, *Stabilised Accounting* (1936).

Stephen Gilman, *Accounting Concepts of Profit* (1939).

W. A. Paton and A. C. Littleton, *An Introduction to Corporate Accounting Standards* (1940).

A. C. Littleton, *Structure of Accounting Theory* (1953).

Maurice Moonitz, *The Basic Postulates of Accounting* (1961).

Robert R. Sterling and Richard E. Flaherty, "The Role of Liquidity in Exchange Valuation," *Accounting Review* (July 1971).

Robert R. Sterling, John O. Tollefson, and Richard E. Flaherty, "Exchange Valuation: An Empirical Test," *Accounting Review* (Oct. 1972).

Yuji Ijiri, *Theory of Accounting Measurement* (1973).

This theory, basically concerned with observing the mechanical tasks which accountants traditionally perform, is based on the assumption that the objective of financial statement is associated with the stewardship concept of the management role, and the necessity of providing the owners of businesses with information relating to the manner in which their assets (resources) have been managed. In this view, company directors occupy a position of responsibility and trust in regard to shareholders, and the discharge of these obligations requires the publication of annual financial reports to shareholders. Ijiri¹⁰ explains traditional accounting practice; however, he does place emphasis on the historical cost system. Sterling advises "to observe accountants' actions and rationalise these actions by subsuming them under generalised principles." Theories explaining traditional accounting practice are desirable to obtain greater insight into current accounting practices, permit a more precise evaluation of traditional theory and an evaluation of existing practices that do not correspond to traditional theory. Such theories relating to the structure of accounting can be tested for internal logical consistency, or they can be tested to see whether or not they actually can predict what accountants do.¹¹

Limitations

(1) The 'accounting structure' theory concentrates on accounting practices and the behaviour of practising accountants. The accounting practice begins with observable occurrences (transactions), translates them into symbolic form (money values) and makes them inputs (*e.g.*, sales, costs) into the formal accounting system where they are manipulated into outputs (financial statements). Accounting practices followed in this way may not reflect the real business situation and real world phenomena. The traditional theory is not concerned with judging the usefulness of the output of accounting practice, but concentrates upon judging the means of manipulation of input into output.

(2) Inconsistencies in traditional theory have given rise to alternative accepted principles and procedures which give significantly divergent reported results. Accrual accounting results in allocations which provide a variety of alternative accounting methods for each major event—*e.g.*, LIFO and FIFO valuations

of stock—and different accountants may prefer different methods depending upon how they are affected. Moreover, the traditional approach is inconsistent with theories developed in related disciplines. For example, the historical cost concept of valuation is externally inconsistent with current value concepts.

Finally, good theory should provide for research to assist advances in knowledge. The conventional approach tends to inhibit change, and by concentrating upon generally accepted accounting principles makes the relationship between theory and practice a circular one.

‘Interpretational’ Theory

Truly speaking, ‘accounting structure’ and ‘interpretational’ theories are part of the classical accounting theory (model). The principal writers under ‘accounting structure’ such as Hatfield, Littleton, Paton and Littleton, Sterling and Ijiri are mainly positivist, inductive writers, concerned with traditional accounting practice in terms of historical cost system, with some deviations such as the lower of cost or market. Accounting practices under accounting structure theory are the result of recording business events as they take place. Such practices lack application of judgement and consequences.

Interpretational theory attempts to give some meaning to accounting practice. The theory based on ‘accounting structure’ only, although logically formulated, does not require meaningful interpretation of accounting practices and analysis of accounting activities. Interpretational theory emphasises on giving interpretations and meaning as accounting practices are followed. This theory provides a suitable basis for evaluating accounting practices, resolving accounting issues and making accounting propositions.¹² The principle writers in interpretational theory are the following:

John B. Canning, *The Economics of Accountancy* (1929).

Sidney S. Alexander, *Income Measurement in a Dynamic Economy* (1950).

Edgar O. Edwards and Philip W. Bell, *The Theory and Measurement of Business Income* (1961).

Robert T. Sprouse and Maurice Moonitz, *A Tentative Set of Broad Accounting Principles for Business Enterprises* (1962).

The above writers in interpretational theory are more analysts and explicators than advocates and preachers. They analyse and assess what accountants do and seek to do, they undertake to explain a phenomenon to accountants, and help in understanding the implications of using accounting concepts in the real business situation. For example, Sprouse and Moonitz suggest that the assets valuations should be made in terms of their future services.

In ‘accounting structure’ theory, accounting concepts are uninterpreted and do not reflect any meaning except actual data resulting from following specific accounting procedures. Asset valuations, for example, are the result of following a specific method of inventory valuation and depreciation. Similarly, specific rules are followed for the measurement of these revenues and

expenses. Interpretational theory gives meaningful interpretations to these concepts and rules and evaluate alternative accounting procedures in terms of these interpretations and meanings. For example, it can be said that FIFO is the most appropriate if objective is to measure current value of inventories. In this case, selection of FIFO in interpretational theory is made with a view to suggest specific result and interpretation. It is argued that empirical enquiry should be made to determine whether information users attach the same interpretations and meanings which are intended by producers of information. Items of information vary as to degree of interpretation; some items by nature reflect higher degree of interpretation and some items are subject to many interpretations. For example, the item cash in balance sheet is fairly well understood by users to mean what preparers intend it to mean. On the contrary, the items like deferred expenses and goodwill may not reflect any specific interpretation. The role of interpretational theories is to build a correspondence between the interpretations of producers and users as to accounting information. This theory attempts to find ways to improve the meaning and interpretations of accounting information in terms of experiences about human behaviour and information processing capacity.

As stated earlier, ‘accounting structure’ and interpretational theories both are known as classical accounting models. The writers (mentioned above) under both the theories are, in every sense, reformers. Interpretational theorists differ from ‘accounting structure’ theorists more in degree than in kind; the former are motivated less by missionary zeal than by a desire to analyse, criticise, and suggest, and are primarily deductivists. Many of the prominent interpretational theorists advocate current cost or values. It is said that interpretational theorists may have observed the behaviour of investors and other economic decision makers and concluded with a validated hypothesis that such decisions-makers seek current value, not historical cost, information. In spite of the difference in emphasis of ‘traditional’ and ‘interpretational’ theorists, broadly, both are concerned with designing financial reports that communicate relevant information to users of accounting information.

‘Decision-Usefulness’ Theory

The decision-usefulness theory emphasises the relevance of the information communicated to decision making and on the individual and group behaviour caused by the communication of information. Accounting is assumed to be action-oriented—its purpose is to influence action, that is, behaviour; directly through the informational content of the message conveyed and indirectly through the behaviour of preparers of accounting reports. The focus is on the relevance of information being communicated to decision makers and the behaviour of different individuals or groups as a result of the presentation of accounting information. The most important users of accounting reports presented to those outside the firm are generally considered to include investors, creditors, customers, and government authorities. However, decision usefulness can also take into consideration

the effect of external reports on the decisions of management and the feedback effect on the actions of accountants and auditors. Since accounting is considered to be a behavioural process, this theory applies behavioural science to accounting. Due to this, decision-usefulness theory is sometimes referred to as behavioural theory also. In the broader perspective, decision-usefulness studies analyses behaviour of users of information. A behavioural theory attempts to measure, and evaluate the economic, psychological and sociological effects of alternative accounting procedures and modes of financial reporting.

In adopting the decision-usefulness theory or approach, two major aspects or questions must be addressed. First, who are the users of financial statements? Obviously, there are many users. It is helpful to categorize them into broad groups, such as investors, lenders, managers, employees, customers, governments, regulatory authorities, suppliers, etc. These groups are called constituencies of accounting. Second, what are the decision models or problems of financial statement users? By understanding these decision models preparers will be in a better position to meet the information needs of the various constituencies. Financial statements can then be prepared with these information needs in mind and in this way financial statements will lead to improved decision making and are made more useful.

(i) Decision Models

Most of the earliest research on decision-usefulness implicitly adopted the decision model emphasis although the assumed decision model was often not specified in detail. The decision model emphasis has now achieved professional recognition and broad exposure through publications of different accounting bodies all over the world. For instance, the American Institute of Certified Public Accountants (AICPA) Study Group on the Objectives of Financial Statements, also known as Trueblood Report, stated that "the basic objective of financial statements is to provide information useful for making economic decisions."¹³ The Financial Accounting Standards Board¹⁴ (USA) has also formulated the similar objective:

"Financial reporting should provide information that is useful to present and potential investors and creditors and other users in making rational investment, credit and similar decisions. The information should be comprehensible to those who have a reasonable understanding of business and economic activities and are willing to study the information with reasonable diligence."

The decision model approach first began to appear in the literature in the 1950s. Prior to 1950s, a number of carefully prepared works on accounting theory did refer to users of accounting information but the theoretical structures in those works were not demonstrably based on the alleged information needs of users. For example, the 1937 "Tentative Statements" of the American Accounting Association (AAA) included but did not build upon, this paragraph:

"The most important applications of accounting principles lie in the field of corporate accounting, particularly in the preparation of published reports of profits and financial position. On the interpretation of such reports depend so many vital decisions of business and government that they have come to be of great economic and social significance."¹⁵

Patton and Littleton¹⁶ gave user needs even more prominent attention, including them in their statement of the purpose of accounting: "The purpose of accounting is to furnish financial data concerning a business enterprise, compiled and presented to meet the needs of management, investors, and the public."

During the 1950s, there was a strong user-oriented movement in the managerial accounting literature. That movement may have served as the stimulus for the initial acceptance of the decision-usefulness objective in external reporting at that time. For instance, Chambers' articles¹⁷, "Blueprint for a Theory of Accounting," published in 1955 stressed that "the basic function of accounting...(is) the provision of information to be used in making rational decisions." Staubus¹⁸ emphasised that "accountants should explicitly and continuously recognise an objective or objectives of accounting, and "that a major objective of accounting is to provide quantitative economic information that will be useful in making investment decisions."

The current status of the decision-usefulness, decision model approach to accounting theory may be summarised as follows:

- (i) The objective of accounting is to provide financial information about the economic affairs of an entity to interested parties for use in making decisions. This objective statement is a premise which most people seem to find acceptable, subject to slight variations.
- (ii) To be useful in making decisions, financial information must possess certain normative qualities such as relevance, reliability, objectivity, verifiability, freedom from bias, accuracy, comparability, understandability, timeliness and economy. A set of such desirable qualities is used as criteria for evaluating alternative accounting methods. The relevance criteria is used to select the attribute(s) of an object or event to be emphasised in financial reporting. Information about an attribute of an object or event is relevant to a decision if knowledge of that attribute can help the decision maker determine alternative courses of action or to evaluate an outcome of an alternative course of action.
- (iii) The decision-usefulness approach provides for the development of the theory on the basis of knowledge of decision processes of investors, taxing authorities, labour union, negotiators, regulatory agencies, and other external users of accounting data, as well as managers. To date, however, only the decision of investors (in the broad sense) have served as the basis for fairly complete theories of external reporting.

(ii) Decision Makers

The previous section has dealt with decision models; this section focuses on decision makers and review certain empirical research bearing upon various issues of financial reporting. Such research can be classified according to the level at which the behaviour of decision makers is observed: the individual level or the aggregate market level.

Individual User Behaviour

Empirical research involving observation of individual behaviour as it relates to accounting information has ordinarily been associated with the term behavioural accounting research (BAR). The objective of BAR is to understand, explain, and predict aspects of human behaviour relevant to accounting problems. Behavioural accounting research is relatively new. Devine's¹⁹ critical remarks in 1960 expose the failure of accountants to examine user behaviour empirically before that time:

"Let us now turn to ... the psychological reactions of those who consume accounting output or are caught in its threads of control. On balance, it seems fair to conclude that accountants seem to have waded through their relationships to the intricate psychological net work of human activity with a heavy handed crudity that is beyond belief. Some degree of crudity may be excused in a new discipline, but failure to recognise that much of what passes as accounting theory is hopelessly entwined with unsupported behaviour assumption as unforgivable."

BAR studies ordinarily lack any agreed upon basis by which their results may be assessed. Instead, BAR has been primarily concerned with studying the techniques of data collection and analysis; there has been little attempt to develop a theoretical framework that would support the problems or hypotheses to be tested. Instead, the studies generally have focussed on the behavioural effects of accounting information or on the problems of human information processing.

BAR studies may be divided into five general classes according to financial statement disclosure and the usefulness of financial statement data: (i) the adequacy of financial statement disclosure, (ii) Usefulness of financial statement data, (iii) attitudes about corporate reporting practices, (iv) materiality judgements, and (v) the decision effects of alternative accounting procedures.

In testing for the adequacy of financial statement disclosures, researchers have used many different strategies. For example, one strategy develops a description of user's approach to financial statement analysis in order to evaluate the reasoning underlying that approach; it then assesses the implications of that approach reasoning for various disclosure issues.²⁰ Another strategy focuses on certain interest groups and surveys their perceptions and attitudes about disclosures.²¹ A third strategy has been to determine the extent to which specific items of important information are disclosed in corporate annual reports, using a normative index of disclosure as a basis for assessment.²² The research on adequacy of financial disclosure showed a general

acceptance of the adequacy of available financial statements, a general understanding and comprehension of these financial statements, that the differences in disclosure adequacy among the financial statements were due to such variables as company size, profitability, size of the auditing firm and listing status.

A second set of studies has focused on the usefulness of financial statement information to investors in making resources allocation decision. In this regard, three approaches have been used. The first approach examined the relative importance to investment analysis of different information items to both users and preparers of financial information.²³ The second approach examined the relevance of financial statements to decision-making using laboratory experimentation.²⁴ The third approach examined the effectiveness of the communication of financial statement data in terms of readability and meaning to users in general.²⁵ The overall conclusion of these studies are (i) that some consensus exists between users and preparers on the relative importance of the information items disclosed in financial statements, and (ii) that users do not rely solely on financial statements for their decisions.

A third set of studies has attempted to measure the attitudes and preferences of various groups toward current and proposed corporate reporting practices. Two approaches have been used in this regard. The first approach examined preferences for alternatives accounting techniques.²⁶ The second approach examined the attitudes about general reporting issues, such as about how much information should be available, how much information is available, and the importance of certain items.²⁷

A fourth set of studies has focused on materiality judgements that affect financial reporting. Two approaches were used to examine the materiality judgements. The first approach examined the main factors that determine the collection, classification, and summarisation of accounting data.²⁸ The second approach focused on what people consider material. This second approach sought to determine how great a difference in accounting data is required before the difference is perceived as material by the users.²⁹ These studies indicate that several factors appear to affect materiality judgements and that these judgements differ among individuals.

Finally, in fifth set of studies, the decision effects of various accounting procedures were examined primarily in the context of the use of different inventory techniques, of price-level information, and of non-accounting information.³⁰ The results indicate that alternative accounting techniques may influence individual decisions and that the extent of influence may depend on the nature of the task, the characteristics of the users, and the nature of the experimental environment.

Evaluation of Behavioural Accounting Research (BAR)

Most of the BAR attempts to establish generalisations about human behaviour in relation to accounting information. The implicit objective of all these studies is to develop and verify the behavioural hypotheses relevant to accounting theory, which

are hypotheses on the adequacy of disclosure, the usefulness of financial statement data, attitudes about corporate reporting practices, materiality judgements, the decision effects of alternative accounting procedures, and components of an information processing model—input, process, and output. This implicit objective has not yet been reached, however, because most of the experimental and survey research in behavioural accounting suffers from a lack of theoretical and methodological rigour.

BAR has been done mostly without explicit formulation of a theory. This lack of a theory imposes limitations on an acceptable and meaningful evaluation and interpretation of the results. Laboratory experimentation is generally favoured in BAR because it can isolate variables and effects to provide unambiguous evidence about causation and allow better control over extraneous variables. The failure to ensure validity, however, causes significant problems with laboratory experiments.³¹ In general, students have been used as surrogates of business people. But do students and business people react similarly to stimuli? Several have examined the surrogation problem without any conclusive results.³² Similarly, the experiment as a social contract implies a role relationship between the subject and the experiment. Some aspects of this relationship may threaten the validity of the experiment.

Aggregate Market Behaviour

The decision-usefulness accounting theory emphasises not only, 'Individual User Behaviour', but 'Aggregate Market (User) Behaviour' also. In fact, aggregate market behaviour is a manifestation of individual action. However, according to proponents of market level research, there are factors that are difficult to stimulate in individual level research (such as competing information sources, incentives, and user interactions) that are important in study of groups; those factors thus prohibit a simplistic extension from the individual to the aggregate.³³ Indeed, they may be so significant that theories about individual behaviour and theories about market behaviour becomes, in fact, theories about distinctly different things. Therefore, some researchers believe that aggregating individual users responses may not provide an apt description of marketwide user behaviour.

The early research regarding relations between accounting information and market behaviour has been based on the theory of capital market efficiency. This theory implies that an alteration in the information set will result in a prompt transition to a new equilibrium. The theory is not specific with respect to the information set, and technical problems arise when it is admitted that the price actually reflects the underlying information.³⁴ The prompt adjustment to a new equilibrium in conjunction with the dissemination of accounting data is consistent with the notion that those data are useful or possess pragmatic information content. Following that logic, researchers have assessed the pragmatic information content of various accounting data by studying the timing of the incidence of abnormal returns.

A number of studies have been conducted along these lines. Ball and Brown³⁵, Beaver³⁶, and Gonedes³⁷ consistently observed abnormal returns in conjunction with the announcement of the annual earnings number. May³⁸ observed similar reactions to the quarterly announcement of firm earnings. In other words, these studies are consistent with the notion that financial reports are useful. However, the mere presence of an abnormal return coincidental with the publication of accounting earnings provides a somewhat tenuous basis from which to infer that the observed price movement was caused by the earnings signal. In some cases, users of accounting information react when they should not react or should not react the way they did. Also, users' aggregate behaviour may not be due to any information content. These fears, however, are not real and lose their validity in view of the theory of Efficient Market Hypothesis.

The above classifications of accounting theory indicates differences in problems addressed, assumptions made, and research methods used, by the various writers. While the differences in these theories are fundamental and issues and conclusions are often inconsistent, theorists have had little success in reconciling their differences or in persuading critics that their theory is superior to others. In future, the debate on (appropriate) accounting theory will continue and no closure appears to be nearer in construction of accounting theory at this time. The existence of continuing disagreement (recognising at the same time that competing theories exist) is noticed in almost all disciplines and not only in accounting. This proves that theory progress in accounting as well as in other disciplines is a difficult task. Watts and Zimmerman³⁹ rightly comment:

"We cannot find a theory that explains and predicts all accounting phenomena. The reason is that theories are simplifications of reality and the world is complex and changing. Theorists try to explain and predict a class of phenomena and, as a consequence, try to capture in their assumptions the variables common to that class. The result is that facts particular to a given observation or subset of observations and not common to the whole class are ignored and are incorporated into the theory's assumptions. Ignoring these facts (or omitted variables) necessarily leads to a theory not explaining or predicting every observation...the mere fact that a theory does not predict perfectly does not cause researchers or users to abandon that theory."

DEDUCTIVE AND INDUCTIVE APPROACH (OR REASONING) IN THEORY FORMULATION

The terms deductive and inductive indicate the type of research methodology or reasoning used in formulating an accounting theory.

Deductive Approach

A *deductive* system is one in which logical reasoning is employed to derive one or more conclusions from a given set of premises. Empirical data are not analyzed in purely deductive systems. A simple example of a deductive system is as follows:

Premise 1: A horse has four legs.

Premise 2: Rakesh has two legs.

Conclusion 1: Rakesh is not a horse.

In this simple case, only one conclusion can be derived from the premises. In a more complex system, more than one conclusion can be derived. However conclusions must not be in conflict with one another. Notice that no other conclusion relative to Rakesh could possibly be reached from the given premises.

Of course, if we are applying this theory to a real being named Rakesh, as opposed to analyzing the logic of a set of sentences, we have to see and, if necessary, examine Rakesh to determine his status. At this point we are in the inductive realm—because we are judging the theory not simply by its internal logic but rather by observing the evidence itself. For example, Rakesh might be a horse that had two legs amputated. Assuming that the reasoning is valid, only questioning premises or conclusions empirically can challenge a deductive theory.

The deductive approach first establishes the objectives of accounting and then derives principles and procedures for recording consistent with these objectives. The deductive approach begins with basic accounting objectives or propositions and proceeds to derive by logical means accounting principles that serves as guides and bases for the development of accounting techniques. The deductive approach includes the following steps:

- (i) Determining the objectives (general or specific) of financial reporting.
- (ii) Selecting the postulates of accounting.
- (iii) Developing a set of definitions.
- (iv) Formulating principles of accounting or generalised statements of policy.
- (v) Applying the principles of accounting to specific situations, and
- (vi) Establishing procedures, methods and rules.

In deductive approach, all subsequent steps (mentioned above in points (ii) to (vi)) follow the objectives formulated. Therefore, the development of objectives is first and prime task as different objectives might require logically different sets of postulates, principles, techniques etc. For example, principles and rules for determining income may vary between the objectives of determining taxable income and business income. Although there is a demand to apply the same set of rules for tax accounting and financial accounting to avoid confusion, but, since the basic objectives are different, it is not likely that the same principles and techniques will meet the different objectives equally well. Similarly different income concepts are found in accounting and therefore the differing income concepts require different principles and procedures to be developed in conformity with respective income concepts. In spite of the existence of different income concepts (and concepts relating to different accounting issues), it has been argued that there is a need for a single all pervasive

concept of income which could serve different objectives and different users. A single income concept and its ability to meet the requirement of different users, is still a debatable question in accounting. On the other hand, it would not be beneficial to have different sets of principles for different purposes accepted in accounting. Some compromises must be made, but there should also be some freedom to serve different objectives as well. Thus, accounting theory should be flexible enough to satisfy the needs of different objectives, but rigid enough to provide for some uniformity and consistency in financial reports to shareholders and the general public.⁴⁰

The accounting writers who have primarily followed deductive process are Paton, Canning, Sweeny, MacNeal, Alexander, Edwards and Bell, Moonitz, and Sprouse and Moonitz (Table 3.1). These deductive theorists unanimously suggest that users should use current cost or value information in their economic decisions. Some deductive writers have used mathematical, analytical representations and testing. Known as the axiomatic method, it is found in the writings of Mattessich and Chambers.⁴¹

Many of the deductive writers cite particular users (generally shareholders, creditors, and managers) and occasionally suggest the information that users would find useful. Except in the case of Alexander, who proposes different models for different users, each writer offers his policy recommendations as a universally valid proposal, as if the entire hierarchy of users would be sufficiently well served by a single set of resulting information. It is also found that the deductive writers operated independently of one another, rarely comparing their work with that of predecessors or contemporaries. The logic of their analyses is difficult to monitor, as it reflects implicit criteria and judgements. Of their writings, it may be said that they neither proved their points nor were disproven by others. A common point may be found in their diverse recommendations: the implicit agreement that users seek (or should seek) current cost information in making economic decision. In this important respect, notwithstanding the diversity of their recommendations, their cause was united.

An important limitation of the deductive approach is that if any of the postulates and propositions are false, the conclusions may also be wrong. Also, it is difficult to derive realistic and workable principles or to provide the basis for practical rules as deductive approach may be found far from reality. But it has been contended that these limitations generally stem from a misunderstanding of the purpose and meaning of deductive theory. It is not necessary that theory be entirely practical in order to be useful in establishing workable procedures. The main purpose of theory is to provide a framework for the development of new ideas and new procedures and to help in the making of choices among alternative procedures. If these objectives are met, it is not necessary that theory be based completely on practical concepts or that it be restricted to the development of procedure, that are completely workable and practical in terms of current known technology. In fact many of the currently accepted principles and procedures are general guides to action rather than

Table 3.1
Summary Analysis of the Approaches of the Deductive Theories

<i>Name</i>	<i>Inferred User(s)</i>	<i>Inferred Model under Ideal Circumstances</i>	<i>Recommended Measurement Methods</i>
Paton (1922)	To promote efficient management, which furthers the interests of all equity holders; also as a report on enterprise progress to equity holders.	"Income in the broadest sense may be conceived as including the entire net increase in the [true economic position of a business] after due allowance has been made for new investments and withdrawals" (pp. 440, 464)	Include appreciation of marketable securities and standard raw materials in non-operating income; to recognize appreciation on other inventories would be more dubious; appreciation on fixed assets and the consequent depreciation on appreciation might be displayed in a supplementary statement.
Canning (1929)	"The proprietor and those beneficially interested in proprietorship wish chiefly to know what <i>net changes in power to command future final income have occurred within a year by reason of the enterprise activities.</i> " (pp. 169-170)	Measure the annual change in capital value by reference to the direct valuation of the assets.	Measure assets and liabilities by discounting future cash flows, if feasible; if not, resort to indirect valuations (such as cost). Income is the change in net assets.
Sweeney (1936)	All users. but primarily business management.	Measure changes in the real valuation of capital by reference to changes in its future productivity to the marginal user.	Account for changes in replacement cost (which are denominated as unrealized until the assets are exchanged); also use GPL changes.
MacNeal (1939)	"To inform the owners of a business of all the profits and losses in which they have an equity" (p. 299); other parties (esp. managers and creditors) at interest also have a right to the same information (pp. 180-182).	Measure changes in "economic value," defined as the market prices of the firm's assets in a free, competitive, broad, and active market.	Use market price for "marketable assets," appraisals or replacement cost for 'reproducible, non-marketable assets,' and original cost less amortization or depletion for "non-reproducible, non-marketable assets." Would include unrealized holding gains and losses on merchandise inventory in net income; other unrealized items, while disclosed in the income statement, are transferred to Capital Surplus.
Alexander (1950)	Asserts different incomes for different purposes where economy is characterized by changing prices and changing expectations of future earning power.	Measure the capitalized value of the enterprise and changes therein.	Proposes various measures depending on user and use. Is skeptical of the usefulness of GPL accounting.
Edwards/Bell (1961)	To facilitate management planning and to assist security analysts, owners of business firms, and potential entrepreneurs in making rational comparisons among companies and industries.	Measure the subjective value and subjective profit of the enterprise.	Account for changes in replacement cost, distinguishing between (1) the excess of realized revenue over the current replacement cost of non-monetary assets consumed, and (2) the unrealized changes in the replacement cost of non-monetary assets. The grand total is called "business profit." Also use GPL changes.

Moonitz (1961) Sprouse/ Moonitz (1962)	To facilitate management planning and control, and to aid owners, creditors, and government in evaluating management performance.	Measure the changes in enterprise wealth, evidently being the present value of future cash flows.	Use discounted present value (at historical interest rates) for receivables and payables to be settled in cash, net realizable values for readily salable inventories, and replacement cost for other inventories and for tangible fixed assets. Reject realization as lacking "analytical precision." Also favour GPL changes.

Source: American Accounting Association, Statement on Accounting Theory Acceptance, AAA, 1977, p. 7.

specific rules that can be followed precisely in every applicable case.⁴²

Inductive Approach

Inductive reasoning examines or tests data, usually a sample from a population, and makes inferences about the population. If an individual were testing a pair of dice to see whether they were loaded, he or she might throw each dice 100 times in order to check that all sides come up approximately one sixth of the time. Accounting researchers gather data through many methods and sources. These include questionnaires sent to practitioners or other appropriate parties, laboratory experiments involving individuals in simulation exercises, numbers from published financial statements, and prices of publicly traded securities.

In a complex environment such as the business world, a good inductive theory must carefully specify the problem that is under examination. The research must be based on a hypothesis that is capable of being tested. The process includes selecting an appropriate sample from the population under investigation, gathering and scrutinizing the needed data, and employing the requisite tools of statistical inference to test the hypothesis.

The inductive approach to accounting theory examines observations first and accounting practices and then derives principles and procedures from these observations. This approach emphasises on drawing generalised conclusions and principles of accounting from detailed observations and measurements of financial information of business enterprises. The inductive approach includes the following steps:

- (i) Making observations and recording of all observations.
- (ii) Analysis and classification of these observations to determine recurring relationships, similarities, and dissimilarities.
- (iii) Derivation and formulation of generalisations and principles of accounting from the recorded observations that reflect recurring relationships.
- (iv) Testing of generalisations and principles.

Some accounting writers have followed inductive approach and used observations regarding accounting practice to suggest an accounting theory, accounting principles and generalisations. Inductive theorists include Hatfield, Littleton, Patton and Littleton, and Ijiri. All these theorists emphasise rationalising and improving

accounting practice to draw theoretical conclusions. The inductive approach has been forcefully supported and defended by Ijiri. Ijiri undertakes to generalise the objectives implicit in current accounting practice and then defends the use of historical cost against current cost and current value. He rejects current values because they are predicted on hypothetical actions of the entity and, as such, are not verifiable. Ijiri concludes that accounting practice may best be interpreted in terms of accountability, which he defines as economic performance measurement that is not susceptible to manipulation by interested parties. Ijiri⁴³ explains forthrightly his preference for inductive approach:

“This type of inductive reasoning to derive goals implicit in the behaviour of an existing system is not intended to be proestablishment or promote the maintenance of the status quo. The purpose of such an exercise is to highlight where changes are most needed and where they are feasible. Changes suggested as a result of such a study have a much better chance of being actually implemented. Goal assumptions in normative models or goals advocated in policy discussions are often stated purely on the basis of one’s conviction and preference, rather than on the basis of inductive study of the existing system. This may perhaps be the most crucial reason why so many normative models or policy proposals are not implemented in the real world.”

Inductive approach has advantages as it is not necessarily influenced by predetermined objectives, structure or model. The investigators may make any observations they find purposeful. After generalisations and principles are formulated, they are verified using the deductive approach. However, this approach has some limitations too. The investigators are likely to be influenced by preconceived notions in studying relationships among the accounting data. The collection of data may be influenced by the attitude of the investigators. Another limitation is that financial data (observations) may vary from one firm to another. The diverse nature of the data for different firms create difficulties in drawing meaningful generalisations and principles.

It may be said that while the deductive approach begins with general proposition and objectives, the formulation of these propositions and objectives are often done by using inductive approach, conditioned by the researcher’s knowledge of and experience with accounting practice. In other words, the general propositions are formulated through an inductive process, while the principles and techniques are formulated by a deductive

process. Therefore, some of the inductive writers sometimes interpose deductive approach, and deductive writers sometimes interpose inductive reasoning. Yu suggests that inductive logic may presuppose deductive logic.⁴⁴

EVENTS APPROACH, VALUE APPROACH AND PREDICTIVE APPROACH

Events Approach

The events approach in accounting theory implies that the purpose of accounting is to provide information about relevant economic events that might be useful in a variety of possible decision models.⁴⁵ It is up to the accountant to provide information about the events and leave to the user the task of fitting the events to their decision models. It is up to the user to aggregate and assign weights and values to the data generated by the event in conformity with his own decisions. The user rather than the preparer of accounts transfers the event into accounting information suitable to the user's own individual decision model. Events may be characterised by one or more basic attributes or characteristics and these characteristics can be directly observed with feasibility. The events approach suggests a large expansion of the accounting data presented in financial reports. Characteristics of an event other than just monetary values may have to be disclosed. Under the events approach because of a disaggregation of data provided to users, the data are expanded. Sorter proposes the following guidelines for the preparation of balance sheet and income statement under the events approach:

- (i) A balance sheet should be so constructed as to maximise the reconstructibility of the events to be aggregated. This means that all aggregated figures in the balance sheet may be disaggregated to show all the events that have occurred since the inception of the firm.
- (ii) In Income statement, each event should be described in a manner facilitating the forecasting of that same event in a future time period given exogenous changes.⁴⁶

Johnson has emphasised upon 'normative events theory' to increase the forecasting accuracy of accounting reports by focusing on the most relevant attributes of events crucial to the users. Johnson⁴⁷ observes:

"In order for interested persons (shareholders, employees, manager, suppliers, customers, government agencies, and charitable institutions) to better forecast the future of social organisations (households, business, governments, and philanthropies), the most relevant attributes (characteristics) of the crucial events (internal, environmental and transactional) which affect the organisations are aggregated (temporally and sectionally) for periodic publication free of inferential bias."

The events approach suffers from the following limitations:

- (i) Information overload may result from the attempt to measure the relevant characteristics of all crucial events affecting a firm. This is important as there is a limit to the

Complementary Nature of Deductive and inductive Methods

The deductive-inductive distinction in research, although a good concept for teaching purposes, often does not apply in practice. Far from being either/or competitive approaches, deduction and induction are complementary in nature and often are used together. Hakansson, for example, suggested that the inductive method can be used to assess the appropriateness of the set of originally selected premises in a primarily deductive system. Obviously, changing the premises can change the logically derived conclusions. The research process itself does not always follow a precise pattern. Researchers often work backward from the conclusions of other studies by developing new hypotheses that appear to fit the data. They then attempt to test the new hypotheses.

The methods used by the greatest detective in all literature, Sherlock Holmes, renowned for his extraordinary powers of deductive reasoning, provide an excellent example of the complementary nature of deductive and inductive reasoning. In one of Holmes's cases, Silver Blaze, a famous racehorse, mysteriously disappeared when its trainer was murdered. One element of the case was that the watchdog did not bark when the horse disappeared. Dr. Watson, Holmes's somewhat slow witted sidekick, saw nothing unusual about the dog not barking. Holmes, however, immediately deduced that the horse was taken from the stable by someone from the household rather than by an outsider. Thus, his list of suspects was immediately narrowed. Holmes was also keenly aware of induction: He systematically observed elements that would increase his knowledge and perceptions. Extensive studies of such diverse items as cigar ashes, the influence of various trades on the form of the hand, and the uses of plaster of Paris for preserving hand and footprints added considerable depth to his deductive abilities.

In a not dissimilar fashion, inductive research in accounting can help to shed light on relationships and phenomena existing in the business environment. This research, in turn, can be useful in the policymaking process in which deductive reasoning helps to determine rules that are to be prescribed. Hence, it should be clear that inductive and deductive methods can be used together and are not mutually exclusive approaches, despite the impossibility of keeping inductive research value free.

Source: Harry I. Wolk, James L. Dodd and John J. Rozycki, *Accounting Theory, Conceptual Issues in a Political and Economic Environment*, VIIIth Edition, Sage Publications, 2013, pp. 38-39.

amount of information an individual can efficiently handle at one time.

- (ii) Measuring all the characteristics of an event may prove to be difficult, given the state of the art in accounting.
- (iii) The criterion for selecting what information (events) should be presented is very vague, and therefore, it does not lead to a fully developed theory of accounting. Yet, an adequate criterion for the choice of the crucial events has not been developed.

Value Approach

Value approach in accounting is traditional approach which assumes that “users needs are known and sufficiently well specified so that accounting theory can deductively arrive at and produce, optimal input values for user and useful decision models.” However, it is accepted that input values cannot be optimal for all uses and users. In the value approach, the balance sheet is regarded as an indicator of the financial position of a business enterprise at a given point in time. On the contrary, in the events approach, the balance sheet is regarded as an indirect communication of all accounting events, relevant to the firm since its inception. Similarly, in the value approach, the income statement is perceived as an indicator of the financial performance of the business firm for a given period. In the events approach, it is perceived as a direct communication of the operating events occurring during period. In the value approach, the funds flow statement is perceived as an expression of the changes in working capital. In the events approach, however, it is better perceived as an expression of financial and investment events. In other words, an event’s relevance rather than its impact on the working capital determines the reporting of an event in the funds flow statement.

Events approach assumes the existence of many and diverse users and therefore financial reporting in this approach is not directed towards specific users. It also assumes that the user should be able to select the desired information from a broader list and also to decide the amount of aggregation. A user can generally aggregate accounting data with sufficient detail, but cannot disaggregate data without the detail.

Which approach—event approach or value approach—should be followed, depends on many factors such as decision models, users’ informational requirements, the need to predict specific events, etc. Benbasat and Dexter⁴⁸ conclude that the psychological type of the decision maker is an important factor in determining what type of information system to provide. Structured/Aggregate reports are preferable for high analytical decision makers, and events approach is preferable for low capability decision makers. In addition to psychological type, the information provider needs to consider the users decision environment as a contributing factor in the design process. As the uncertainty in the decision environment decreases, the “value” approach seems preferable. On the other hand, as uncertainty about the environment increases or if the decision making process is not well understood, the event approach may be more suitable.

Predictive Approach

Predictive approach in accounting theory basically deals with deciding different accounting alternatives and measurement methods. This approach signifies that particular accounting method should be followed which has predictive ability, *i.e.*, which can predict events that are useful in decision making and in which users are interested. In this way, an accounting measure or option having the highest predictive ability or power with regard to a specific situation or event will be preferred by the preparers of accounting reports as it will be useful to users in predicting the decision making variables.

Predictive approach in accounting theory is based on the concept of relevant information. The assumption is that the relevant information, if communicated, commands greater predictive ability in predicting the future events about a business enterprise. The predictive approach is useful in evaluating the current accounting practices, evaluating alternative methods of accounting, choosing competing accounting measures and hypotheses. It facilitates the testing and evaluation of accounting choices empirically and the ultimate decision making. Predictive ability is a purposeful criterion which is linked with the decision-making purpose of accounting information and within this goal this approach helps in selecting relevant information for the users. Prediction is a prerequisite to making decision, *i.e.*, decisions are usually not made without the prediction. However, prediction may not necessarily end into decision making, *i.e.*, prediction may be made without the goal of decision.

Predictive approach may not be successfully used due to some inherent difficulties such as difficulty in identifying the decision models of different users, difficulty in identifying the events and items which are of interest to users, difficulty in establishing predictive and explanatory relationship between accounting events and information on the one hand and accounting methods and measures on the other hand.

METHODOLOGY IN ACCOUNTING THEORY

A methodology is required for the formulation of an accounting theory. In accounting it is true that many theories, approaches, opinions, have been proposed and supported. These theories and approaches have led to the use of two methodologies:

- (1) Positive Accounting Theory
- (2) Normative Accounting Theory

Positive Accounting Theory

Positive methodology, is often known as Descriptive Methodology, Positive Accounting Theory or “the Rochester School of Accounting”. The basic message in positive theory of accounting is that most accounting theories are unscientific because they are normative and should be replaced by positive theories that explain actual accounting practices in terms of management’s voluntary choice of accounting procedures and how the regulated standards have changed over time. It attempts to set forth and explain what and how financial information is presented and communicated to users of accounting data. Positive theory yields no prescriptions and norms for accounting practices. It is concerned with explaining accounting practice. Positivism or empiricism means testing or relating accounting hypotheses or theories back to experiences or facts of the real world. It is designed to explain and predict which firms will and which firms will not use a particular method of valuing assets, but it says nothing as to which method a firm should use.

The concept of positive theory was introduced into the accounting literature relatively recently during 1960s. The best

defence of positive accounting theory has been provided by Watts and Zimmerman through their various writings, the most recently being *Positive Accounting Theory* (1986).⁴⁹

Watts and Zimmerman asserted:

“The objective of [positive] accounting theory is to *explain and predict* accounting practice ... *Explanation* means providing reasons for observed practice. For example, positive accounting theory seeks to explain why firms continue to use historical cost accounting and why certain firms switch between a number of accounting techniques. *Prediction* of accounting practice means that the theory predicts unobserved phenomena.”

Unobserved phenomena are not necessarily future phenomena; they include phenomena that have occurred, but on which systematic evidence has not been collected. For example, positive theory research seeks to obtain empirical evidence about the attributes of firms that continue to use the same accounting techniques from year to year versus the attributes of firms that continually switch accounting techniques. We might also be interested in predicting the reaction of firms to a proposed accounting standard, together with an explanation of why firms would lobby for and against such a standard, even though the standard has already been released. Testing these theories provides evidence that can be used to predict the impact of accounting regulations before they are implemented.

Positive accounting theories are based on assumptions about the behaviour of individuals:

- Managers, investors, lenders and other individuals are assumed to be rational, evaluative utility maximisers (REMs).
- Managers have discretion to choose accounting policies that directly maximise their utility (self-interest) or to alter the firm's financing, investment and production policies to indirectly maximise their self-interest.
- Managers take actions that maximise the value of the firm.

Watts and Zimmerman find that prescriptions and proposed accounting objectives and methodologies in the form of ‘should be’ fail to satisfy all and not accepted generally by all standard setting bodies. Prescriptions require the specification of an objective and an objective function. For example, to argue that current cost values should be the method of valuing assets, one might adopt the objective of operating capability and specify how certain variables affect operating capability (the objective functions). Then one could use a theory to argue that adoption of current cost values will increase operating capacity. However, a theory (which suggest the specification of objective) does not provide a means for assessing the appropriateness of the objective(s) which frequently differ among writers and researchers. The decisions on the objective is subjective and there is no method for resolving differences in individual decisions. The differences in objectives are reflected in many statements on accounting theory. For example, Chambers (*Accounting, Evaluation and Economic Behaviour*, Prentice Hall 1966,

Chapters 911) apparently adopts economic efficiency as an objective while the American Institute of Certified Public Accountants (AICPA) Study Groups on the Objectives of Financial Statements (1973, p. 17) decided that “financial statements should meet the needs of those with the least ability to obtain information....” Not only are the researchers unable to agree on the objectives of financial statements, but they also disagree over the methods of deriving prescriptions from the objectives. Thus, choosing an objective amounts to choosing among individuals and, therefore, necessarily entails a subjective value judgement.

Belkaoui⁵⁰ observes

“The major thrust of the positive approach to accounting is to explain and predict management's choice of standards by analyzing the costs and benefits of particular financial disclosures in relation to various individuals and to the allocation of resources within the economy. The positive theory is based on the propositions that managers, shareholders, and regulators/politicians are rational and that they attempt to maximize their utility, which is directly related to their compensation and, hence, to their wealth. The choice of an accounting policy by any of these groups rests on a comparison of the relative costs and benefits of alternative accounting procedures in such a way as to maximize their utility. For example, it is hypothesized that management considers the effects of the reported accounting of numbers on tax regulation, political costs, management compensation, information production costs, and restrictions found in bond-indenture provisions. Similar hypotheses may be related to standard setters, academicians, auditors and others. In fact, the central ideal of the positive approach is to develop hypotheses about factors that influence the world of accounting practices and to test the validity of these hypotheses empirically:

(1) To enhance the reliability of prediction based on the observed smoothed series of accounting numbers along a trend considered best or normal by management.

(2) To reduce the uncertainty resulting from the fluctuations of income number in general and the reduction of systematic risk in particular by reducing the covariances of the firm's returns with the market returns.”

Evaluation of the Positive Approach

Positive methodology or theory is important because it can provide those who must make decisions on accounting policy (corporate managers, auditors, investors, creditors, loan officers, financial analysts, company law authorities) with explanations and predictions of the consequences of their decisions. An important test of the value of an accounting theory is how useful it is. For example, a user will use the accounting theory that increases his welfare the most,⁵¹ through making decisions. Therefore, all users are interested in predicting the effects of decisions.

Positive accounting theory attempts to make good predictions of real-world events. This theory is concerned with

predicting such actions as the choice of accounting policies by firms and how firms will respond to proposed new accounting standards. It should be noted that this theory does not go far as to suggest that firms (and standard setters) should completely specify the accounting policies they will use. This would be too costly. It is desirable to give managers some flexibility to choose accounting policies so that they can adopt to new or unforeseen circumstances.

However, giving management flexibility to choose from a set of accounting policies opens up the possibility of opportunistic behaviour. That is, this theory assumes that managers are rational (like investors) and will choose accounting policies in their own best interests if able to do so.⁵²

The positive approach looks into “why” accounting practices and/or theories have developed in the way they have in order to explain and/or predict accounting events. As such, the positive approach seeks to determine the various factors that may influence rational factors in the accounting field. It basically attempts to determine a theory that explains observed phenomena. The positive approach is generally differentiated from the normative approach, which seeks to determine a theory that explains “what should be” rather than “what is”. The positive approach seemed to generate considerable optimism among its advocates and supporters.

Christenson⁵³ has pointed out the following limitations of positive theory of accountings:

- The Rochester School’s assertion that the kind of “positive” research they are undertaking is a prerequisite for normative accounting theory is based on a confusion of phenomenal domains at the different levels (accounting entities versus accountants), and is mistaken.
- The concept of “positive theory” is drawn from an obsolete philosophy of science and is, in any case, a misnomer, because the theories of empirical science make no positive statement of “what is”.
- Although a theory may be used merely for prediction even if it is known to be false, an explanatory theory of the type sought by the Rochester School, or one that is to be used to test normative proposals, ought not to be known to be false. The method of analysis, which reasons backward from the phenomena to the premises which are acceptable on the basis of independent evidence, is the appropriate method for constructing explanatory theories.
- Contrary to the empirical method of subjecting theories to severe attempts to falsify them, the Rochester School introduces *ad hoc* arguments to excuse the failure of their theories.

Another criticism is based on the argument that positive or “empirical” theories are also normative and value-laden because they usually mark a conservative ideology in their accounting-policy implications.⁵⁴

Normative Accounting Theory

The 1950s and 1960s saw what has been described as the ‘golden age’ of normative accounting research. During this period, accounting researchers became more concerned with policy recommendations and with what should be done, rather than with analysing and explaining what was currently accepted practice. Normative theories in this period concentrated either on deriving the ‘true income’ (profit) for an accounting period or on discussing the type of accounting, information which would be useful in making economic decisions.

Normative accounting theory, popularly known as normative methodology also, attempts to prescribe what data ought to be communicated, and how they ought to be presented; that is, they attempt to explain ‘what should be’ rather than ‘what is.’ Financial accounting theory is predominantly normative (prescriptive). Most writers are concerned with what the contents of published financial statements should be; that is, how firms should account. Normative methodology and accounting, with more than half a century of research in its area, has got support from many writers and accounting bodies, notably Moonitz, Sprouse and Moonitz, AAA’s Statement of Basic Accounting Theory, Edwards and Bell, Chambers. It has been found that government regulations relating to accounting and reporting has acted as a major force in creating a demand for normative accounting theories employing public interest arguments, that is, for theories purporting to demonstrate that certain accounting procedures should be used, because they lead to better decisions by investors, more efficient capital market, etc. Further, the demand is not for one (normative) theory, but rather for diverse prescriptions and suggestions.

Normative researchers labelled their approach to theory formulation as scientific and, in general, based their theory on both analytic (syntactic) and empirical (inductive) propositions. Conceptually, the normative theories of the 1950s and 1960s began with a statement of the domain (scope) and objectives of accounting, the assumptions underlying the system and definitions of all the key concepts. The normative theorists also made assumptions about the nature of firm’s operations based on their observations. Detailed and precise accounting principles and rules and a logical explanation of the accounting outputs were outlined. The deductive framework was to be rigorous and consistent in its analytic concepts.

According to Scott:

“Whether or not normative theories have good predictive abilities depends on the extent to which individuals actually make decisions as those theories prescribe. Certainly, some normative theories have predictive ability—we do observe individuals diversifying their portfolio investments. However, we can still have a good normative theory even though it may not make good predictions. One reason is that it may take time for people to figure out theory.

Individuals may not follow a normative theory because they do not understand it, because they prefer some other theory or simply because of inertia. For example, investors may not follow

a diversified investment strategy because they believe in technical analysis, and may concentrate their investments in firms that technical analysts recommend. But, if a normative theory is a good one, we should see it being increasingly adopted over time as people learn about it. However, unlike a positive theory, predictiveability is not the main criterion by which a normative theory should be judged. Rather it is judged by its logical consistency with underlying assumptions of how rational individuals should behave.”⁵⁵

COMPARISON BETWEEN POSITIVE THEORY AND NORMATIVE THEORY

The main difference between normative and positive theories is that normative theories are prescriptive, whereas positive theories are descriptive, explanatory or predictive. Normative theories prescribe how people such as accountants should behave to achieve an outcome that is judged to be right, moral, just, or otherwise a ‘good’ outcome. Positive theories do not prescribe how people (e.g., accountants) should behave to achieve an outcome that is judged to be ‘good’. Rather, they avoid making value_laden prescriptions. Instead, they describe how people do behave (regardless of whether it is ‘right’); they explain why people behave in a certain manner, for example to achieve some objective such as maximising share values or their personal wealth (regardless of whether that is, right’); or they predict what people have done or will do (again, regardless of whether that is ‘right’ or ‘best behaviour’).

Normative theories employ a value judgment: Contained within them is at least one premise saying that this is the way things *should* be. For example, a premise stating that accounting reports should be based on net realizable value measurements of assets indicates a normative system. By contrast, *descriptive theories* attempt to find relationships that actually exist. The Watts and Zimmerman study is an excellent example of a descriptive theory applied to a particular situation.

The positive theory is a predictive model whose validity is independent of the acceptance of any goal structure. Though assumed goals may be part of such a model, research relating to a theory or model of accounting does not require acceptance of the assumed goals as necessarily desirable or undesirable. On the other hand, accounting policies as made in normative theory, requires a commitment to goals and, therefore, requires a policy-maker to make value judgements. Policy decisions presumably are based on both an understanding of accounting theories and acceptance of a set of goals.⁵⁶ In spite of the existence of positive and normative methodologies in accounting theory, theorists and writers have to be very careful in discriminating between positive and normative propositions. Positive theories are concerned with how the world works. For example, the following is a propositions made in positive accounting: “if a business enterprise changes from FIFO to LIFO and the share market has not anticipated the change, the share price will rise.” This statement is a prediction that can be refuted by evidence. Normative theories are concerned with prescriptions, goal setting. For example, “given the set of

conditions A, alternative D should be selected,” is a normative proposition. The other normative proposition can be, “since prices are rising, LIFO should be adopted.” These (normative) propositions are not refutable. Given an objective, it can be made refutable. For example, the statement, “if prices are rising, choosing LIFO will maximise the value of the firm,” is refutable by evidence. Thus, given an objective, a researcher can turn a prescription into a conditional prediction and assess the empirical validity. However, the choice of the objective is not made by the theorists, but by the users of theory.

It is difficult to say which methodology—positive or normative—should be used in the formulation and construction of accounting theory. It is argued that, given the complex nature of accounting, accounting environment, issues and constraints, both methodologies may be needed for the formulation of an accounting theory. Positive theory may be used in justifying some accounting practices. At the same time, normative theory may be useful in determining the suitability of some accounting practices which ought to be followed in terms of normative theories. Watts and Zimmerman⁵⁷ observe:

“We emphasise that positive theory does not make normative propositions unimportant. The demand for theory arises from the users’ demands for prescriptions, for normative propositions. However, theory only supplies one of the two necessary ingredients for a prescription: the effect of certain actions on various variables. The user supplies the other ingredient: the objective and the function that provides the effect of variables on that objective (the objective function).”

Similarly, Scott⁵⁸ comment:

“...it is sufficient to recognise that both normative and positive approaches to theory development and testing are valuable. To the extent that decision makers proceed normatively, both positive and normative theories will make similar predictions. By insisting on empirical testing of these predictions, positive theory helps to keep the normative predictions on track. In effect, the two approaches complement each other.”

Many positive theory researchers are largely dismissive of normative viewpoints. Similarly, many normative theorists do not accept the value of positive accounting research. In fact, the theories can coexist, and can complement each other. Positive accounting theory can help provide an understanding of the role of accounting which, in turn, can form the basis for developing normative theories to improve the practice of accounting.⁵⁹

OTHER APPROACHES IN ACCOUNTING THEORY

In the previous section, many theories (approaches) of accounting have been discussed. It is also clear that there is no single comprehensive theory of accounting. Besides the theories discussed earlier, some more traditional approaches to formulation of an accounting theory are found. They are listed as follows:

- (1) Pragmatic Approach
- (2) Authoritarian Approach

- (3) Ethical Approach
- (4) Sociological Approach
- (5) Economic Approach
- (6) Eclectic Approach

1. Pragmatic Approach

The pragmatic approach aims to construct a theory characterized by its conformity to real world practices and that is useful in terms of suggesting practical solutions. According to this approach, accounting techniques and principles should be chosen because of their usefulness to users of accounting information and their relevance to decision making processes. Usefulness, or utility, means that attribute which fits something to serve or to facilitate its intended purpose.

2. Authoritarian Approach

The authoritarian approach to the formulation of an accounting theory, which is used mostly by professional organizations, consists of issuing pronouncements for the regulation of accounting practices.

Because the authoritarian approach also attempts to provide practical solutions, it is easily identified with the pragmatic approach. Both approaches assume that accounting theory and the resulting accounting techniques must be predicted on the ultimate uses of financial reports if accounting is to have a useful function. In other words, a theory without practical consequences is a bad theory.

3. Ethical Approach

The several approaches to accounting theory are not independent of each other. This is particularly true of the ethical approach; defining it as a separate approach does not necessarily imply that other approaches do not have ethical content, nor does it imply that ethical theories necessarily ignore all other concepts. The ethical approach to accounting theory places emphasis on the concepts of justice, truth and fairness. Fairness, justice, and impartiality signify that accounting reports and statements are not subject to undue influence or bias. They should not be prepared with the objective of serving any particular individual or group to the detriment of others. The interests of all parties should be taken into consideration in proper balance, particularly without any preference for the rights of the management or owners of the firm, who may have greater influence over the choice of accounting procedures. Justice frequently refers to a conformity to a standard established formally or informally as a guide to equitable treatment.

Truth, as it relates to accounting, is probably more difficult to define and apply. Many seem to use the term to mean “in accordance with the facts.” However, not all who refer to truth in accounting have in mind the same definition of facts. Some refer to accounting facts as data that are objective and verifiable. Thus, historical costs may represent accounting facts. On the other hand, the term truth is used to refer to the valuation of assets and

expenses in current economic terms. For example, MacNeal stated that financial statements display the truth only when they disclose the current value of assets and the profits and losses accruing from changes in values, although the increases in values should be designated as realized or unrealized.

Truth is also used to refer to propositions or statements that are generally considered to be established principles. For example, the recognition of a gain at the time of the sale of an asset is generally considered to be a reporting of true conditions, while the reporting of an appraisal increase in the value of an asset prior to sale as ordinary income is generally thought to lack truthfulness. Thus, the established rule regarding revenue realization is the guide. But the truthfulness of the financial reports depends on the fundamental validity of the accepted rules and principles on which the statements are based. Established rules and procedures provide an inadequate foundation for measuring truthfulness.

Probably the greatest disadvantage of ethical approach to accounting theory is that it fails to provide a sound basis for the development of accounting principles or for the evaluation of currently accepted principles. Principles are evaluated on the basis of subjective judgement; or, as generally found, currently accepted practices become accepted without evaluation because it is expedient and easier to do so.

4. Sociological Approach

The Sociological approach to the formulation of an accounting theory emphasizes the social effects of accounting techniques. It is an ethical approach that centers on a broader concept of fairness, that is, social welfare. According to the sociological approach, a given accounting principle or technique will be evaluated for acceptance on the basis of its reporting effects on all groups in society. Also implicit in this approach is the expectation that accounting data will be useful for social welfare judgements. To accomplish its objectives, the sociological approach assumes the existence of “established social values” that may be used as criteria for the determination of accounting theory. A strict application of the sociological approach to accounting theory construction may be difficult to find because of the difficulties associated with both determining acceptable “social values” to all people and identifying the information needs of those who make welfare judgements.

The sociological approach to the formulation of an accounting theory has contributed to the evolution of a new accounting subdiscipline — social responsibility accounting. The main objective of social responsibility accounting is to encourage the business entities functioning in a free market system to account for the impact of their private production activities on the social environment through measurement, internalization, and disclosure in their financial statements. Over the years, interest in this subdiscipline has increased as a result of the social responsibility trend espoused by organizations, the government, and the public. Social value oriented accounting, with its emphasis on “social measurement,” its dependence on “social values,” and

its compliance to a "social welfare criterion," will probably play a major role in the future formulation of accounting theory.

5. Economic Approach

The economic approach to the formulation of an accounting theory emphasizes controlling the behaviour of macroeconomics indicators that result from the adoption of various accounting techniques. While the ethical approach focuses on a concept of "fairness" and the sociological approach on a concept of "social welfare," the economic approach focuses on a concept of "general economic welfare." According to this approach, the choice of different accounting techniques depends on their impact on the national economic good. Sweden is the usual example of a country that aligns its accounting policies to other macroeconomic policies. More explicitly, the choice of accounting techniques will depend on the particular economic situation. For example, last in first out (LIFO) will be a more attractive accounting technique in a period of continuing inflation. During inflationary periods, LIFO is assumed to produce a lower annual net income by assuming higher, more inflated costs for the goods sold than under the first in, first out (FIFO) or average cost methods.

The general criteria used by the macroeconomic approach are (1) accounting policies and techniques should reflect "economic reality," and (2) the choice of accounting techniques should depend on "economic consequences." "Economic reality" and "economic consequences" are the precise terms being used to argue in favour of the macroeconomic approach.

Until the setting of standards setting bodies in different countries, the economic approach and the concept of "economic consequences of accounting choices" were not much in use in accounting. The professional bodies were encouraged to resolve any standardsetting controversies within the context of traditional accounting. Few people were concerned with the economic consequences of accounting policies. However, at present, the economic approach and the concepts of economic consequences and economic reality are being applied while framing accounting standards. Some examples where economic approach has got major consideration are accounting for research and development, foreign currency fluctuations, leases, inflation accounting. In setting accounting standards, therefore, the considerations implied by the economic approach are more economic than operational. While in the past, reliance has been on technical accounting considerations, the tenor of the times suggests that standard setting encompasses social and economic concerns.

6. Eclectic Approach

The eclectic approach is basically the result of numerous attempts by individual writers and researchers, professional organisations, government authorities in the establishment of accounting theory and principles and concepts therein. Therefore, eclectic approach comprises a combination of approaches. For example, in USA, many public accounting firms (like Arthur Anderson and Company; Arthur Young and Company; Coopers and Lybrand; Ernst and Whinney; Price Water House Co.; Peat,

Marwick, Mitchell and Co.; Touche Ross and Co.; Deloitte Haskins and Sells), The American Institute of Certified Public Accountants (AICPA), American Accounting Association (AAA), Financial Accounting Standards Board (FASB), Securities and Exchange Commission (SEC), and other professional organisations are involved in the development of accounting theory. In other countries also including India, many efforts have, although on a lesser degree, been made by individual accounting organisations and government authorities to establish accounting principles and concepts.

REFERENCES

1. American Accounting Association, *A Statement of Basic Accounting Theory*, Sarsota: AAA, 1966, p. 1.
2. Kenneth S. Most, *Accounting Theory*, Ohio: Grid Inc. 1982, p. 11.
3. Frederick D.S. Choi and G. Mueller, *International Accounting*, Englewood Cliffs: Prentice Hall, 1984, p. 28.
4. Eldon S. Hendriksen, *Accounting Theory*, Homewood: Richard D. Irwin, 1982, p. 1.
5. Eldon S. Hendriksen, *Accounting Theory*, Irwin, 1982, p. 1.
6. Kenneth S. Most, *Accounting Theory*, *Ibid.*
7. Ross L. Watts and Jerold L. Zimmerman, *Positive Accounting Theory*, Englewood Cliffs: Prentice Hall, 1986, p. 2.
8. A.C. Littleton, *Structure of Accounting Theory*, American Accounting Association, 1958, p. 132.
9. P.J. Taylor and B. Underdown, *Financial Accounting*, CIMA, 1992, p. 3.
10. American Accounting Association, *Accounting Theory Construction and Verification*, Accounting Review Supplement, 1971, p. 531.
11. Yuji Ijiri, *Theory of Accounting Measurement*, American Accounting Association, 1975.
12. Eldon S. Hendriksen, *Accounting Theory*, *Ibid.*, p. 3.
13. Eldon S. Hendriksen, *Accounting Theory*, *Ibid.*, p. 4.
14. American Institute of Certified Public Accountants, *Objectives of Financial Statements*, New York: AICPA, 1973, p. 13.
15. Financial Accounting Standards Board, *Concept No. 1, Objectives of Financial Reporting by Business Enterprises*, FASB, 1978.
16. American Accounting Association, *Accounting Principles Underlying Accounting Financial Statement*, *The Accounting Review* (June 1936), p. 187.
17. W.A. Paton and A.C. Littleton, *An Introduction to Corporate Accounting Standards*, American Accounting Association, 1940, p. 1.
18. R.J. Chambers, "Blue Print for a Theory of Accounting," *Accounting Research*, No. 6, (January 1955) p. 25.
19. C.J. Staubus, *A Theory of Accounting to Investors*, Berkeley: University of California Press, 1961, p. 8.
20. C.T Devine "Research Methodology and Accounting Theory Formation," *The Accounting Review* (July 1960), p. 394.

20. C.T. Horngreen, "Depreciation, Flow of Funds, and the Price Levels," *Financial Analysts Journal* (August 1957), pp. 45-47.
21. R.D. Bradish, Corporate Reporting and the Financial Analyst," *The Accounting Review* (October 1965), pp. 757766.
22. In this category, many studies have been conducted abroad and few in India; e.g. (a) S.S. Singhvi and Harsh B. Desai, "An Empirical Analysis of the Quality of Corporate Financial Disclosure," *The Accounting Review* (January 1971), pp. 129138. (b) S.L. Buzby, "Selected Stems of Information and Their Disclosure in Annual Reports," *The Accounting Review*, (July 1974), pp. 423435. (c) Jawahar Lal, *Corporate Annual Reports, Theory and Practice*, New Delhi: Sterling Publishers Private Ltd., 1985.
23. (a) H.K. Baker Haslem, "Information Needs of Individual Investors," *The Journal of Accountancy* (November 1983), pp. 64-69. (b) Gyan Chandra, "A Study of the Consensus on Disclosure Among Public Accountants and Security Analysts," *The Accounting Review* (October 1974), pp. 733734.
24. (a) H. Falk and I. Ophir, "The Effect of Risk on the Use of Financial Statements by Investment Decision Makers: A Case Study," *The Accounting Review* (April 1973), pp. 32338, and "The Influences of Differences in Accounting Policies on Investment Decisions," *The Journal of Accounting Research* (Spring 1973), pp. 10816. (b) R. Libley, "The use of Simulated Decision Makers in Information Evolution," *The Accounting Review* (July 1975), pp. 475489, and "Accounting Ratios and the Prediction of Failure: Some Behavioural Evidence," *Journal of Accounting Research* (Spring 1975), pp. 15061.
25. (a) F.J. Soper and R. Dalphin, Jr., "Readability and Corporate Annual Reports," *The Accounting Review* (April 1964), pp. 358-62. (b) J.E. Smith and N.P. Smith, 'Readability: A Measure of the Performance of the Communication Function of Financial Reporting'. *The Accounting Review* (July 1971), pp. 55261. (c) A.A. Haried, "Measurement of Meaning in Financial Reports," *Journal of Accounting Research* (Spring 1973), pp. 117142.
26. (a) K. Nelson and R.H. Strawser, "A Note on APB Opinion No. 76" *Journal of Accounting Research* (Autumn 1970), pp. 28489. (b) V. Brewner and R. Shvey, "An Empirical Study of Support for APB Opinion No. 16," *Journal of Accounting Research* (Spring 1972), pp. 200208.
27. (a) R.M. Copeland, A.J. Francia, and R.H. Strawser, "Students as Subjects in Behavioural Business Research", *The Accounting Review* (April 1973), pp. 365374. (b) L.B. Godum, "CPA and User Opinions on Increased Corporate Disclosure", *The CPA Journal* (July 1975), pp. 3135.
28. (a) S.M. Woolsey, "Materiality Survey," *The Journal of Accountancy* (September 1973), pp. 9192. (b) J.A. Boatsman and J.C. Robertson, "Policy Capturing on Selected Materiality Judgements", *The Accounting Review* (April 1974), pp. 342352. (c) J.W. Pattilo, "Materiality: The (Formerly) Elusive Standard", *Financial Executive* (August 1975), pp. 2027.
29. (a) J. Rose *et al.*: "Toward an Empirical Measure of Materiality", *Journal of Accounting Research*, Supplement to Vol. 8 (1970), pp. 138156. (b) J.W. Dickhaut and I.R.C. Eggleton, "An Examination of the Processes Underlying Comparative Judgements of Numerical Stimuli," *Journal of Accounting Research* (Spring 1975), pp. 3872.
30. Some such studies are: (a) A. Belkaoui and A. Cousineau, "Accounting Information, NonAccounting Information and Common Stock Perception," *Journal of Business* (July 1977), pp. 33442. (b) T.R. Dyckman, "On the Investment Decisions," *The Accounting Review* (April 1976), pp. 258295. (c) N. Dopuch and J. Ronen, "The Effects of Alliterative Inventory Valuation Methods: An Experimental Study" *Journal of Accounting Research* (Autumn 1973) pp. 191211. (d) R.F. Ortman, "The Effect of Investment Analysis of Alternative Reporting Procedure for Diversified Firms," *Accounting Review* (April 1974), pp. 298304.
31. Ahmed Riahi Belkaoui, *Accounting Theory*, New York: Harcourt Brace Jovanovica, 1981, p. 43.
32. R.A. Abdel Khalik, "On the Efficiency of Subject Surrogation in Accounting Research," *The Accounting Review* (October 1974), pp 443450.
33. (a) N.J. Gonedes, "Efficient Capital Markets and External Accounting," *The Accounting Review* (January 1972). pp. 1121. (b) N.J. Gonedes and N. Dopuch, "Capital Market Equilibrium, Information Production, and Selecting Accounting Techniques; Theoretical Framework and Review of Empirical Work," *Journal of Accounting Research* (Supplement 1974), pp. 48129.
34. S.J. Grossman and J.E. Stiglitz, 'Information and Competitive Price Systems', *The American Economic Review* (May 1970), pp. 246253.
35. R.J. Ball and P. Brown, "An Empirical Evaluation of Accounting Income Numbers", *Journal of Accounting Research* (Autumn 1968), pp. 159-177.
36. W. Beaver, "The Behaviour of Security Prices and Its Implications for Accounting Research (Methods)", *The Accounting Review Supplement* (1972), p 408.
37. N.J. Gonedes "Capital Market Equilibrium and Annual Accounting Numbers: Empirical Evidence", *Journal of Accounting Research* (Spring 1974), pp. 2662.
38. R.G. May, "The Influence of Quarterly Earnings Announcements on Investor Decisions as Reflected in Common Stock Price Changes", *Journal of Accounting Research* (Spring 1971) pp. 119163.
39. Ross L. Watts and Jerold L. Zimmerman, *Positive Accounting Theory*, *Ibid*, p. 10.
40. Eldon S. Hendriksen, *Accounting Theory*, *Ibid*, p. 8.
41. (a) R. Mattessich, *Accounting and Analytical Methods*, Homewood: Richard D. Irwin, 1964. (b) R.J. Chambers, *Accounting, Evaluation and Economic Behaviour*, Englewood Cliffs: Prentice Hall, 1966.
42. Eldon S. Hendriksen, *Accounting Theory*, *Ibid*, p. 9.
43. Y. Ijiri, *Theory of Accounting Measurement*, Studies in Accounting Research 10, AAA, 1975, p. 28.
44. S.C. Yu, *The Structure of Accounting Theory*, Gainesville: The University Press of Florida, 1976, p. 20.
45. G.H. Sorter, "An Events Approach to Basic Accounting Theory," *The Accounting Review* (January 1969), pp. 12-19.

46. G.H. Sorter, "An Events Approach to Basic Accounting Theory," *Ibid*, pp. 1516.
47. O. Johnson, "Toward An Events Theory of Accounting," *The Accounting Review* (October, 1970), pp. 641-653.
48. Izak Benbasat and Albert S. Dexter, "Value and Events Approaches to Accounting: An Experimental Evaluations," *The Accounting Review* (October 1979), pp. 735-749.
49. (a) Ross L. Watts and Jerold L. Zimmerman, "Towards a Positive Theory of the Determination of Accounting Standards," *The Accounting Review* (January 1978), pp. 112-134.
- (b) Ross L. Watts, and Jerold L. Zimmerman, "The Demand for and Supply of Accounting Theories: The Market for Excuses," *The Accounting Review* (April 1979), pp. 273-305.
- (c) Ross L. Watts and Jerold L. Zimmerman, "Agency Problems, Auditing and the Theory of the Firm: Some Evidence," *Journal of Law and Economics* (October 1983), pp. 613-634.
- (d) Ross L. Watts and Jerold L. Zimmerman, *Positive Accounting Theory*, Englewood Cliffs: Prentice Hall, Inc., 1986.
50. Ahmed Riahi – Belkaoui, *Accounting Theory*, Thomson Learning, 2000, pp. 369-370.
51. Ross L Watts and Jerold L. Zimmerman, *Positive Accounting Theory*, *Ibid*, p. 14.
52. William R. Scott, *Financial Accounting Theory*, Prentice Hall, 1997, p. 220.
53. C-Christenson, "The Methodology of Positive Accounting", *The Accounting Review* (January, 1983), pp. 1-22.
54. A.M. Tinker, B.D. Merino and M.D. Neimark, "The Normative Origins of Positive Theories: Ideology and Accounting Thought", *Accounting, Organizations and Society* (May 1982), pp. 167-200.
55. William R. Scott, *Ibid*.
56. Robert G May and Gary L. Sundem, "Research for Accounting Policy: An Overview," *The Accounting Review* (October 1976), pp. 747-763.
57. Ross L. Watts and Jerold L. Zimmerman, *Positive Accounting Theory*, *Ibid.*, p. 9.
58. William R. Scott, *Ibid*, p. 221.
59. Jayne Godfrey, Allan Hodgson, Scott Holmes and Ann Tarca, *Accounting Theory*, John Wiley and Sons Australia Ltd., 2006, p. 55.
6. Behavioural approach to accounting theory studies human behaviour as it relates to accounting information." Discuss this statement and also examine studies conducted in this area.
7. In what way 'aggregate market behaviour research' can contribute to the development of accounting theory?
8. Compare normative deductive and inductive approaches to theory formulation. Which approach is more useful in theory construction? (*M.Com., Delhi, 2013*)
9. "No single approach to accounting theory is universally recognised." In the light of this statement discuss the factors responsible for it?
10. "Accounting is what accountants do; therefore, a theory of accounting may be extracted from the practices of accountants." Do you agree?
In the light of the above statement, discuss the nature of accounting theory. (*M.Com., Delhi, 1990*)
11. (a) Define 'accounting theory.'
(b) Although there are several ways of classifying accounting theories, a useful frame of reference is to classify theories according to prediction levels." Explain clearly. (*M.Com., Delhi*)
12. "A single universally accepted basic accounting theory does not exist at this time. Instead a multiplicity of theories has been proposed." Elaborate in brief. (*M.Com., Delhi*)
13. What is the difference between traditional and new approaches to accounting theory formulation? Explain briefly the traditional approaches. (*M.Com., Delhi*)
14. "...At the present time, no comprehensive theory of accounting exists. Instead, different theories have been and continue to be proposed." What are the reasons for so many theories (of middle range) being proposed from time to time? Have some attempts been recently made in the direction of formulating a universally acceptable accounting theory? Explain in brief. (*M.Com., Delhi, 1991*)
15. Distinguish between deductive and inductive reasoning. (*M.Com., Delhi*)
16. Contrast the descriptive and general normative approaches to theory construction. (*M.Com., Delhi*)
17. "...The ability to predict is not the only consideration in the development of theories in accounting" (E.S. Hendriksen). Do you agree with the above statement? Also state any other considerations which you consider to be relevant in this context. (*M.Com., Delhi, 1994*)
18. Explain briefly how the welfare approach to accounting theory differs from other approaches. (*M.Com., Delhi, 1994*)
19. Explain the primary purpose of accounting theory. (*M.Com., Delhi 1992*)
20. Define accounting theory. What is the primary purpose of accounting theory? (*M.Com., Delhi, 1991*)
21. Discuss the salient features of the 'ethical approach' to accounting theory. What are its limitations? Can exclusive reliance on this approach lead to development of sound accounting principles. (*M.Com., Delhi*)
22. "In the formulation of accounting theory, a hypothesis has been widely accepted that relates the user of accounting

QUESTIONS

1. Explain the terms 'theory' and 'accounting theory.'
2. How does accounting theory influence accounting practices and accounting issues? (*M.Com., Delhi, 2011*)
3. Discuss the descriptive approach in financial accounting theory. What are the limitations of this approach?
4. "Decision-usefulness approach focuses on the relevance of information being communicated." Explain this statement.
5. Discuss the main characteristics of decision-usefulness approach in financial accounting.

information, the relevance of accounting information to decision making, the decision maker's conception of accounting and other available information to the effect of accounting information on decisions."

Which accounting theory(s), in your opinion, accomplishes the hypothesis contained in the above statement? Explain, giving reasons. (M.Com., Delhi, 1995, 2008, 2012)

23. Mr. Raghavan, a practising accountant for over twenty years made the following statement:
"In other fields of study, there is no overall theory, so why do so many accounting theorists want to construct a general theory of accounting. Attempts to formulate a general theory is futile and is of no value. After all, we have gotten along these many years without one, so why do we need one now."
Comment on Mr. Raghavan's statement, giving appropriate explanation. (M.Com., Delhi, 1995, 2007, 2010)
24. "Accounting theory has great utility for improving accounting practices and resolving complex accounting issues." Discuss this statement. (M.Com., Delhi, 1996)
25. "A single general theory of accounting may be desirable, but accounting as a logical and empirical science is still in too primitive a stage for such a development." Hendriksen, Do you agree with this statement? Explain briefly.
26. What do you understand by the term 'syntactical theories.'? Can such theories be tested?
27. Discuss briefly the need for 'Behavioural theories,' in accounting. (M.Com., Delhi, 1997)
28. Explain the main objectives of Accounting Theory. Does it precede or follow Accounting practice. (M.Com., Delhi, 1998)
29. Explain decision-usefulness approach. How does it differ from welfare approach? (M.Com., Delhi, 1999)
30. Hendriksen has classified accounting theories at three main levels. Discuss them with the help of suitable examples. (M.Com., Delhi, 1999)
31. What do you understand by the term Interpretational theories? Discuss briefly the role of such theories in the development of accounting theory. (M.Com., Delhi, 2000)
32. Discuss briefly the major objective of corporate social accounting approach. What is its relevance in the present day context? (M.Com., Delhi, 2000)
33. Which method of reasoning would you suggest for the development of accounting theory? Is it possible to develop a sound theory of accounting based on any particular method of reasoning? Explain. (M.Com., Delhi, 2000, 2011)
34. Define accounting theory. What is the primary purpose of accounting theory? (M.Com., Delhi, 2008, 2012)
35. Discuss decision-usefulness theory in the formulation of accounting theory. Explain the relevance of 'Individual User Behaviour' and 'Aggregate Market Behaviour' in decision-usefulness theory. (M.Com., Delhi, 2007, 2010)
36. "The ethical approach to accounting theory places emphasis on the concepts of justice, truth and fairness." Comment. (M.Com., Delhi, 2009)
37. Distinguish between deductive and inductive reasoning. (M.Com., Delhi, 2009)
38. Explain positive and normative theory. Which theory is appropriate for formulating accounting theory. (M.Com., Delhi, 2009)
39. Can a positive theory make good predications even though it may not capture exactly the underlying decision processes by which individuals make decisions? Explain.
40. Explain methods of reasoning for the development of accounting theory. Is it possible to develop a sound theory of accounting based on any particular method of reasoning? Why or why not? (M.Com., Delhi, 2011)



PART – TWO

Elements of Financial Statements

- **Chapter 4 : Income Concepts**
- **Chapter 5 : Revenues, Expenses, Gains and Losses**
- **Chapter 6 : Assets**
- **Chapter 7 : Liabilities and Equity**
- **Chapter 8 : Depreciation Accounting and Policy**
- **Chapter 9 : Inventory**
- **Chapter 10 : Accounting and Reporting of Intangibles**

Income Concepts

RELEVANCE OF INCOME MEASUREMENT

The measurement of income occupies a central position in accounting. Income measurement is probably the most important objective and function of accounting, accounting concepts, principles and procedures used by a business enterprise. Generally speaking, income represents wealth increase and business success; the higher the income, the greater will be the success of a business enterprise. The following are some of the major areas where income information is practically useful:

(i) Income as a guide to dividend and retention policy:

Income information determines as to how much of a business enterprise's periodic income can be distributed to its owners and how much shall be retained to maintain or expand its activities. The income is the maximum amount which can be distributed as dividends and retained for expansion. However, because of the differences in accrual accounting and cash accounting income, a firm may not distribute the total recognised income as dividends. Liquidity and investment prospects are necessary variables for the determination of dividend policy.

(ii) Income as a measure of managerial efficiency:

Income is regarded as an indicator of management's effectiveness in utilising the resources belonging to the external users. Income tends to provide the basic standard by which success is measured. Thus, income is a measure to evaluate the quality of management's policy making, decision-making, and controlling activities. The Trueblood Committee Report comments:

"An objective of financial statements is to supply information useful in judging management's ability to utilise enterprise resources effectively in achieving the primary enterprise goal."¹

(iii) Income as a guide to future predictions:

Income helps in predicting the future income and future economic events of a business enterprise as current income acts to influence future expectations. It helps in evaluating the worth of future investments while making investment decisions.

(iv) Income as a means of determining tax:

Income figure determines the tax liability of a business enterprise. How tax is determined is important to management and investors both. The taxation authorities generally accept accounting income as a basis of assessing the tax.

(v) Income as a guide to creditworthiness and other economic decisions:

Credit grantors—individuals and institutional both—require evidence of sound financial status before advancing loans to business enterprises. Income—current and future both—is a relevant data to determine a concern's ability to repay loans and other liabilities at maturity. Besides, income figure is useful in other decision areas also such as pricing,

collective bargaining, governmental, social and economic regulation and policies.

INCOME STATEMENT VS. BALANCE SHEET

The relationship between income statement which reports net income of a business enterprise and balance sheet which reports financial position has been a matter of debate and research in accounting. The controversy between the two has had some amount of influence as how income should be measured. The Financial Accounting Standards Board (U.S.A.) in its 1976 D.M. entitled *Conceptual Framework for Financial Accounting and Reporting: Elements of Financial Statements and Their Measurement* (para 31) comments on this controversy when it says:

"difference in emphasis over the years have led to two schools of thought about measuring earnings. One view is usually called the balance sheet, asset and liability or capital maintenance view; the other is usually called the income or earnings statement, revenue and expense or matching view. Many of the differences between them in articulated financial statements are matters of emphasis, but some result in significant differences in measures of earnings and statements of financial position."

Articulated financial statements, by definition, are statements in which net income for the period, less distributions to owners, is entered into the balance sheet as the change in owners' equity. It is this that makes the balance sheet balance. Articulated statements further assume that there are no capital transactions between the enterprise and its owners. The debate between income statement and balance sheet is mainly about the primacy of the income statement or the balance sheet. An example of tank of water has often been used to explain this difference. If water is flowing into and out of a tank at different rates, the net inflow into the tank during a specified period can be measured by comparing the level in the tank at the beginning and at the end of the period, or by measuring the inflow and the outflow and subtracting one from the other. Assuming there are no leaks or evaporation, the two answers should be the same. Measuring net inflow by comparing the water levels at two points in time corresponds to measuring net income by comparing the owners' wealth at two points in time. The other approach corresponds to measuring net income by matching revenues with expenses.

Many accounting writers and researchers view net income as a quantity to be determined by comparing inputs and outputs, not by looking at the change in wealth during a period. Proponents of the input-output or expense-revenue view of income are not concerned if, as a result, the balance sheet has to accommodate

deferred credits that are neither liabilities nor a part of owners' equity, or deferred expenditures that are not economic resources and therefore, not assets. In this view, the balance sheet is simply a list of what is left over after expenses have been matched with revenues. David Solomons in his book *Making Accounting Policy* (1986) supports this view and says:

"... determining income more or less independently of balance sheet changes has the great advantage of giving management more control over the number that emerges as earnings. It facilitates income smoothing and makes it easier to control the volatility of earnings."

DIFFERENT CONCEPTS OF INCOME MEASUREMENT

Measuring periodic income of a business has been a debatable issue among the theorists, researchers, accounting bodies, accounting educators and practitioners. Accordingly, many concepts and approaches have emerged which aim to determine net income* of a business for an accounting period. The different concepts of income measurement have led to different types of income which can be measured for a business enterprise.

The different concepts of income measurement or different types of income are as follows:

- (1) Accounting Income (or Business Income** or Accounting Concept of Income).
- (2) Economic Income (or Economic Concept of Income).
- (3) Capital Maintenance Income (or Capital Maintenance Concept of Income).

Besides the above concepts or approaches, there are other income concepts such as current value income comprising different valuation bases like replacement costs, current entry price, net realisable value or current exit price etc.

ACCOUNTING INCOME

Accounting income is operationally defined as the difference between the realized revenues arising from the transactions of the period and the corresponding historical costs. Accounting income, often referred to as business income or conventional income is measured in accordance with generally accepted accounting principles. The profit and loss account or income statement determines the net income or operating performance of a business enterprise for some particular period of time. Income is determined by following income statement approach, i.e., by comparing sales revenue and costs related to the sales revenue. Net income is determined as follows:

$$\text{Revenue} - \text{Expenses} = \text{Net Income}$$

Accounting income has the following characteristics:

(1) Accounting income is based on the *actual transaction* entered into by the firm (primarily revenues arising from the sales of goods or services minus the costs necessary to achieve these sales). Conventionally, the accounting profession has employed a transaction approach to income measurement. The transactions may be external or internal. Explicit (external) transactions result from the acquisition by firm of goods or services from other entities; implicit (internal) transactions result from the use or allocation of assets within a firm. External transactions are explicit because they are based on objective evidence; internal transactions are implicit because they are based on less objective evidence, such as the use and passage of time.

Thus, accounting income is measured in terms of transactions which the business enterprise enters into with third parties in its operational activities. The transactions relate mainly to revenues received from the sale of goods and/or services, and the various costs incurred in achieving these sales. All these transactions will, in some way, involve the eventual receipt of payment of cash, and, if the eventual cash exchanges with third parties is not complete at the moment of measuring income, this incompleteness is allowed and adjustments are made for amounts due by debtors for sales on credit, amounts due to creditors for purchase on credit. Once these adjustments are made, the revenue and costs which have been recognised as having arisen during the defined period are then linked or matched in order to derive accounting income.

(2) Accounting income is based on the period *postulate* and refers to the financial performance of the firm during a given period.

(3) Accounting income is based on the *revenue principle* and requires the definition, measurement, and recognition of revenues. In general, the *realization principle* is the test for the recognition of revenues and, consequently, for the recognition of income. Specific circumstances present exceptions.

(4) Accounting income requires the measurement of expenses in terms of the *historical cost* to the enterprise, constituting a strict adherence to the cost principle. An asset is accounted for at its acquisition cost until a sale is realized, at which time any change in value is recognized. Thus, expenses are expired assets or expired acquisition costs.

(5) Accounting income requires that the realized revenues of the period be related to appropriate or corresponding relevant costs. Accounting income, therefore, is based on the *matching principle*. Basically, certain costs or period costs are allocated to or matched with revenues and the other costs are reported and carried forward as assets. Costs allocated and matched with period revenues are assumed to have an expired service potential.

* In accounting, the term 'net income' is considered more precise and explaining than the term 'profit'. However, both the terms are, in practice, used interchangeably having identical meaning.

** The term 'Business Income' should not be confused with Edwards and Bell's concept of Money Income, which is often labelled as Business Income as well. See E.O. Edwards and P.W. Bell, *The Theory and Measurement of Business Income*, University of California Press, 1961.

The net income defined as the difference between revenue and expenses determine the business income of an enterprise. Under the income statement approach, expenses are matched with the revenues and the income statement is the most significant financial statement to measure income of a business enterprise. Accounting income is the increase in the resources of a business (or other) entity which results from the operations of the enterprise. In other words, accounting income is the net increase in owner's equity resulting from the operations of a company. It should be distinguished from the capital contributed to the entity. Income is a net concept; it consists of the revenue generated by the business, less losses and less expired costs that contribute to the production of revenue.

Procedure of Computing Accounting Income

The procedure for computing accounting income may be summarised as follows:

(i) Defining the particular accounting period: Accounting income refers to the financial performance of the firm for a definite period. The commonly accepted accounting period is either the calendar or natural business year. It should be recognised, however, that income can be determined precisely only at the termination of the entity's life. The preparation of annual financial statements represents somewhat of a compromise between the greater accuracy achieved by lengthening the accounting period and the greater need for frequent operating reports.

(ii) Identifying revenues of the accounting period selected: Accounting income requires the definition, measurement, and recognition of revenues. In general, realisation principle is used for recognition of revenues and consequently for the recognition of income. Revenue is the aggregate of value received in exchange for the goods and services of an enterprise. Sale of goods is the commonest form of revenue. In accordance with realisation principle, the accountant does not consider changes in value until they have crystallised following a transaction. The realisation principle is not applicable in case of unrealised losses which are recognised, measured, accounted for and subsequently reported prior to realisation. There are some other instances where realisation principle is ignored and unrealised income is recognised. Some such examples are valuation of properties, long-term contract business.

(iii) Identifying costs corresponding to revenues earned: Accounting concept of Income is based on the historical cost concept. Income for an accounting period considers only those costs which have become expenses, *i.e.*, those costs which have been applied against revenue. Those costs which have not yet expired or been utilised in connection with the realisation of revenue are not the costs to be used in computing accounting income. Such costs are assets and appear on the balance sheet. Prepaid expenses, inventories, and plant thus represent examples of deferred unallocated costs.

(iv) Matching Principle: Traditional accounting income is expressed as a matching of revenue and expenditure transactions, and results in a series of residues for balance sheet purposes.

Matching principle requires that revenues which are recognised through the application of the realisation principle are then related to (or matched with) relevant and appropriate historical costs. The cost elements regarded as having expired service potential are allocated or matched against relevant revenues. The remaining elements of costs which are regarded as continuing to have future service potential are carried forward in the traditional balance sheet and are termed as assets. Such asset measurements, together with corresponding measurements of the entity's monetary resources, and after deduction of its various liabilities, give rise to its residual equity in accounting.

Advantages of Accounting Income

(1) Accounting concept of income has the benefit of a sound, factual and objective transaction base. Accounting income has stood the test of time and therefore is used by the universal accounting community.

(2) Another argument in favour of historical cost-based income is that it is based on actual and factual transactions which may be verified. Advocates of accounting income contend that the function of accounting is to report fact rather than value. Therefore, accounting income is measured and reported objectively and that it is consequently verifiable.

(3) Accounting income is very useful in judging the past performance and decisions of management. Also it is useful for control purposes and for making management accountable to shareholders for the use of resources entrusted to it.

(4) Income based on historical cost is the least costly because it minimises potential doubts about information reliability, and time and effort in preparing the information.

(5) In times of inflation, which is now a usual feature, alternative income measurement approaches as compared to accounting income could give lower operating income, lower rates of return which could lower share prices of a business firm.

Limitations of Accounting Income

Despite accounting income being useful in many respects, it has certain limitations:

Firstly, the historical cost concept and realisation principle conceal essential information about unrealised income since it is not reported under historical accounting. Unrealised income results from holding assets, which should be reported to provide useful information about a business and its profitability and financial position. It also leads to reports of heterogeneous mixtures of realised income items. This implies that the criteria of relevance and usefulness with regard to unreported information are sacrificed. Accounting income may have little utility in many decision making functions as it does not report all income accumulated to date; it does not report current values; balance sheet is merely a statement of unallocated cost balances and is not a value statement.

Secondly, validity of business income depends on measurement process and the measurement process depends on the soundness of the judgements involved in revenue recognition and cost allocation and related matching between the two. There is a great deal of flexibility and subjectivity involved in assigning cost and revenue items to specific time periods and using matching concept. According to Sprouse, "In most cases matching of costs and revenues is a practical impossibility." Sprouse² describes the process as one similar to judging a beauty contest where the judges cast their votes according to their personal preferences to decide the winner, because no established concepts exist to ascertain beauty, just as there are none to determine proper matching.

Kam³ argues:

"One of the consequences of the conventional matching principle is that it relegates the balance sheet to a secondary position. It is merely a summary of balances that results after applying the rules to determine income. It serves mainly as a repository of unamortised costs. But the balance sheet has an importance of its own; it is the primary source of information on the financial position of the firm. The conventional matching principle is responsible for deferred charges that are not assets and deferred credits that are not liabilities. Traditional accounting principles complicate the evaluation of the financial position of a company when the balance sheet is considered mainly as a dumping ground for balances that someone has decided should not be included in the income statement."

Benston, Bromwich, Litan and Wagenhofer⁴ observe:

"However, the ability of opportunistic managers to manipulate reported net income with timing and accrual assumptions is limited by three factors. One is the self-correcting nature of accruals. Earlier revenue recognition that overstates net income in a period results in understated net income, usually in the next period. Because direct charges of "extraordinary" events to retained earnings that bypass the income statement are not self-correcting, they rarely are (or should be) accepted. The second is managers' decisions to advance or delay the acquisition, purchase, and use of resources. Unfortunately for shareholders, this form of manipulation is more than cosmetic; it can be detrimental to economic performance (although this impact should be mitigated by the fact that lower sales and higher expenses reduce reported income). Third, GAAP does not allow to accept numbers that are inconsistently determined from period to period. Hence, although managers can, say, initially reduce depreciation expense by assuming a longer economic life for a fixed asset, in the future the depreciation expense must be greater."

Thirdly, the traditional accounting income is based upon historical cost principle and conventions which may be severally criticised, *e.g.*, lack of useful contemporary valuations in times of price level changes, inconsistencies in the measurement of periodic income of different firms and even between different years for the same firm due to generally accepted accounting principles. Thus, accounting income could be misleading,

misunderstood and irrelevant to users for making investment decisions.

Components of Accounting Income

A profit and loss account or income statement, as stated earlier, determine the net income or business income of a business enterprise and displays revenues and expenses of the enterprises for a specified period. Therefore, business income has the following two major components or elements:

- (1) Revenue
- (2) Expenses

Besides the revenues and expenses, gains and losses are also considered while determining business income or net profit of an enterprise.

These elements of business income—revenues, expenses, gains and losses have been discussed in Chapter 5.

ECONOMIC INCOME

The economic concept of income is based on Hick's concept (1946) of income defined as follows:

"... the maximum value which he can consume during a week, and still expect to be as well off at the end of the week as he was at the beginning."⁵

Hicks presented his concept of "well offness" as the basis for a rough approximation of personal income. According to Hicks, income is the maximum which can be consumed by a person in a defined period without impairing his "well offness" as it existed at the beginning of the period. "Well offness" is equivalent to wealth or capital. Hick's concept of personal income was subsequently adopted by Alexander and subsequently revised by Solomons to an equivalent concept of corporate profit. Alexander defined income of an enterprise as the maximum amount which a firm can distribute to shareholders during a period and still be as well off at the end of the period as at the beginning."⁶

In other words, economic income is the consumption plus saving expected to take place during a certain period, the saving being equal to the change in economic capital. Economic income may be expressed as follows:

$$EI = C + (K_2 - K_1)$$

where EI = Economic Income

C = Consumption

K₁ = Capital as at period 1

K₂ = Capital as at period 2

Economic income and Hicksian approach follow balance sheet approach of income measurement. The balance sheet approach determines the income as the difference between the value of capital at the opening and closing balance sheets adjusted for the dividend or the additional capital contributed during the year. Under the balance sheet approach, income is determined as follows:

Income = Capital at the end minus capital at the beginning of the year plus Dividend or saving during the year minus capital contributed during the year.

It is significant to observe that under economic income and balance sheet approach, different items of assets and liabilities possessed by firm at the beginning as well as at the end of the year are to be valued to determine income for the year. Therefore, income measurement in this approach depends upon the valuation of assets and liabilities. In this way, economic income may be defined as the operating earnings plus the change in asset values during a time period. Economic income is measured in real terms and results from changes in the value of assets rather than from the matching of revenue and expenses. Like accounting income, it is not based on money values. The “Well offness” is measured by comparing the value of company at two points in terms of the present value of expected future net receipts at each of these two points.

Thus, economic income of the business is the amount by which its net worth has increased during the period, adjustments are made for any new capital contributed by its owners or for any distributions made by the business to its owners. This form of words would also serve to define accounting income, in so far as net accounting income is the figure which links the net worth of the business as shown by its balance sheet at the beginning of the accounting period with its networth as shown by its balance sheet at the end of the period. The correspondence between the two ideas of increased worth is, however, a purely verbal one; for Hicksian income demands that in evaluating net worth we capitalise expected future net receipts. while accounting income

only requires that we evaluate net assets on the bases of their unexpired costs. The relationship between these two different concepts of increase in net worth, economic income and accounting income may be summed up in the following manner, by starting with accounting income and arriving at economic income:

Accounting Income

- + Unrealised tangible asset changes during the period
- Realised tangible asset changes that occurred in prior periods
- + Changes in the value of intangible assets
- = Economic Income

The changes in the value of intangible assets do not refer to the conventional intangible assets found in the balance but to a concept called subjective goodwill arising from the use of expectations in the computation of economic income. The following example illustrates economic income and accounting income.

Assume the following expected net cash flows from the total assets of a firm whose useful remaining life is four years:

Year	0	1	2	3	4
Cash flow (₹)	—	7000	8500	10000	12000

Assume an annual depreciation of ₹ 7000 and a discount rate of 5 per cent. Using the discount rate, the present value at the beginning of year I would be ₹ 32,887 computed (using present value tables) as follows:

Capitalised value at beginning of year 1		Capitalised value at end of year 1	
₹ 7,000 × .9524 =	₹ 6,667	₹ 8,500 × .9524 =	₹ 8,095
₹ 8,500 × .9071 =	₹ 7,710	₹ 10,000 × .9070 =	₹ 9,070
₹ 10,000 × .8638 =	₹ 8,638	₹ 12,000 × .8638 =	₹ 10,366
₹ 12,000 × .8227 =	₹ 9,872	—	
	<u>₹ 32,887</u>		<u>₹ 27,531</u>
The income for the first year may be computed as follows:			
Cash flow expected from the use of the assets for year 1			₹ 7,000
Add: Capitalised value of total assets at the end of year 1			<u>₹ 27,531</u>
Total value of the firm at the end of year 1			₹ 34,531
Less: Capitalised value of total assets at the beginning of year 1			<u>₹ 32,887</u>
Income for the first year			<u>₹ 1,644</u>

The income for the subsequent years can be computed in similar manner. The present value income, or economic income (for year 1) is ₹ 1644 which represents the real increase in the value of the firm in the first year. It is equivalent to 5 per cent of the starting capital of ₹ 32,887. Because most authors define discount rate as the subjective rate of return, Edwards and Bell call the economic income ₹ 1644 the ‘subjective profit’. It is significant to note that the variable (*e.g.*, cash flows) included in

the capitalised value formula are merely expectations that are subject to change.

We can analyse the difference between the present value or economic income and the accounting income using the previous example. While economic income is an ex ante income based on future cash flow expectations, the accounting income is an ex post or periodic income based on historical value. Table 4.1 presents economic income and accounting income and reconciliation between the two is displayed in Table 4.2.

Table 4.1
Computation of Economic and Accounting Income

Year	Capitalised Value at the beginning of the year	Capitalised value at the end of the year	Cash flow expected for the year	Economic income 2 + 3 – 1
	(₹)	(₹)	(₹)	(₹)
	(1)	(2)	(3)	(4)
1.	32887	27531	7000	1644
2.	27531	20408	8500	1377
3.	20408	11428.8	10000	1020.8
4.	11428.8	—	12000	571.2
Total economic profit	—	—		4613
Total Cash flow	—	—	37500	—
Total depreciation Expenses (assumed)	—	—	28000	—
Accounting Income	—	—	9500	9500
Subjective goodwill	—	—	—	4887

As Table 4.1 reveals, the economic income for the four-year period is equal to ₹ 4,613 and the accounting income is equal to ₹ 9,500. The difference between the economic income and the accounting income is ₹ 4,887 which is the subjective goodwill.

Table 4.2
Reconciliation of the Economic and Accounting Income

Year	Depreciation accounting (₹)	Subjective goodwill (₹)	Difference (₹)
1.	7000	5356.0	(1644)
2.	7000	7123.0	123.0
3.	7000	8979.2	1979.2
4.	7000	11428.8	4428.8
Total	28000	32887.0	4887.0

The capitalized value method is deemed useful for such long-term operating decisions as capital budgeting and product development. The options yielding the highest positive capitalized values are deemed to be the best methods. Capitalized values of long-term receivables and long-term payables are also used in financial statements. The capitalized value is generally considered an ideal attribute of assets and liabilities, although it presents some conceptual and practical limitations. From a practical point of view, capitalized value suffers from the subjective nature of the expectations used for its computation. From a conceptual point of view, capitalized value suffers from (1) the lack of an adequate adjustment for risk preference of all users, (2) the ignorance of the contributions of other factors than physical assets to the cash flows, (3) the difficulty of allocating total cash flows to the separate factors that made the contribution, and (4) the fact that the marginal present values of physical assets used jointly in operations cannot be added together to obtain the value of the firm.⁷

Limitations of Economic Income

Economic concept of income has several difficulties. In fact there is no agreement as to the meaning of “better offness” that occurs in specific time periods. Also, this term is not well defined in case of business enterprises. The greatest problem lies in measuring the net assets at the beginning and end of the period, which are required to ascertain income. Several methods of valuation of assets may be suggested: (i) capitalisation of the expected future net cash flows or services to be received over the life of the firm, (ii) aggregation of selling prices of the several assets of the firm less the total of the liabilities, (iii) valuation of the firm on the basis of current share market prices applied to the total equity outstanding, and (iv) valuation of the firm by using either historical or current cost for nonmonetary assets and adding the present cash value of monetary assets and subtracting liabilities.⁸ In certainty, the cash flows and benefits could be determined with accuracy. But certainty is a rare factor, and the expected future cash flows upon which income *ex ante* (income

at the beginning) and *ex post* (income at the end) depend, are subject to a great deal of uncertainty. In practice, the economic income would be subject to extreme subjectiveness and inaccuracies of the predictions:

Secondly, there is a problem regarding the choice of the discount factor used in computing the present values of the future cash flows. Ideally, the discount factor should reflect accurately the time value of money. If interest rates fluctuate during the time period considered for using the asset, the present values of the opening and closing capital will be distorted simply because the correct discount rate has not been used. The variations in the discount factors would lead inevitably to an increase in the subjectiveness of the resulting income figure; different discount factors produce entirely different measures of income.

Thirdly, accurate predictions about the timing of the receipt of future cash flows are difficult to make. Different times of cash flows produce different measures of capital, and thus different income figures. Inaccuracies in forecasting of realisation times will therefore produce corresponding inaccuracies in the income measure.

Fourthly, the economic income concept assumes a static situation, *i.e.*, an individual or a business enterprise will attempt to maintain his “well offness” at a constant level. In fact, it seems reasonable to assume that individuals will, on the whole, attempt to maximise their “well offness” by investing capital in activities which will yield increasing benefits over time. Therefore, in forecasting benefits and cash flows for discounting purposes, a significant problem would be to incorporate degree of growth in the cash flows. The choice of such a growth factor further increases the subjectiveness of the economic income.⁹

Edwards and Bell¹⁰ call economic income ‘subjective income’ and observe that it cannot be satisfactorily applied in practice by business enterprises. The notion of “well offness” is indeed a matter of individuals’ personal preferences. Because of the aforesaid limitations, the concept of economic income has little application to the area of financial accounting and reporting.

Bromwich, Macve and Shyam Sunder¹¹ in their research study have developed interesting findings and presented reasons why Hicksian concept of income cannot be invoked to support the asset/liability perspective promoted in the FASB/IASB’s joint conceptual framework project. They have cited the following reasons.

“Firstly, firms do more than just earn a return on their identifiable net assets. These assets may or may not have a readily available market value. There is also normally the element of what Hicks calls human capital in how firms exploit their opportunities, so even if asset markets are in competitive equilibrium, if they are not complete this creates internal goodwill. Measurement of this inevitably requires subjective estimation, precluding the feasibility of objective measurement even *ex post*, contrary to the objectivity claimed in FASB/IASB (2005).

Secondly, Hicks has difficulty in arriving at a practical measure of business income that could be reflected in accounts, as he

finds it necessary to conduct the analysis at the level of the change in the value of the firm itself, not of its net assets and this income is that of the proprietors rather than of the business. He finds that the measure of this income, even *ex post*, is largely driven by changes in expectations about the firm’s future cash flows, rather than by the realized cash flows of the period just completed.

Thirdly, our fundamental objection to FASB/IASB (2005) as a conceptual foundation for financial reporting is that Hicks’ own assessment of any practical *ex post* measure of income, whether more or less subjective, is that it is irrelevant to decision making—and therefore it must be largely irrelevant to the Boards’ decision usefulness objective for financial accounting and reporting. At best it can provide relevant statistics for prediction—but that may imply that adjusting the factual record about past transactions for changes in expectations about the future is best left to decision makers as users. Assistance from competing information intermediaries such as analysts, the press, and academic research based on information from within and without the firm may also help. Adjusting the financial statements themselves for this purpose may therefore be unnecessary and it is up to the Boards to demonstrate what comparative advantage accountants have in adding value through bringing ever more of management’s and analysts’ estimates of the future into audited financial statements and reports.

Fourthly, if the focus were to shift primarily to income *ex ante*, it may be argued that an equally important perspective on what the future holds is to consider not just the likely changes in future value (or gain), as captured by Hicks’ No. 1 *ex ante* concept of income, but also the standard stream (No. 2 *ex ante*) view of income, as useful in helping to triangulate the amount to be reported as a firm’s expected earnings. There are legitimate economic motivations underlying interest in both views. Given the variety of user preferences and objectives, any choice between them can itself only be an accounting convention. Therefore, any measures to assist estimates along both these dimensions may usefully be reflected in general purpose financial reports. For example, as far as practicable, both the current value of net assets and changes in net assets may be reported, without requiring all the changes to be reported as earnings.

The conceptual framework project of FASB and IASB will not be able to eliminate either of the two income concepts; user preference may force them to retain both. In many situations the revenue/expense matching view of income/earnings is closer to the maintainable earnings concept than the asset/liability view. It seems unlikely that the Boards’ attempt to eliminate the revenue/expense view in favour of the asset/liability view can succeed. Indeed, it is already in the process of being deconstructed in their Revenue Recognition and Fair Value projects (FASB/IASB).

The Boards’ conceptual framework should seriously attend to the necessary interrelationship between concepts and conventions in practical affairs. Indeed, revisiting the concepts in this way will help the Boards as well as their constituents to understand why accounting practice has to include conventions

and how those conventions, despite there being no clear framework for identifying what is optimal, have become so powerful as calculations of performance, including business performance, in the modern world. We therefore suggest a revision of the key sentence: 'To be principles-based, standards have to be a collection of (socially) useful conventions, rooted in fundamental concepts'.

In summary. Hicks' (1946) analysis does not provide a conceptual basis for the FASB/IASB's exclusive focus on a balance sheet approach to the financial reporting, nor does it help address the difficult problem of measuring and reporting business performance and identifying drivers of value creation."

Differences Between Accounting Income and Economic Income

The following are the differences between accounting income and economic income:

(1) Accounting income is an income resulting from business transactions arising from the cash-to-cash cycle of business operations. It is derived from a periodic matching of revenue (sales) with associated costs. Accounting income is an *ex post* measure—that is, measured 'after the event.' In contrast to accounting income, economic income is a concept of income useful to analyse the economic behaviour of the individual. It focuses on maximizing present consumption without impairing future consumption by decreasing economic capital. Economic income is used as a theoretical model to rationalise economic behaviour. In this respect, it is similar to accounting income which measures, in aggregate terms, the results of human behaviour and activity, and which, through use, modifies and influences human behaviour. In other words, economic income aims to rationalise human behaviour while accounting income measures the results of it.

(2) The accounting income recognises income only when they have been realised. On the other hand, the economic income, because it is based on valuations of all anticipated future benefits, recognises these flows well before they are realised. This means that, at the point of original investment, economic capital will exceed accounting capital by an amount equivalent to the difference between the present value of all the anticipated benefit flows and the value of those resources transacted and accounted for at that time. The difference represents an unrealised gain which will, over time, be recognised and accounted for in computing income as the previously anticipated benefit flows are realised.

(3) Accounting income and economic income basically differ in terms of the measurement used. As Boulding¹² observes: "accountants measure capital in terms of actualities, as the primary byproduct of the accounting income measurement process; and that economist in terms of potentialities, in order to measure economic income." The accountant uses market prices (either past or current) in measuring income based upon recorded transactions which may be verified. Current values, if used in accounting income, utilise the historic cost transactions base before updating the data concerned into contemporary value

terms. The economist, on the other hand, uses predictions of future flows stemming from the resources which have the subject of past transactions. The accountant basically adopts a totally backward-looking or *ex post* approach, and consequently ignores potential capital value changes. The economist, on the other hand, is forward looking in his model and bases his capital value on future events. Under accounting income, the accountant aims to achieve objectivity maximization while measuring income for reporting purposes. The economist is free of such a constraint and is quite content in his model which may have large-scale subjectivity. As a result, the two income concepts appear to be poles apart in concept and measurement—certainly the accountant would find the economic model almost impossible to put into practice in financial reporting, despite its great theoretical qualities. On the other hand, the economist would not find the accounting model relevant as a guide to prudent personal conduct.¹³

(4) Conventional accounting income possesses a limited utility for decision making purposes because of the historical cost and realisation principle which govern the measurement of accounting income. Changes in value are not reported as they occur. Economic concept of income places emphasis on value and value changes rather than historical costs. Economic income stresses the limitations of accounting income for financial reporting and decision making purposes.

Similarities Between Accounting Income and Economic Income

In spite of the above differences in concept and measurement between accounting income and economic income, there are some similarities between the two:

(1) Both use the transactions for income measurement.
 (2) Both involve measurement and valuation procedures.
 (3) Capital is an essential ingredient in income determination.
 (4) In a world of certainty and with perfect knowledge, accounting income and economic income as measures of better-offness would be readily determinable and would be identical. With such knowledge, earnings for a period would be the change in the present value of the future cash flows, discounted at an appropriate rate for the cost of money.

(5) Under current cost accounting, the reported income equals economic income in a perfectly competitive market system. During periods of temporary disequilibrium and imperfect market conditions, current cost income may or may not approximate economic income. When asset market prices move in directions opposite to expected cash flows, there tends to be a difference between current cost income and economic income, *i.e.*, the assets are overvalued. On the other hand, when asset values move together with expected cash flows, current cost income tends to approximate economic income quite well.¹⁴

The Trueblood Committee Report¹⁵ comments on accounting income as follows:

“Accounting income or earnings should measure operations and represent the periodbyperiod progress of an enterprise towards its overall goals Accounting measurements of earning should recognise the notion of economic better-offness, but should be directed specifically to the enterprise’s success in using cash to generate maximum cash.”

According to Trueblood Committee Report, accounting income, although having some limitations, is preferable:

“...the real world does not afford decisionmakers the luxury of certainty. Earnings, therefore, are based on conventions and rules that should be logical and internally consistent, even though they may not mesh with economists’ notions of income. Enterprises have attempted to provide users with measures of periodic earnings....Since these measures are made without benefit of certainty, they are of necessity imprecise, because they are based on allocations and similar estimates.”

CAPITAL MAINTENANCE INCOME (or Capital Maintenance Concept of Income)

In traditional accounting, the concept of accounting income has been recognised widely. Adequate attention has not been given to the capital maintenance concept associated with income measurement. In fact, ‘income measurement’ and ‘capital maintenance’ are interrelated or twin concepts. The term capital represented by assets refers to ‘stock’ or a ‘tree’ while the term ‘income’ refers to the fruit. As such, by using the concept of capital maintenance, income for a business enterprise can be defined as the amount which can be drawn from the business maintaining intact the capital that existed at the beginning of the period.

Capital maintenance concept of income requires that capital of a business enterprise needs to be maintained intact before income can be distributed. A concept of maintenance of capital or recovery of cost is a prerequisite for separating return on capital from return of capital because only inflows in excess of the amount needed to maintain capital are a return on equity. Capital at the end of a year should be measured in order to determine the amount that can be distributed without impairing the capital that the firm had at the beginning of the year. Capital maintenance may refer to maintaining capital intact in financial or in physical terms. According to Forker¹⁶, the capital maintenance is viewed merely as a neutral benchmark to be used in determining the surplus which accrues to shareholders as income and implies nothing which ought to be interpreted as suggesting normative behaviour for the management of the enterprise. Choice of maintenance concepts may however be dictated by the preferences of managers and/or owners. The following are the concepts of capital maintenance:

- (1) Financial Capital Maintenance.
- (2) General Purchasing Power Financial Capital Maintenance
- (3) Physical or Operating Capital Maintenance.

(1) Financial Capital Maintenance

Financial or money capital maintenance pertains to the original cash invested by the shareholders in the business enterprise. According to this concept periodic income should be measured after recovering or maintaining the shareholders’ equity intact. Income under this concept is the difference between opening and closing shareholders’ equity. It is this amount which may be distributed as income without encroaching upon the financial capital of the firm. For instance, the capital of a firm is ₹ 1,50,000 at the beginning of the year and ₹ 2,00,000 at the end of the year in monetary units. Assuming no capital transactions during the year, ₹ 50,000 will be the income which can be distributed and still the firm will be well off at the end of the year as at the beginning. The financial capital maintenance concept is reflected in conventional or historical cost accounting. Financial capital maintenance concept assumes a constant (stable) unit of measurement to determine the income by comparing the endoftheyear capital with the beginning capital. Changes in the price levels during the period is not recognised. Because of this and other underlying principles, income measurement under this concept may not prove to be reliable and useful for decisionmaking purposes.

(2) General Purchasing Power Financial Capital Maintenance

This concept aims at maintaining the purchasing power of the financial capital by continuously updating the historical cost of assets for changes in the value of money. This concept attempts to show to shareholders that their company has kept pace with general inflationary pressures during the accounting period, by measuring income in such a way as to take account changes in the pricelevels. It intends to maintain the Shareholders’ capital in terms of monetary units of constant purchasing power. It reflects the proprietorship view of the enterprise which demands that the objective of profit measurement should focus on the wealth of equity shareholders. Taking the earlier example, if it is assumed that the rate of inflation was 10 per cent during the year, the initial ₹ 1,50,000 capital is adjusted in terms of inflation. That is, in the terms of inflation the capital that needs to be maintained in fact is ₹ 1,65,000, and income will be ₹ 35,000 which can be distributed without encroaching the capital of the firm. This approach suggests that the accountant should be aware of the measurement unit problem that arises in a period of unstable general pricelevel conditions. Instead of comparing the capital in units of money, it is preferable to compare beginning and ending capital, measured in units of the same purchasing power.

The main drawback of financial capital maintenance concept is that the resulting bottomline income figure includes holding gains as a component of periodic income. Reflecting holding gains in the income statement may indicate (i) the success of the firm in buying inventories and equipment at prices which have subsequently increased, and (ii) a surrogate of an increase in the exit value or the present value from selling or using the assets in question. On the other hand, inclusion of such holding gains may

raise two serious problems. First, the reported income figure, if distributed as dividends, could impair the firm's ability to maintain its current level of operations. Such holding gains can only be available for distribution if the company is liquidated. In the absence of evidence to the contrary, the firm is assumed to be going concern and, as such, any holding gains should not be considered income that can be distributed as dividends. The second criticism of the bottomline income measure is that it may not be useful to investors interested in normal operating results as a basis for predicting future normal operating income.¹⁷ An enterprise that maintains its net assets (capital) at a fixed amount of money in periods of inflation or deflation does not remain equally well-off in terms of purchasing power.

(3) Physical or Operating Capital Maintenance

Physical or operating capital concept is expressed in terms of maintaining operating capability, that is, maintaining the capacity of an enterprise to provide a given physical level of operations. The level of operations may be indicated by the quantity of goods and services of specified quality produced in a fixed period of time. Financial capital maintenance concept—money capital and purchasing power concept both—views the capital of the enterprise from the standpoint of the shareholders as owners. In other words, it recognises the proprietorship concept of the enterprise while measuring income and capital, and applies valuation system which are in conformity with this concept. On the other hand, the physical or operating capacity maintenance concept views capital as a physical phenomenon in terms of the capacity to produce goods or services and considers the problem of capital maintenance from the perspective of the enterprise itself and thus it reflects the entity concept of the enterprise.

Operating capacity concept provides that the income should be measured after productive (physical) capacity of the enterprise has been maintained intact, *i.e.*, after provision has been made for replacing the physical resources exhausted in the course of business operations. Such income can be distributed without impairing the firm's ability to maintain its operating level. This income is also known as "sustainable" income implying that the firm can sustain such income as long as the firm insures the maintenance of its present physical operating capacity. This view is based on the following rationale. Firms produce certain goods or services. To ensure a firm's ability to produce such goods and services, at least at its present operating levels, it is necessary for the firm to maintain its prevailing physical operating capacity. This implies that income should represent the maximum dividend that could be paid without impairing the productive capacity of the firm.¹⁸

The operating capability concept implies that in times of rising prices increased fund will be required to maintain assets. These funds might not be available if profit is determined without recognition of the rising costs of assets consumed in operations. For example, profit would not be earned on the sale for ₹ 1,000 of 100 units of stock costing ₹ 800 if their replacement cost was ₹ 1,000. In this situation, an outlay of ₹ 1,000 would be required

in order to maintain the operating capability of the business in terms of 100 units of stock. In other words, the increase in the cost of the stock necessitates the investment of additional funds in the business in order to maintain it as an operating unit.

The operating capability concept does not imply that the firm should necessarily replace assets with identical items. Business enterprises, being dynamic, may extend, contract, or change their activities in whichever way desired. The concept simply means that the operating capability should be maintained at the same level at the end of a period as it was at the beginning.

The operating capability concept considers the problem of capital maintenance from the perspective of the enterprise itself. This concept emphasises current cost accounting.

However, there is a difference of opinion regarding the meaning of maintaining physical productive capacity or operating capability. Atleast three different interpretation are suggested:

- (a) Maintaining identical or similar physical assets that the firm presently owns.
- (b) Maintaining the capacity to produce the same volume of goods and services.
- (c) Maintaining the capacity to produce the same value of goods and services.

The second interpretation implies technological improvements and in this respect is superior to the first interpretation, which essentially assumes the firm will maintain and replace its identical assets, an untenable assumption in light of technological improvements. The third interpretation not only reflects technological changes but also the impact of changes on the selling prices of outputs. Although this might be a highly refined approach, it may well be difficult to implement.

On the balance sheet, the physical capacity maintenance concept requires the valuation of the physical assets of the firm at their current cost or lower recovery value (*i.e.*, the higher of present value or net realisable value). To compute income that preserves the physical capital intact, the holding gains and losses resulting from increases or decreases in the current costs of the productive capacity of the firm are treated as "capital maintenance adjustments." Once the necessary capital maintenance adjustments are made, the difference between beginning and ending capital would represent (assuming the ending capital is greater, and in the absence of any capital transactions by the owners) the amount that could be distributed while maintaining the physical capital of the firm intact. In the income statement, the income of the period, under the physical capital maintenance approach, is measured by matching the realised revenues with the current cost of the assets sold or consumed. Such a direct comparison, however, is only possible under a stable monetary situation. When changes in the general level of prices occur, the respective monetary measures of the physical capital amounts must be restated in units of the same purchasing power.

The basic difference between the financial and physical capital maintenance concept using current (replacement) cost is

in the treatment of “holding gains and losses.” Under the financial capital maintenance concept, holding gains are reflected as income of the given period, whereas the concept of physical capital maintenance holding gains are shown in the shareholders’ equity section of the balance sheet as “capital maintenance adjustments.”

The physical capital maintenance concept is useful as a basis for providing information that would assist users in predicting the amounts, timing, and risks associated with future cash flows that could be expected from the firm. Information that enables users to assess whether an enterprise has maintained, increased or decreased its operating capability may be helpful for understanding enterprise performance and predicting future cash flows; in particular, it may help users to understand past changes and to predict future changes in the volume of activity. Also, the physical capacity maintenance concept is consistent with the going concern assumption—by maintaining the firm’s ability to continue its normal operations—and the enterprise theory of the firm.

Example

During the year ended 31st December 2015 a company, a ₹ 40,000 equity financed company acquired an asset at a cost of ₹ 40,000. By 31 December 2015 its replacement cost had risen to ₹ 60,000. It was sold on 31st December 2016 for ₹ 1,00,000 and at the time of sale, its replacement cost was ₹ 65,000.

For the purpose of measuring historical cost profit, the profit arising from the sale of the asset (assuming no depreciation) would accrue in the year ended 31 December 2016 and would be calculated as follows:

$$\begin{aligned}\text{HC profit} &= \text{Revenue} - \text{Historical cost} \\ &= ₹ 1,00,000 - ₹ 40,000 \\ &= ₹ 60,000\end{aligned}$$

For the purpose of measuring replacement cost profit three distinct gains are recognized which occur as follows:

- A holding gain in the year ended 31 December 2015 measured as the difference between the replacement cost at 31 December 2015 and the acquisition cost during the year, that is ₹ 60,000 – ₹ 40,000 = ₹ 20,000.
- A holding gain in the year ended 31 December 2016 measured as the difference between the replacement cost at 31 December 2015 and the replacement cost on the date of sale, that is ₹ 65,000 – ₹ 60,000 = ₹ 5,000/-.
- An operating gain resulting directly from the activity of selling measured as the difference between the realized sale price and the replacement cost at the date of sale, that is ₹ 1,00,000 – ₹ 65,000 = ₹ 35,000.

These differing timings of profit recognition may be compared as follows:

Year ended 31 December	2015	2016
Historical cost profit	—	₹ 60,000
Replacement cost profit Holding gains	₹ 20,000	5,000
Current operating gain	—	35,000

It is clear from this example that the difference between historical and replacement cost relate to the timing of reported gains and losses since the total gain over the two periods is ₹ 60,000 in each case. Furthermore, the replacement cost concept provides more detailed information than the historical cost profit for performance evaluation. Two arguments for the separation of profit into holding and operating gains have been suggested. First, the two profit categories may be used to evaluate different aspects of management activity. Secondly, they permit better inter-period and inter-firm comparisons.

Holding gains on assets which have not been sold are termed ‘unrealized’, after sale they are said to be ‘realized.’ When the concept of maintenance of operating capability is applied no part of the holding gain can be regarded as profit. This should be credited to a capital maintenance reserve, designated current cost reserve by UK’s SSAP 16. Assuming all of the ₹ 35,000 operating profit was distributed as dividends the condensed balance sheet of the company at 31st December 2016 would appear as follows:

Balance Sheet as at 31st December 2016
(maintaining operating capability)

Share Capital	₹ 40,000	Cash (₹ 1,00,000 - 35,000)	₹ 65,000
Current cost reserve	25 000		
	65,000		65,000

If the balance sheet of the company is prepared on a historical cost basis, and assuming the ₹ 60,000 profit was all distributed as dividends the position would appear as follows:

Balance Sheet as at 31st December 2016
(maintaining money amount)

Share Capital	₹ 40,000	Cash (₹ 1,00,000 – ₹ 60,000)	₹ 40,000

This example shows clearly how under the financial maintenance concept capital may be distributed to shareholder to the detriment of the long-term viability of the business.

General or Current purchasing power accounting is not designed to differentiate between operating profits and holding gains. However, it may be used to compute real gain or loss, *i.e.*, the surplus or shortfall between the replacement cost value and what this would have been if it had behaved like prices in general. Taking the above example assume the retail price index at 31st December 2009 has increased by 10 per cent since company bought the asset in question. Real gain is calculated as follows:

Current replacement cost	₹ 65,000
Historical cost adjusted by general index (₹ 40000 x 110/100)	44,000
Real gain	21,000

Balance Sheet as at 31st December 2016
(maintaining financial capital in current purchase power)

Share capital (₹ 40,000 + 10%)	₹ 44,000	Cash (₹ 1,00,000 – ₹ 56,000)	₹ 44,000

Monetary Items

In the discussion, so far, attention has been given to physical assets such as property, plant and equipment and stock. These items gain in money value in periods of inflation. Monetary items (*e.g.*, bank balance and liabilities generally), are stated in fixed units of money which are not affected by a change in prices. However, the purchasing power of such items will change with fluctuations in the value of money. When prices are rising the purchasing powers of a bank deposit or an amount due from debtors will be falling and it may be argued that this represents a loss to the business. Conversely the purchasing power represented by the claims of creditors will fall during a period of inflation. It may be argued that such a reduction in the purchasing power of monetary liabilities represents a gain to the business. In order to represent this situation current purchasing power financial statements contain one type of item not represented in historical cost statement—purchasing power gains or losses on monetary items. This item is necessary to maintain financial capital of a company. The treatment of monetary items under the concept of maintaining the operating capability of a company is more complex, because supporters of the maintenance of operating capability are not united on a definition of capital. It is possible to identify seven different basic notions of what is meant by operating capability:

- (a) Physical assets.
- (b) Physical assets and monetary assets (excluding fixed or long-term monetary assets).
- (c) Physical assets and all monetary assets.
- (d) Physical assets and all monetary assets minus current liabilities.
- (e) Physical assets and monetary assets (excluding cash) minus creditors.

This shows that the company has beaten the general index to make a real gain of ₹ 21,000. In maintenance of general purchasing power financial capital, real holding gains form part of profit; the gain exceeds that needed to maintain the purchase which resulted in the gain. Therefore, under this concept of capital maintenance ₹ 56000 (₹ 21000 + ₹ 35000) would be available for distribution as dividends. If the company did take this step the balance sheet based on maintenance of current purchasing power financial capital at 31st December 2009 would appear as follows:

- (f) Physical assets and net monetary assets.
- (g) Physical assets and all monetary assets minus all liabilities.

UK's SSAP 16 favours concept (e) of maintaining the operating capital of a business firm.

Operating Income

The current operating concept of income focuses on effective utilisation of a business enterprise's resources in operating the business and earning a profit thereon. In this way, operating income measures the efficiency of a business enterprise. In this concept of income, the two terms 'current' and 'operating' are significant. Firstly, the events and transactions relating to the current period are only considered. However, in some cases, the transactions and resources are acquired in prior periods but may be used in the current period. For example, plant and equipment and even the services of workers are acquired in prior periods. The decisions of the current period involve the proper use and combination of those resources. A plant that is judged as obsolete in the current period may have become obsolete in prior periods. If a decision is taken in the current period to sell it, it is not operating event of the current period. Similarly, detection of an error in the computation of net income for the prior periods is not used in the determination of current period's net income.

Furthermore, the current operating income recognises changes relating to normal operations; non-operating activities are not considered. It can be contended that income in terms of normal operating activities better reflects the efficiency of management and facilitates interperiod and interfirm comparison of business performance. The inclusion of non-operating activities makes the net income number unreliable and improper device to

measure the performance of a business. It is often suggested that nonoperating income should be shown separately as they are non-recurring. If non-recurring items arise from normal activities or operations, the current operating income will include it to provide a good measure of the enterprise's earning power and show correct income trends.

To conclude, current operating income is more useful in judging the profitability of a business enterprise, in making predictions and interperiod and interfirm comparisons. Although it is difficult to classify operating and non-operating items, it is preferable to show them separately. The external users, however, are accustomed to use a single income figure for making economic decisions. In such a case, it can be rightly said that current operating income is a better measure of current operating performance of a business enterprise.

OPERATING AND NON-OPERATING ACTIVITIES

Operating activities are the central means by which the enterprise is expected to obtain income and cash in the future. Results of central, continuing operations, therefore, have a different significance from results associated with other nonrecurring activities and events. No definition of the term operations is likely to produce a clear identification of the activities concerned in all types of business. However, operations normally comprise the provision of goods and services that make up the main business of the enterprise and other activities that have to be undertaken jointly with the provision of goods and services. Such goods and services are produced and distributed at prices that are sufficient to enable a firm to pay for the goods and services it uses and to provide a satisfactory return to its owners. Operations would include for example, exploration for and development of natural resources, manufacture and distribution of goods and the results of trading and investment activities that are part of the main business of the enterprise. Gains and losses on marketable securities may be excluded from the results of central operations of a manufacturing concern but may be included in central operations for a dealer in securities.

Operating items are generally of recurring nature and nonoperating items are generally considered non-recurring and unpredictable. However, that is not always true. Many items may be operating in nature, but not necessarily recurring. Over time payments during a rush period and acquisition of raw materials under extremely favourable conditions both are operating events, but are possible non-recurring. Similarly, some non-operating items may be recurring in nature. Under both the income concepts (current operating performance concept, and all inclusive concept), income from normal activities of the enterprise generally is identified separately from unusual items. The fact that an item, otherwise typical of the normal activities of the enterprise is abnormal in amount or infrequent in occurrence does not qualify the item as unusual (known as extraordinary or special items also). It remains a part of income from the ordinary (normal) activities although separate disclosure of its nature and amount may be

appropriate. An example of such an item would be the write-off of a very large receivable from a regular trade customer.

Although information about comprehensive income and its all components are useful for assessments of enterprise performance, net income figure based on recurring (operating) items is generally more useful to economic decision makers in predicting future income and cash flows. Recurring nonoperating items are just as important as those recurring operating items that are the result of normal business operations. The distinction between operating and non-operating, however, is more useful for measuring managerial efficiency. The advantage of classifying income items as recurring (operating) or non-recurring is based upon the improved usefulness of the resulting net income figure in the making of predictions by investors. External users and other persons may find it difficult to distinguish between recurring and non-recurring transactions than that of operating and non-operating items.

According to AS-5 entitled 'Prior Period and Extraordinary Items and Changes in Accounting Policies' issued by The Institute of Chartered Accountants of India, "There are two approaches to the treatment of non-recurring items. One is to include them in the reported net profit or loss with a separate **disclosure of** the individual amounts. The other is to show such items in the statement of profit and loss after the determination of current net profit or loss. In either case, the objective is to indicate the effect of such items on the current profit or loss. However, the extraordinary items are shown as a part of the current net income."

COMPREHENSIVE INCOME

Concept

According to Ind AS 1 'Presentation of Financial Statements (February, 2015):

"Total comprehensive income is the change in equity during a period resulting from transactions and other events, other than those changes resulting from transactions with owners in their capacity as owners.

Total comprehensive income comprises all components of 'profit or loss' and of 'other comprehensive income.' (Para 7)

Under IFRS, total comprehensive income is "the change in equity during a period resulting from transaction and other events, other than those changes resulting from transactions with owners in their capacity as owners." Under U.S. GAAP, comprehensive income is defined as "the change in equity [net assets] of a business enterprise during a period from transactions and other events and circumstances from non-owner sources. It includes all changes in equity during a period except those resulting from investments by owners and distributions to owners.¹⁹ While the wording differs; comprehensive income includes the same items under IFRS and U.S. GAAP. So, comprehensive income includes *both* net income and other revenue and expense items that are excluded from the net income calculation (other comprehensive income).

Comprehensive income is equal to revenues plus gains minus expenses and minus losses. Overall enterprise performance is indicated by the amount of comprehensive income, that is, by increase in the amount of net assets resulting from transactions and other events and circumstances in the period (excluding the effects of investments by and distribution to owners). The International Accounting Standards Committee in its IAS-8 (1978) entitled 'Unusual and Prior Period Items and Changes in Accounting Policies' says:

"Under the all-inclusive concept, transactions causing a net increase or decrease in shareholders' interests during the period, other than dividends and other transactions between the enterprise and its shareholders, are included in the net income for the period. Non-recurring items, including unusual items arising in the current period, prior period items, or adjustments related to changes in accounting policies, are included in net income but there may be separate disclosure of the individual amounts."

Solomons²⁰ observes:

"A truly comprehensive concept of income for a period must include all changes in owners' equity from nonowner sources that are associated with the period and that can be measured reliably, regardless of the restrictions on recognition imposed by our present GAAP. Obvious candidates for inclusion are holding gains and losses on assets and liabilities, whether realised or not."

Earnings, Net Income and Comprehensive Income

In accounting literature, accurate definitions of and relationships between earnings, comprehensive income and present generally accepted concept of net income are not found. Table 4.3 presents the relationships among these three terms.

Table 4.3 presents the relationship among these three terms.

As it is clear from Table 4.3, the difference between net income as presently accepted and earnings is not a fundamental one. The difference is the inclusion in net income and the exclusion from earnings of the cumulative effect of certain accounting adjustments relating to past periods, *e.g.*, adjustments arising from a change in an accounting principle such as change in the method of pricing inventory. In other respects, net income and earnings are synonymous. On the difference between earnings and comprehensive income, the Financial Accounting Standards Board (USA) in its SFAC No. 5 says:

"Earnings focus on what the entity has received or reasonably expects to receive for its output (revenues) and what it sacrifices to produce and distribute that output (expenses). Earnings also includes results of the entity's incidental or peripheral transactions and some effects of other events and circumstances stemming from the environment (gains and losses)²¹."

Table 4.3
Net Income, Earnings and Comprehensive Income

	Present Net Income (₹)		Earnings (₹)		Comprehensive Income (₹)	
Revenue		100		100		100
Expenses		(80)		(80)		(80)
Gain from unusual source		3		3		3
Income from continuing Operations		23		23		23
Loss on discontinued Operations:						
Income from operating discontinued segment	10		10		10	
Loss on disposal of discontinued segment	-12	-2	-12	-2	-12	-2
Income before extraordinary items and effect of a change in accounting principle		21		21		21
Extraordinary loss	-6			-6		-6
Cumulative effect on prior years of a change in accounting principle	-2	-8		—		-2
Other non-owner change in equity (<i>e.g.</i> , recognised holding gains)	—	—		—		+1
Earnings				15		
Net Income		13				
Comprehensive Income						14

Source: FASB, Concept No. 5. (Para 34, 44)

The FASB explains that the reason for the use of the term ‘comprehensive income’ is to distinguish it from the term ‘earnings’. Earnings are a component of comprehensive income. In Concepts Statement No. 5, the FASB explains the concept of earnings as follows:

“Earnings does not include the cumulative effect of certain accounting adjustments of earlier periods that are recognised in the current period. The principal example that is included in present net income but excluded from earnings is the cumulative effect of a change in accounting principle, but others may be identified in the future. Earnings is a measure of performance for a period and to the extent feasible excludes items that are extraneous to that period—items that belong primarily to other periods.”

On the relationship between earnings and comprehensive income, SFAC No. 5. Recognition and Measurement in Financial Statements of Business Enterprises (1984) observes:

(1) Earnings and comprehensive income have the same broad components—revenues, expenses, gains, and losses—but are not the same because certain classes of gains and losses are included in comprehensive income but are excluded from earnings. Those items fall into two classes that are illustrated by certain present practices:

- (a) Effects of certain accounting adjustments of earlier periods that are recognized in the period, such as the principal example in present practice—cumulative effects of changes in accounting principles—which are included in present net income but are excluded from earnings’.
- (b) Certain other changes in net assets (principally certain holding gains and losses) that are recognised in the period, such as some changes in market values of investments in marketable equity securities classified as noncurrent assets, some changes in market values of investments in industries having specialized accounting practices for marketable securities, and foreign currency translation adjustments.

(2) Differences between earnings and comprehensive income require some distinguishing terms. The items in both classes are gains and losses under the definitions in FASB (USA). Concepts Statement 3 (paragraphs 67-73), but to refer to some gains and losses that are included in earnings and other gains and losses that are included in comprehensive income but are excluded from earnings is not only clumsy but also likely to be confusing. Table 4.3 given earlier uses *gains* and *losses* for those included in earnings and uses *cumulative accounting adjustments* and *other nonowner changes in equity* for those excluded from earnings but included in comprehensive income.

+	Revenues	100
—	Expenses	80
+	Gains	3
—	Losses	8
=	Earnings	<u>15</u>

Research Insight

Academics and practitioners have recently begun to move away from proposing “better” measures of earnings to instead focusing on earnings quality attributes—such as persistence, predictability, smoothness, and timeliness—that may make a particular earnings measure more useful in equity valuation, especially if such attributes capture some dimension of information risk about the firm’s future performance.

Our goal in this paper is to develop an empirical description of the underlying constructs reflected in common performance measure attributes, and to generalize that description to multiple performance measures for firms in the global capital market. To this end, we estimate the persistence, predictability, smoothness, and the contemporaneous and lagged association with operating cash flows, timeliness, and conservatism of eight different summary performance measures for almost 20,000 firms in 46 countries during 1996-2005. Our eight performance measures are sales, EBITDA, operating income, income before income taxes, income before extraordinary items and discontinued operations, net income, total comprehensive income, and operating cash flows.

We find that the performance measures exhibit value relevance that largely follows an inverted U shape, with the lowest value relevance at the top (i.e., sales) and bottom (i.e., total comprehensive income) of the income statement and higher value relevance toward the middle of the income statement (i.e., operating income and EBITDA). No single performance measure clearly dominates all others, but subtotals generally tend to be more value relevant when they include core operating expenses and exclude more transitory items like extraordinary items, gains and losses, and other comprehensive income. Our comparisons of the performance measures’ value relevance reflect wide variation across countries. The absolute and relative value relevance of the performance measures vary between code- and common-law regimes—the distinction between code and common law introduces additional explanatory power into regressions assessing the value relevance of performance measures across the income statement.

Unlike performance measures, the underlying attributes tend to be ranked more consistently across countries and between code – and common-law regimes. In addition, we find that the seven performance measure attributes we examine are not independent of each other, but rather can be represented by two underlying factors with intuitive associations with the constructs of sustainability and articulation with cash flows. This result suggests that researchers should use care in making inferences regarding individual attributes rather than a reduced set of underlying factors.

Source: Jan Barton, Thomas Bowe Hansen and Grace Pownall, “Which Performance Measures Do Investors Around the World Value the Most—and Why?” *The Accounting Review*, Vol. 85, No. 3, 2010, pp. 753-789.

(3) The relationships between earnings and comprehensive income mean that statements of earnings and comprehensive income complement each other something like this:

+	Earnings	15
—	Cumulative accounting adjustments	2
+	Other nonowner changes in equity	1
=	Comprehensive income	<u>14</u>

Arguments in Favour of Comprehensive Income

Many arguments have been advanced in support of measuring comprehensive income of a business firm:

- (i) The annual reported net incomes, when added together for the life of the enterprise, should be equal to the total net income of the enterprise.
- (ii) The omission of certain charges and gains from the computation of net income lends itself to possible manipulation or smoothing of the annual earning figures.
- (iii) An income statement that includes all income charges and credits recognised during the year is said to be easier to prepare and more easily understood by the readers. This is based on the assumption that accounting statements should be as verifiable as possible; several accountants working independently on the same figures should be able to arrive at identical income figures.
- (iv) With adequate disclosure of items influencing the comprehensive income, the financial statements users is assumed to be more capable of making appropriate classification to arrive at an appropriate measurement of income.
- (v) The distinction between operating and nonoperating transactions influencing the income is not clearcut. Transactions classified as operating by one firm may be classified as nonoperating by another firm. Furthermore, items classified as nonoperating in one year may be classified as operating by the same firm in a subsequent year. This, in itself, leads to inconsistencies in making comparison among different firms or over several periods for the same firm.

Advocates of the all-inclusive concept claim that reporting in the income statement of all items affecting the shareholders' interests during the period, other than dividends and other transactions between the enterprise and its shareholders, provides more useful information for the users of financial statements to enable them to evaluate the importance of the items and their effects on operating results. Although the all-inclusive concept is generally supported, there are circumstances in which it may be considered desirable to report certain items outside the income statement for the current period. However, unusual items are generally included in net income.

Components of Comprehensive Income

Comprehensive income is a useful measure of overall performance. However, information about the components that make up overall performance is also needed. A single focus on the amount of comprehensive income is likely to result in a limited understanding of enterprise performance; information about the components of comprehensive income often may be more important than the total amount of comprehensive income. Investors generally attach more importance to component parts of an enterprise's income for a period than knowing the aggregate figure shown on the "bottom line" for it is knowledge about the composition of the aggregate that makes judgement about the "quality of earnings" possible. "Quality of earnings" generally refers to the durability and stability of earnings. For instance, one company may have ₹ 1,00,000 income, all derived from continuing and recurring operations, another may have the same aggregate income derived from a one time gain on redemption of debt. Most investors would give more value to the first income figure than to the second income figure.

Although some generalisations can be made about components of income, the separate components will differ for different kinds of enterprises. The components of comprehensive income usually consist of the following items:

- (1) Items relating to an entity's ongoing major or central operations.
- (2) Exchange transactions and other transfers between enterprise and other entities that are not its owners.
- (3) Items that are unusual or that occur infrequently, but that do not qualify as "extraordinary items."
- (4) Items that can be estimated with only little reliability.
- (5) Results of transactions in investments in other enterprises.
- (6) Unrealised changes in the value of assets and liabilities, when these are recognised by the accounting model in use.
- (7) Items relating to the payment or recovery of taxes.

The above list is not exhaustive. Among the above items, the "ongoing major or central operations" are generally the primary source of comprehensive income. It should be understood clearly that what are major or central operations for one kind of enterprise are peripheral or incidental for another, and for some it may be difficult to know where to draw the line. For most businesses, gains and losses on the sale of company automobiles are incidental; for a car rental company they are central. Transactions in marketable securities are incidental for a manufacturing business and central for an investment banker. Thus, what are revenues to one business enterprise are gains to another business enterprise. The various components of comprehensive income may differ significantly from one another in terms of stability, risk and predictability, indicating a need for information about these components of income.

The following are the components of other comprehensive income as per Ind AS 1 'Presentation of Financial Statements' (February, 2015):

The components of *other comprehensive income* include:

- (a) changes in revaluation surplus (see Ind AS 16, *Property, Plant and Equipment* and Ind AS 38, *Intangible Assets*);
- (b) reameasurements of defined benefit plans (see Ind AS 19, *Employee Benefits*);
- (c) gains and losses arising from translating the financial statements of a foreign operation (see Ind AS 21, *The Effects of Changes in Foreign Exchange Rates*);
- (d) gains and losses from investments in equity instruments designated at fair value through other comprehensive income in accordance with paragraph 5.7.5 of Ind AS 109, *Financial Instruments*;
- (da) gains and losses on financial assets measured at fair value through other comprehensive income in accordance with paragraph 4.1.2A of Ind AS 109.
- (e) the effective portion of gains and losses on hedging instruments in a cash flow hedge and the gains and losses on hedging instruments that hedge investments in equity instruments measured at fair value through other comprehensive income in accordance with paragraph 5.7.5 of Ind AS 109.
- (f) for particular liabilities designated as at fair value through profit or loss, the amount of the change in fair value that is attributable to changes in the liability's credit risk (see paragraph 5.7.7 of Ind AS 109);
- (g) changes in the value of the time value of options when separating the intrinsic value and time value of an option contract and designating as the hedging instrument only the changes in the intrinsic value (see Chapter 6 of Ind AS 109);
- (h) changes in the value of the forward elements of forward contracts when separating the forward element and spot element of a forward contract and designating as the hedging instrument only the changes in the spot element, and changes in the value of the foreign currency basis spread of a financial instrument when excluding it from the designation of that financial instrument as the hedging instrument (see Chapter 6 of Ind AS 109).

SFAC No. 6 'Elements of Financial Statements' issued by FASB (U.S.A.) (1985) highlights the following characteristics of comprehensive income.

(1) Over the life of a business enterprise, its comprehensive income equals the net of its cash receipts and cash outlays, excluding cash (and cash equivalent of noncash assets) invested by owners and distributed to owners. Matters such as recognition criteria and choice of attributes to be measured also do not affect the amounts of comprehensive income and net cash receipts over the life of an enterprise but do affect the time and way parts of the

total are identified with the periods that constitute the entire life. Timing of recognition of revenues, expenses, gains, and losses is also a major difference between accounting based on cash receipts and outlays and accrual accounting. Accrual accounting may encompass various timing possibilities—for example, when goods or services are provided, when cash is received, or when prices change. (Para 73)

(2) Comprehensive income of a business enterprise results from (a) exchange transactions and other transfers between the enterprise and other entities that are not its owners, (b) the enterprise's productive efforts, and (c) price changes, casualties, and other effects of interactions between the enterprise and the economic, legal, social, political, and physical environment of which it is part. An enterprise's productive efforts and most of its exchange transactions with other entities are ongoing major activities that constitute the enterprise's central operations by which it attempts to fulfill its basic function in the economy of producing and distributing goods or services at prices that are sufficient to enable it to pay for the goods and services it uses and to provide a satisfactory return to its owners. (Para 74)

(3) Comprehensive income is a broad concept. Although an enterprise's ongoing major or central operations are generally intended to be the primary source of comprehensive income, they are not the only source. Most entities occasionally engage in activities that are peripheral or incidental to their central activities. Moreover, all entities are affected by the economic, legal, social, political, and physical environment of which they are part, and comprehensive income of each enterprise is affected by events and circumstances that may be partly or wholly beyond the control of individual enterprises and their managements. (Para 75)

(4) Although cash resulting from various sources of comprehensive income is the same, receipts from various sources may vary in stability, risk, and predictability. That is, characteristics of various sources of comprehensive income may differ significantly from one another, indicating a need for information about various components of comprehensive income. That need underlies the distinctions between revenues and gains, between expenses and losses, between various kinds of gains and losses, and between measures found in present practice such as income from continuing operations and income after extraordinary items and cumulative effect of change in accounting principle. (Para 76)

(5) Comprehensive income comprises two related but distinguishable types of components. It consists of not only its basic components—revenues, expenses, gains, and losses—but also various intermediate components that result from combining the basic components. Revenues, expenses, gains, and losses can be combined in various ways to obtain several measures of enterprise performance with varying degrees of inclusiveness. Examples of intermediate components in business enterprises are gross margin, income from continuing operations before taxes, income from continuing operations, and operating income. Those intermediate components are, in effect, subtotals of comprehensive income and often of one another in the sense that they can be combined with each other or with the basic

components to obtain other intermediate measures of comprehensive income. (Para 77)

Duff and Phelps²² observe:

“In the practical world of business and investment, however, net income determined on allinclusive basis contains too much “noise”, *i.e.*, earnings (positive or negative) derived from developments outside the normal operations of the business, such as capital gains or accounting changes. These are generally nonrecurring over a period of time, so that the analyst places his primary emphasis on earning power as something that can be counted on from year to year. Thus, earning power is a second concept of earnings and the one most meaningful to the investor.”

Prior Period Items

Prior period items are generally infrequent in nature. They should not be confused with accounting estimates which are, by their nature, approximations that may need correction as additional information becomes known in subsequent periods. The charge or credit arising on the outcome of a contingency, which at the time of occurrence could not be estimated accurately, does not constitute the correction of an error but a change in estimate. Such an item is not treated as a prior period item.

AS-5. ‘Net Profit or Loss for the Period, Prior Period Items and Changes in Accounting Policies’ (Revised) issued in February 1997 has made the following provisions with regard to prior period items:

1. The nature and amount of prior period items should be separately disclosed in the statement of profit and loss in a manner that their impact on the current profit or loss can be perceived.
2. The term ‘prior period items’, refers only to income or expenses which arise in the current period as a result of errors or omissions in the preparation of the financial statements of one or more prior periods. The term does not include other adjustments necessitated by circumstances. which though related to prior periods, are determined in the current period, *e.g.*, arrears payable to workers as a result of revision of wages with retrospective effect during the current period.
3. Errors in the preparation of the financial statements of one or more prior periods may be discovered in the current period. Errors may occur as a result of mathematical mistakes, mistakes in applying accounting policies, misinterpretation of facts, or oversight.
4. Prior period items are generally infrequent in nature and can be distinguished from changes in accounting estimates. Accounting estimates by their nature are approximations that may need revision as additional information becomes known. For example, income or expense recognised on the outcome of a contingency which previously could not be estimated reliably does not constitute a prior period item.

5. Prior period items are normally included in the determination of net profit or loss for the current period. An alternative approach is to show such items in the statement of profit and loss after determination of current net profit or loss. In either case, the objective is to indicate the effect of such items on the current profit or loss.

Extraordinary Items

According to AS-5, extraordinary items are income or expenses that arise from events or transactions that are clearly distinct from the ordinary activities of the enterprise and, therefore, are not expected to recur frequently or regularly.

Extraordinary items are sometimes termed “unusual items.” Some examples of such items could be the sale of a significant part of the business, the sale of an investment not acquired with the intention of resale or a liability arising on account of legislative changes or judicial pronouncement etc. The nature and amount of each extraordinary items are separately disclosed so that users of financial statements can evaluate the relative significance of such items and their effect on the operating results.

Income or expenses arising from the ordinary activities of the enterprises though abnormal in amount or infrequent in occurrence do not qualify as extraordinary. An example of such an item would be the write-off of a very large receivable from a regular trade customer.

The following guidelines are contained in AS-5 with regard to extraordinary items:

- I. Extraordinary items should be disclosed in the statement of profit and loss as a part of net profit or loss for the period. The nature and the amount of each extraordinary item should be separately disclosed in the statement of profit and loss in a manner that its impact on current profit or loss can be perceived.
2. Virtually all items of income and expense included in the determination of net profit or loss for the period arise in the course of the ordinary activities of the enterprise. Therefore, only on rare occasions does an event or transaction give rise to an extraordinary item.
3. Whether an event or transaction is clearly distinct from the ordinary activities of the enterprise is determined by the nature of the event or transaction in relation to the business ordinarily carried on by the enterprise rather than by the frequency with which such events are expected to occur. Therefore, an event or transaction may be extraordinary for one enterprise but not so for another enterprise because of the differences between their respective ordinary activities.

For example, losses sustained as a result of an earthquake may qualify as an extraordinary item for many enterprises. However, claims from policyholders arising from an earthquake do not qualify as an extraordinary

item for an insurance enterprise that insures against such risks.

4. Examples of events or transactions that generally give rise to extraordinary items for most enterprises are:
 - attachment of property of the enterprise; or
 - an earthquake.

The 'comprehensive income' concept covers several types of income which have varying degrees of significance for the investors. Sometimes it is suggested that a tripartite form of income statement should be prepared in which operating income, holding gains/losses and extraordinary items would be separately reported. In this income statement format, the main advantage is the clear separation of operating earnings—earnings power—from other types of income. This will be more useful to the investors, creditors and other users who are primarily concerned with earning power, than the one number, allinclusive net income.

Profit or Loss from Ordinary Activities

Ordinary activities are any activities which are undertaken by an enterprise as part of its business and such related activities in which the enterprise engages in furtherance of, incidental to, or arising from, these activities. AS-5 issued by ICAI has given the following provisions on profit/loss arising from ordinary activities:

1. When items of income and expense within profit or loss from ordinary activities are of such size, nature or incidence that their disclosure is relevant to explain the performance of the enterprise for the period, the nature and amount of such items should be disclosed separately.
2. Although the items of income and expense described in point No. 1 above are not extraordinary items, the nature and amount of such items may be relevant to users of financial statements in understanding the financial position and performance of an enterprise and in making projections about financial position and performance. Disclosure of such information is sometimes made in the notes to the financial statements.
3. Circumstances which may give rise to the separate disclosure of items of income and expense in accordance with point No. 1 above include:
 - (a) the write-down of inventories to net realisable value as well as the reversal of such write-downs;
 - (b) a restructuring of the activities of an enterprise and the reversal of any provisions for the costs of restructuring;
 - (c) disposals of items of fixed assets;
 - (d) disposals of long-term investments;
 - (e) legislative changes having retrospective application;
 - (f) litigation settlements; and
 - (g) other reversals of provisions.

As-5 on Changes in Accounting Estimates

1. As a result of the uncertainties inherent in business activities many financial statement items cannot be measured with precision but can only be estimated. The estimation process involves judgements based on the latest information available. Estimates may be required, for example, of bad debts, inventory obsolescence or the useful lives of depreciable assets. The use of reasonable estimates is an essential part of the preparation of financial statements and does not undermine their reliability.
2. An estimate may have to be revised if changes occur regarding the circumstances on which the estimate was based, or as a result of new information, more experience or subsequent developments. The revision of the estimate, by its nature, does not bring the adjustment within the definitions of an extraordinary item or a prior period item.
3. Sometimes, it is difficult to distinguish between a change in an accounting policy and a change in an accounting estimate. In such cases, the change is treated as a change in an accounting estimate, with appropriate disclosure.
4. The effect of a change in an accounting estimate should be included in the determination of net profit or loss in:
 - (a) the period of the change, if the change affects the period only; or
 - (b) the period of the change and future periods, if the change affects both.
5. A change in an accounting estimate may affect the current period only or both the current period and future periods. For example, a change in the estimate of the amount of bad debts is recognised immediately and therefore affects only the current period. However, a change in the estimated useful life of a depreciable asset affects the depreciation in the current period and in each period during the remaining useful life of the asset. In both cases, the effect of the change relating to the current period is recognised as income or expense in the current period. The effect, if any, on future periods, is recognised in future periods.
6. The effect of a change in an accounting estimate should be classified using the same classification in the statement of profit and loss as was used previously for the estimate.
7. To ensure the comparability of financial statements of different periods, the effect of a change in an accounting estimate which was previously included in the profit or loss from ordinary activities is included in that component of net profit or loss. The effect of a change in an accounting estimate that was previously included as an extraordinary item is reported as an extraordinary item.

8. The nature and amount of a change in an accounting estimate which has a material effect in the current period, or which is expected to have a material effect in subsequent periods, should be disclosed. If it is impracticable to quantify the amount, this fact should be disclosed.

TRANSACTIONS APPROACH TO INCOME MEASUREMENT

The transactions approach in income measurement records changes in asset and liability valuations only as these are the result of transactions. The term transactions is used in a wider sense and it includes both external transactions and internal transactions. As it can be inferred, external transactions relate to dealings with outside parties and internal transactions arise due to use or conversion of assets within the firm. Changes in values are not recognised if such changes are based on market valuations or expectations and changes therein. Income is recognised when new market valuations are more than the input (cost) valuations and when the external transactions take place. Internal transactions may have valuation changes, but only those that result from the use or conversion of assets are usually recognised and recorded. When conversion takes place, the value of the old asset is usually transferred to the new asset. Therefore, the transactions approach fulfils the concept of realisation at the time of sale or exchange and cost concept recognised in accounting.

In transactions approach, income is determined after recording revenues and expenses associated with external transactions. It should be understood that revenues and expenses have their own problems of timing and valuation. However, the vital issue is of proper matching of expenses with the associated revenues during a definite period. Furthermore, the different concepts of net income based on different methods of determining capital maintenance can be considered in the transactions approach which will require adjustments to revenues and expenses at the time of recording each transaction and assets valuations at the end of each period. In fact, current accounting practice is a combination of capital maintenance concept of income, operational concept and the transactions-based approach to income measurement.

The transactions-based income measurement has some advantages.

Firstly, it provides information about assets and liabilities existing at the end of a period. The availability of this information facilitates application of different asset valuation methods.

Secondly, the net income of a business can be classified in terms of products, customers which certainly provide more useful information to the management.

Thirdly, income data can be collected for operations within the firm and external factors separately.

Fourthly, different statements prepared under the transactions approach can be made to have linkage with each other. This enhances the fuller understanding and utility of data developed in this approach.

ACTIVITIES APPROACH TO INCOME MEASUREMENT

The activities approach focuses on description of activities of a business enterprise rather than on transactions (as in transactions approach). In activities approach, income is recognised when certain activities or events occur; income recognition is not confined to the mere result of specific transactions. A business firm does many activities such as planning, purchasing, producing, selling. Activity income is recognised at each of these activities. Practically speaking, activities approach are expansion of the transactions approach. The main difference between transactions approach and activities approach is that the former is based on the reporting process that measures an external event—the transaction—and the latter is based on the realworld concept of activity or event in a wider sense. Both approaches, however, fail to achieve realistic income measurement since both depend on same structural relationships and underlying concepts and both have no real-world counterpart.

Activities approach income facilitates the measurement of several concepts of income, which can be used for different purposes. It can be contended that income in case of production and sale of merchandise requires different valuations and predictions which may not be relevant while measuring income in case of purchase or sale of securities or holding assets for mere capital gains. The availability of income components by different types of operations or activities is useful in measuring the efficiency of management and also in better predictions as different activities reflect different behavioural patterns.

RECIPIENTS OF NET INCOME

The term 'net income' generally means net earning or net profits accruing to current shareholders or owners of the business. However, there may be valid reasons for the presentation of a net income figure that represents net earnings to a narrower or broader group of recipients. They are listed as follows:

(1) **Value Added Concept of Income:** Broadly speaking, it is possible to view the enterprise as having a large group of claimants or interested parties, including not only owners and other investors but also employees and landlords of rented property. This is the value added approach. Value added is the market price of the output of an enterprise less the price of the goods and services acquired by transfer from other firms. Thus, all employees, owners, creditors and governments (through taxation) are recipients of the enterprise income. This is the total price that can be divided among the various contributors of factor inputs to the enterprise in the production of goods and services. The value added income would include wages, rent, interest, taxes, dividends paid to shareholders, and undistributed earnings of the companies.

(2) **Enterprise Net Income:** This concept of net income has an advantage from the point of view of separating the financial aspects of an enterprise from its operating. The net income to the enterprise is an operating concept of net income. The operating concept of income has earlier been discussed in this chapter. Net income resulting under 'operating capability concept' is known as enterprise net income.

(3) **Net Income to investors:** In accordance with the entity concept of the business enterprise, both shareholders and creditors of longterm debt are considered equally as investors of permanent capital. With the separation of ownership and control in the business enterprises, the differences between shareholders and debt holders are no longer as important as they once were. The main differences arise in the priorities of claims against income and against assets in liquidation.

In the entity concept, income to investors includes the interest on debt, dividends to preferred and common shareholders, and undivided remainder. This concept of income has considerable merit for several purposes: (1) The decisions regarding the sources of longterm capital are financial rather than operating matters. Therefore, the net income to investors reflects more clearly the results of operations. (2) Because of differing financial structure, comparisons among firms can be made more readily by using this concept of income. (3) The rate of return on total investment computed from this concept of income portrays the relative efficiency of invested capital better than does the rate of return to shareholders.

In the computation of net income to investors, income taxes are treated as expenses. Corporate income after taxes is much more stable—by industries—than income before taxes; income taxes seem to be passed on much as other expenses. Also, both investors and managers seem to make most of their decisions on the basis of income after taxes.

(4) **Net Income to shareholders:** The most traditional and accepted viewpoint of net income is that it represents the return to the owners of the business. Although this concept has its firm foundation in the proprietary approach, many authors apply it to the entity approach and consider the accounting profit of the entity to be a liability to the owners. FASB Statement of Financial Accounting Concepts No. 1, emphasized the predictive nature of reported earnings. It states, for example, that in addition to being used to evaluate management's performance, reported earnings may be used to predict future earnings, to predict the long-term earning ability of the enterprise, or to evaluate the risks of investing in or lending to the enterprise.

(5) **Net Income to residual equity holders:** In financial statements presented primarily for shareholders and investors, the net income available for distribution to common shareholders is usually thought to be the most important single figure in the statements. Net income per share of common share and dividends per share are the most commonly quoted figures in financial news, along with the market price per share. Therefore, there is pragmatic

support for presenting statements from which the net income to residual equity holders can readily be obtained.

The holders of common stock and the prospective buyers of common shares are interested primarily in the future flow of dividends. Normally, only a part of the residual net income is distributed as dividends, but the knowledge of the net income available and the financial policy of the companies may provide useful information to common shareholders in their evaluation of the firm and in their prediction of the total amount of annual dividend distributions in the future. However, in order to predict the amount of dividends he may receive in the future, an investor must also predict the number of shares that will be outstanding in each period.

Although it is possible to view current net income as the return to current outstanding shareholders, potential residual equity holders must be taken into consideration in predictions regarding future earnings and dividends per share. Furthermore, if current net income is not distributed to current shareholders, the amount added to retained earnings may be shared by these potential holders of common shares.

Illustrative Problem 1. The Tandy Company produces and sells a product at a price of ₹ 10 per unit. There were no inventories on January 1, 2015. During 2015, 2,00,000 units were produced at a cost of ₹ 12,00,000 or ₹ 6 per unit.

During 2015, 1,80,000 units were sold with delivery costs being 50 paise per unit under a contract with a trucking firm. During 2016 there was no additional production, but the remaining units were sold and the 50 paise delivery charge was paid on those units.

Required: Calculate 2015 and 2016 income before income taxes under the production method and the sales method of revenue recognition and give the inventory figure for December 31, 2015, under each method. (M.Com., Delhi)

SOLUTION

Income under Production Method

	2015 (₹)	2016 (₹)
Sales	18,00,000	2,00,000
Add: Net realisable value of unsold production (20,000 units @ ₹ 9.50) (₹ 10 – Re. 0.50)	1,90,000	—
	19,90,000	2,00,000
Expenses:		
Manufacturing costs	12,00,000	—
Delivery costs @ 50 p.	90,000	10,000
Net realizable value of inventory sold	—	1,90,000
	12,90,000	2,00,000
Income before taxes	7,00,000	—

Note: Ending inventory will be shown on balance sheet.

Net realisable value = Selling price – delivery costs
 = ₹ 10 – .50p
 = ₹ 9.50

Income under Sales Method

	2015 (₹)	2016 (₹)
Sales	1 8,00,000	2,00,000
Less: Cost of goods sold:		
Opening inventory	—	1,20,000
Manufacturing costs	12,00,000	—
Cost of goods available for sale	12,00,000	1,20,000
Less: Closing inventory	1,20,000	—
Cost of goods sold	10,80,000	1,20,000
Gross margin	7,20,000	80,000
Less: Delivery Costs	90,000	10,000
Net income before taxes	6,30,000	70,000

As can be seen, the profit pattern are quite different. When revenue is based on production, there is no profit in the second period because there is no production. Obviously, the choice between the two methods depends on the nature of earning process and when it is judged to be reasonably complete.

Illustrative Problem 2. Giant stores started operations in 2015, selling merchandise on the instalment plan. During the first years, sales were recorded at ₹ 68,40,000. During 2016, sales were recorded at ₹ 71,75,000. The cost of goods sold and operating expenses for the two years are given below:

2015 – ₹ 41,04,000

2016 – ₹ 43,05,000

In 2015, cash collections from customers amounted to ₹ 34,00,000. Collections on sales during 2016 are given below:

On 2015 Sales – ₹ 15,00,000

On 2016 Sales – ₹ 40,00,000

- Prepare summary income statements with revenue and expense recognized at the point of sale.
- Prepare summary income statements with revenue and expense recognition as collections are made from the customers.

(M.Com., Delhi)

Solution

(i) *Income Statement with Revenue and Expense Recognized at the point of sale.*

	2015 ₹	2016 ₹
Sales	68,40,000	71,75,000
Less: Cost of goods sold and expenses	41,04,000	43,05,000
Net Income	27,36,000	28,70,000

(ii) *Revenue and Expense Recognised as Collections are made from Customers.*

	2015 ₹	2016 ₹
Sales	34,00,000	55,00,000
Less: Cost of goods sold and expenses	41,04,000	43,05,000
Net Income	(–) 7,04,000	11,95,000

Illustrative Problem 3. Based on the following information, prepare conventional income and value-added statement.

(In thousand rupees)

Sale revenue	₹ 5,000
Materials used	1,000
Salaries and Wages	900
Depreciation	400
Income Tax	800
Supplies used	200
Utilities expense	300
Interest expense	200
Dividends paid	300

(M.Com., Delhi 1988, 2000, 2002)

Solution

Conventional Income Statement (₹ in thousand)

Sales		5,000
Less: Cost of goods sold:		
Materials	1,000	
Salaries	900	
Depreciation	400	
Supplies	200	
Utilities	300	
Interest	200	3,000
Net Profit before tax and dividend		2,000
Less: Income tax	800	
Dividends paid	300	1,100
Profit retained		900

Value-added Statement (₹ in thousand)

Sales		5,000
Less: Materials	1,000	
Supplies	200	
Utilities	300	1,500
Value added		3,500
Distributed as:		
Salaries		900
Income Tax		800
Interest		200
Dividends		300
Depreciation		400
Profit retained in business		900
		3,500

REFERENCES

1. American institute of Certified Public Accountants, *Objectives of Financial Statements*, New York, AICPA, Oct, 1973, p. 26.
2. Rober T. Sprouse, "The Balance Sheet Embodiment of the Most Fundamental Elements of Accounting Theory" in S. Zeff and T. Keller (Eds.) *Financial Accounting Theory*, 1973, p. 167.
3. Vernonkam, *Accounting Theory*, John Wiley and Sons, 1990, p. 178.
4. George J. Benston, Michael Bromwich, Robert E. Litan and Alfred Wagenhofer, *World Wide Financial Reporting*, Oxford University Press, 2006, p. 35.
5. J.R. Hicks, *Value and Capital*, Clarendon Press, 1946, p. 171.
6. S.S. Alexander, "Income Measurement in a Dynamic Economy," in W.T. Baxter and S. Davidson (Eds.) *Studies in Accounting Theory*, London, Sweet and Maxwele, 1962.
7. Allan Barton, *An Analysis of Business Income Concepts*, International Centre for Research in Accounting, University of Lancasters, 1975, p. 50.
8. Eldon S. Hendriksen, *Accounting Theory*, Homewood, Richard D. Irwin, 1984, p. 15.
9. T.A. Lee, *Income and Value Measurement*, London: Thomas Nelson & Sons Ltd., 1974, p. 41.
10. E.O. Edwards and P.W. Bell, *The Theory and Measurement of Business Income*, University of California Press, 1961.
11. Michael Bromwich, Richard Macve and Shyam Sunder, "Hicksian Income in the Conceptual Frame Work", *ABACUS* (Vol. 46, No. 3), September 2010), pp. 348-376.
12. K. Boulding, "Economic and Accounting: The Uncongenial Twins," in W.T. Baxter and S. Davidson (Eds.), *Studies in Accounting*, p. 52.
13. T.A. Lee, *Income and Value Measurement*, *Ibid.*, p. 64.
14. L. Revsine, "On the Correspondence Between Replacement Cost Income and Economic Income," *The Accounting Review* (July 1970).
15. American Institute of Certified Public Accountants, *Objectives of Financial Statements*, New York: AICPA, October 1973, p.22.
16. J.J. Farker, "Capital Maintenance Concepts, Gains from Borrowing and the Measurement of Income," *Accounting and Business Research* (Autumn 1980), p. 394.
17. Robert Bloom and Araya Debessay, *Inflation Accounting*, New York: Praeger Publishers, 1984, p.94.
18. L. Revsine and J.J. Waygrandt, "Accounting for Inflation: The Controversy," *The Journal of Accountancy* (Oct. 1974), pp. 7278.
19. Financial Accountant Standards Board, Concept No. 3, *Elements of Financial Statement of Business Enterprises*, Stamford, FASB, Dec. 1980, p. 27.
20. David Solomons, *Making Accounting Policy*, New York: Oxford University Press, 1986, p. 141.
21. Financial Accounting Standards Board, Concept No. 5, para 38.
22. Duff and Phelps, *A Management Guide to Better Financial Reporting*, A Report for Arthur Anderson & Co. 1976, p. 53.

QUESTIONS

1. "Measurements of income is the central purpose in accounting." Examine this statement and discuss the objectives of income measurement in financial accounting.
2. What is accounting income? How is accounting income determined?
3. Discuss the advantages and limitations of accounting concept of income.
4. Explain the economic concept of income. How economic income differs from accounting income?
5. "The economic income concept has little applicability to the area of financial accounting and reporting." Evaluate this statement.
6. Discuss relevance of capital maintenance concept in measurement of business income.
7. Discuss the following approaches in capital maintenance concept of income measurement:
 - (a) Financial capital maintenance
 - (b) General purchasing power financial capital maintenance
 - (c) Physical or operating capital maintenance
8. Explain the concept of comprehensive income. Discuss its uses in financial accounting. (*M.Com., Delhi, 2009*)
9.
 - (a) What do you understand by 'Comprehensive Income'?
 - (b) What is meant by the concept of 'capital maintenance' in accounting. (*M.Com., Delhi*)
10. Define Comprehensive Income.' Which concept of income—the accounting concept or the economic concept — is better for decision making by the users of financial statements? Give reasons. (*M.Com., Delhi*)
11. "Earnings ... are based on conventions and rules that should be logical and internally consistent, even though they may not mesh with economists' notions of income." [Report of the Study Group on the Objectives of Financial Statements (1973)].
Do you agree with the above statement? Explain briefly the role of the two approaches, viz., the transactions approach and the activities approach, in the development of income concepts at the structural level. (*M.Com., Delhi*)
12. What do you understand by the term 'Comprehensive Income'? What specific items, if any, would you include while measuring comprehensive income and exclude in measuring earnings? (*M.Com., Delhi, 1994*)
13. What do you understand by 'operating capability'? Which concept of capital maintenance will be more useful to adopt during the days of rising prices? (*M.Com., Delhi, 1992*)
14. Which concept of capital maintenance is more appropriate in the days of unstable prices? Explain the concept precisely.
15. What do you understand by enterprise net income?
(*M.Com., Delhi*)
16. "Income measurement can be divided into different income concepts classified by income recipients." Explain.
(*M.Com., Delhi, 1993*)
17. "Income cannot be properly determined unless capital is maintained." Explain and discuss the different concepts of

- capital maintenance. Which one is better during periods of inflation? (M.Com., Delhi, 1993)
18. Discuss the similarities and dissimilarities between accounting income and economic income. (M.Com., Delhi, 1995, 2008)
19. "Income cannot be properly determined unless capital is maintained." Explain and discuss the different concepts of capital maintenance. Which one is better during periods of inflation? (M.Com., Delhi, 1996)
20. What do you understand by value added concept of income? (M.Com., Delhi, 1997)
21. Distinguish between 'comprehensive income' and 'Earnings' as defined by SFAC. Which of these concepts would you suggest for adoption for financial reporting purposes? (M.Com., Delhi, 1998/2000)
22. What criteria must be met before an item can be classified as an extraordinary item? (M.Com., Delhi)
23. What are the provisions in AS-5 on prior period items?
24. Discuss the rules suggested in AS-5 for the treatment of extraordinary items.
25. Explain the concept of profit or loss arising from ordinary activities.
26. Discuss the guidelines given in AS-5 on
(i) Changes in Accounting Estimates
(ii) Changes in Accounting Policies
27. Discuss the different concepts of capital maintenance for income measurement. Which capital maintenance concept is useful to a business firm during inflation? (M.Com., Delhi, 2007, 2013)
28. Explain the different recipients of net income. (M.Com., Delhi, 2010, 2012)
29. Explain economic income. What are its advantages and disadvantages? (M.Com., Delhi, 2012)
30. "In accounting income, in most cases, matching of costs and revenues is a practical impossibility. The process is one similar to judging a beauty-contest where the judges cast their votes according to their personal preferences to decide the winner, because no established concepts exist to ascertain beauty, just as there are none to determine proper matching." Evaluate the above statement and examine the drawbacks of accounting income as compared to its benefits. (M.Com., Delhi, 2011)

MULTIPLE CHOICE QUESTIONS

Select the correct answer for the following multiple choice questions.

1. The process of reporting an item in the financial statements of an entity is
(a) Allocation.
(b) Matching.
(c) Realization.
(d) Recognition.
Ans. (d)
2. Which of the following items would cause earnings to differ from comprehensive income for an enterprise in an industry not having specialized accounting principles?

- (a) Unrealized loss on investments classified as available-for-sale securities.
(b) Unrealized loss on investments classified as trading securities.
(c) Loss on exchange of similar assets.
(d) Loss on exchange of dissimilar assets.

Ans. (a)

3. Comprehensive income excludes changes in equity resulting from which of the following?
(a) Loss from discontinued operations.
(b) Prior period error correction.
(c) Dividends paid to stockholders.
(d) Unrealized loss on securities classified as available-for-sale.

Ans. (c)

4. FASB's conceptual framework explains both financial and physical capital maintenance concepts. Which capital maintenance concept is applied to currently reported net income, and which is applied to comprehensive income?

Currently reported income	Comprehensive income
(a) Financial capital	Physical capital
(b) Physical capital	Physical capital
(c) Financial capital	Financial capital
(d) Physical capital	Financial capital

Ans. (c)

5. Which of the following should be included in general and administrative expenses?

Interest	Advertising
(a) Yes	Yes
(b) Yes	No
(c) No	Yes
(d) No	No

Ans. (d)

6. During 2009, both Ram Co. and Shyam Co. suffered losses due to the flooding of the Ganga River. Ram Co. is located two miles from the river and sustains flood losses every two to three years, Shyam Co. which has been located fifty miles from the river for the past twenty years, has never before had flood losses. How should the flood losses be reported in each company's 2009 income statement?

Ram Co.	Shyam Co.
(a) As a component of income from continuing operations	As an extraordinary item
(b) As a component of income from continuing operations	As a component of income from continuing operations
(c) As an extraordinary item	As a component of income from continuing operations
(d) As an extraordinary item	As an extraordinary item

Ans. (a)

7. A Co. incurred the following infrequent losses during 2009:
● ₹ 1,75,000 from a major strike by employees.

- ₹ 1,50,000 from an early extinguishment of debt.
- ₹ 1,25,000 from the abandonment of equipment used in the business.

In Co.'s 2009 income statement, the total amount of infrequent losses not considered extraordinary should be

- (a) ₹ 2,75,000
- (b) ₹ 3,00,000
- (c) ₹ 3,25,000
- (d) ₹ 4,50,000

Ans. (b)

8. Kent Co. incurred the following infrequent losses during 2009:

- A ₹ 3,00,000 loss was incurred on disposal of one of four dissimilar factories.
- A major currency devaluation caused a ₹ 1,20,000 exchange loss on an amount remitted by a foreign customer.
- Inventory valued at ₹ 1,90,000 was made worthless by a competitor's unexpected product innovation.

In its 2009 income statement, what amount should Kent report as losses that are not considered extraordinary?

- (a) ₹ 6,10,000
- (b) ₹ 4,90,000
- (c) ₹ 4,20,000
- (d) ₹ 3,10,000

Ans. (a)

9. Milton Co. had the following transactions during 2009:

- ₹ 12,00,000 pretax loss on foreign currency exchange due to a major unexpected devaluation by the foreign government.
- ₹ 5,00,000 pretax loss from discontinued operations of a division.
- ₹ 8,00,000 pretax loss on equipment damaged by a hurricane. This was the first hurricane ever to strike in Midway's area. Milton also received ₹ 10,00,000 from its insurance company to replace a building, with a carrying value of ₹ 3,00,000, that had been destroyed by the hurricane.

What amount should Milton report in its 2009 income statement as extraordinary loss before income taxes?

- (a) ₹ 1,00,000
- (b) ₹ 13,00,000
- (c) ₹ 18,00,000
- (d) ₹ 25,00,000

Ans. (a)

10. A material loss should be presented separately as a component of income from continuing operations when it is

- (a) An extraordinary item.
- (b) A cumulative-effect-type change in accounting principle.
- (c) Unusual in nature and infrequent in occurrence.
- (d) Not unusual in nature but infrequent in occurrence.

Ans. (d)

11. During 2009, Ansal Construction Co. recognized substantial gains from

- An increase in value of a foreign customer's remittance caused by a major foreign currency revaluation.
- A court ordered increase in a completed long-term construction contract's price due to design changes.

Should these gains be included in continuing operations or reported as an extraordinary item in Ansal 2009 income statement?

<i>Gain from major currency revaluation</i>	<i>Gain from increase in contract's price</i>
(a) Continuing operations	Continuing operations
(b) Extraordinary item	Continuing operations
(c) Extraordinary item	Extraordinary item
(d) Continuing operations	Extraordinary item

Ans. (a)

12. An extraordinary item should be reported separately on the income statement as a component of income.

	<i>Net of income taxes</i>	<i>Before discontinued operations of a segment of a business</i>
(a)	Yes	Yes
(b)	Yes	No
(c)	No	No
(d)	No	Yes

Ans. (b)

13. In 2009, hail damaged several of Tata Co.'s vans. Hailstorms had frequently inflicted similar damage to Maruti's vans. Over the years, Tata had saved money by not buying hail insurance and either paying for repairs, or selling damaged vans and then replacing them. In 2009, the damaged vans were sold for less than their carrying amount. How should the hail damage cost be reported in Tata's 2009 financial statements?

- (a) The actual 2009 hail damage loss as an extraordinary loss, net of income taxes.
- (b) The actual 2009 hail damage loss in continuing operations, with no separate disclosure.
- (c) The expected average hail damage loss in continuing operations, with no separate disclosure.
- (d) The expected average hail damage loss in continuing operations, with separate disclosure.

Ans. (b)

14. A transaction that is unusual in nature and infrequent in occurrence should be reported separately as a component of income

- (a) After cumulative effect of accounting changes and before discontinued operations of a segment of a business.
- (b) After cumulative effect of accounting changes and after discontinued operations of a segment of a business.
- (c) Before cumulative effect of accounting changes and before discontinued operations of a segment of a business.

- (d) Before cumulative effect of accounting changes and after discontinued operations of a segment of a business.

Ans. (d)

15. When a segment of a business has been discontinued during the year, this segment's operating losses of the current period up to the measurement date should be included in the
- (a) Income statement as part of the income (loss) from operations of the discontinued segment.
 - (b) Income statement as part of the loss on disposal of the discontinued segment.
 - (c) Income statement as part of the income (loss) from continuing operations.
 - (d) Retained earnings statement as a direct decrease in retained earnings.

Ans. (a)

16. When a segment of a business has been discontinued during the year, the loss on disposal should
- (a) Exclude operating losses of the current period up to the measurement date.
 - (b) Exclude operating losses during the phaseout period.
 - (c) Be an extraordinary item.
 - (d) Be an operating item.

Ans. (a)

17. On December 1, 2008, Shine Co. agreed to sell a business segment on March 1, 2009. Throughout 2008 the segment had operating losses that were expected to continue until the segment's disposition. However, the gain on disposition was expected to exceed the segment's total operating losses in 2008 and 2009. The amount of estimated net gain from disposal recognized in 2008 equals
- (a) Zero
 - (b) The entire estimated net gain.
 - (c) All of the segment's 2008 operating losses.
 - (d) The segment's December 2008 operating losses.

Ans. (a)

18. What is the purpose of reporting comprehensive income?
- (a) To report changes in equity due to transactions with owners.
 - (b) To report a measure of overall enterprise performance.
 - (c) To replace net income with a better measure.
 - (d) To combine income from continuing operations with income from discontinued operations and extraordinary items.

Ans. (b)

19. Which of the following is not an acceptable option of reporting other comprehensive income and its components?
- (a) In a separate statement of comprehensive income.
 - (b) In a statement of earnings and comprehensive income.
 - (c) In the footnotes.
 - (d) In a statement of changes in stockholders' equity.

Ans. (c)

20. Which of the following changes during a period is not a component of other comprehensive income?

- (a) Unrealized gains or losses as a result of a debt security being transferred from held to maturity to available for sale.
- (b) Stock dividends issued to shareholders.
- (c) Foreign currency translation adjustments.
- (d) Minimum pension liability adjustments.

Ans. (b)

21. Which of the following options for displaying comprehensive income is (are) preferred by FASB?

- I. A continuation from net income at the bottom of the income statement.
- II. A separate statement that begins with net income.
- III. In the statement of changes in stockholders' equity.

(a) I.

(b) II.

(c) II and III.

(d) I and II.

Ans. (d)

22. Which of the following is not classified as other comprehensive income?

- (a) A net loss of an additional pension liability not yet recognized as net periodic pension cost.
- (b) Subsequent decreases of the fair value of available for sale securities that have been previously written down as impaired.
- (c) Decreases in the fair value of held to maturity securities.
- (d) None of the above.

Ans. (c)

23. When a full set of general purpose financial statements are presented, comprehensive income and its components should

- (a) Appear as a part of discontinued operations, extraordinary items, and cumulative effect of a change in accounting principle.
- (b) Be reported net of related income tax effect, in total and individually.
- (c) Appear in a supplemental schedule in the notes to the financial statements.
- (d) Be displayed in a financial statement that has the same prominence as other financial statements.

Ans. (d)

24. How should the effect of a change in accounting estimate be accounted for?

- (a) By restating amounts reported in financial statements of prior periods.
- (b) By reporting proforma amounts for prior periods.
- (c) As a prior period adjustment to beginning retained earnings.
- (d) In the period of change and future periods if the change affects both.

Ans. (d)

25. The effect of a change in accounting principle that is inseparable from the effect of a change in accounting estimate should be reported
- By restating the financial statements of all prior periods presented.
 - As a correction of an error.
 - As a component of income from continuing operations, in the period of change and future periods if the change affects both.
 - As a separate disclosure after income from continuing operations, in the period of change and future periods if the change affects both.

Ans. (c)

26. A company has included in its consolidated financial statements this year a subsidiary acquired several years ago that was appropriately excluded from consolidation last year. This results in
- An accounting change that should be reported prospectively.
 - An accounting change that should be reported by restating the financial statements of all prior periods presented.
 - A correction of an error.
 - Neither an accounting change nor a correction of an error.

Ans. (b)

27. Which of the following statements is correct regarding accounting changes that result in financial statements that are, in effect, the statements of a different reporting entity?
- Cumulative-effect adjustments should be reported as separate items on the financial statements pertaining to the year of change.
 - No restatements or adjustments are required if the changes involve consolidated methods of accounting for subsidiaries.
 - No restatements or adjustments are required if the changes involve the cost or equity methods of accounting for investments.
 - The financial statements of all prior periods presented should be restated.

Ans. (d)

PROBLEMS

1. From the following information prepare
- conventional income statement and
 - value added statement.

	₹
Sales	3,50,000
Printing and stationary	5,000
Interest	25,000
Travelling and communication	15,000
Welfare expenses	10,000
Salaries and wages	50,000
Depreciation	40,000
Power and fuel	15,000
Packing material	1 0,000
Raw material	1,20,000
Tax at 50%	—
Dividends	10,000
Transfer to reserves	20,000

(M.Com., Delhi, 2003)

2. From the following figures, calculate separately (i) earnings (ii) comprehensive income using definition of these terms as given by the FASB in its Concept Statements No. 3 and 5.

	(₹)
Revenues	10,000
Cumulative effect on prior years of	
Expenses	8,000
a change in accounting principle	(200)
Gains from unusual source	300
Other non-owner changes in equity	
Loss on discontinued operations	200
(realised holding gains)	100
Extraordinary loss	600

How far do you think any of the two figures, earnings and comprehensive income, is closer to the present net income concepts as is generally used in practice?

(M.Com., Delhi, 1997)



Revenues, Expenses, Gains and Losses

REVENUE

Meaning of Revenues

Revenues are earned from the sale of goods or services done by a business entity to the others. The business entity receives or will receive (in future) cash or something else of value. Generally cash is received immediately from the sale of goods or rendering services. If goods or services are sold on credit, then cash will not be received immediately but at a future date. In this situation, it is assumed that the business enterprise has received/created, accounts receivable/debtors. In both the cases, *i.e.*, whether goods and services are sold on cash or credit, revenues are considered to be earned by the business entity. Further, the gross increase in assets and capital eventually pertains to cash.

Revenues earned results into inflows and gross increase in the value of assets and capital of a business entity and outflows of goods or services from the firm to its customers. Generally, revenues are defined differently taking broader or narrower views about the components of revenue.

Broader Concept of Revenue

The broad or comprehensive concept of revenue includes all of the proceeds from business and investment activities. This view accepts revenues as all changes in the net assets, resulting from ordinary activities (or revenue producing activities) and other gains or losses resulting from the sale of fixed assets and investments. The broader view is taken by AICPA (USA)¹ when it defines revenues as follows:

“Revenue results from the sale of goods and the rendering of services and is measured by the charge made to customers, clients or tenants for goods and services furnished to them. It also includes gains from the sale or exchange of assets (other than stock in trade), interest and dividends earned on investments, and other increases in the owners equity except those arising from the capital contributions and capital, adjustments.”

Narrower Concept of Revenue

The narrower concept considers revenues resulting from the primary or normal activities of a business entity and thus the narrower view of revenues excludes investment income and gains and losses on the disposal of fixed assets. The Institute of Chartered Accountants of India (ICAI) defines revenue in its Accounting Standard (AS) No. 9 as following, taking a narrower view²:

“Revenue is the gross inflow of cash, receivables or other consideration arising in the ordinary activities of an enterprise from the sale of goods, from the rendering of services, and from the use by others of enterprise resources yielding interest, royalties and dividends. Revenue is measured by the charges made to customers or clients for goods supplied and services rendered to them and by the charges and rewards arising from the use of resources by them. In an agency relationship, the revenue is the amount of commission and not the gross inflow of cash, receivables or other consideration.”

The FASB (USA) also takes a narrower view while defining revenues:

“Revenue are inflows or other enhancements of assets of an entity or settlements of its liabilities (or combination of both) during a period from delivery or producing goods, rendering services, or other activities that constitute the entity’s ongoing major or central operations.”³

Thus, revenues will be increase in asset values in the firm due to the primary operations of the business and on account of production or sales of product or services. Revenues represent actual or expected cash inflows (or the equivalent) that have occurred or will eventuate as a result of the entity’s ongoing major or central operations. The assets increased by revenues may be various kinds—for example, cash claims against customers or clients, other goods or services received, or increased value of a product resulting from production. Similarly, the transactions and events from which revenues arise and the revenues themselves are in many forms and are called by various names—for example, output, deliveries, sales, fees, interest, dividends, royalties and rent—depending on the kinds of operations involved and the way revenues are recognized.

The narrower concept makes clearly the distinction between revenues and gains (Gains have been discussed later). Gains are increases in net assets from peripheral or incidental transactions and from other events that may be largely beyond the control of the firm whereas revenues relate to the ongoing major or central operations. Revenues represents increases that occur because the firm undertakes certain activities. In other words, there is performance by a business entity. Revenue comes about because an enterprise does something to make it happen. In particular, what it does is to produce and sell a product or service. Revenue is not simply a sum of money, but it is indicative of the accomplishment of the firm. It is a measure of the company ‘gross performance’ as a profit making enterprise. When expenses are

seen as representing the 'efforts' of the firm, the matching of revenues and expenses results in income, the 'net accomplishment' of the firm.⁴

Taking a narrower concept of revenues, the following items are not included within the definition of revenue:

- (a) Realised gains resulting from the disposal of, and unrealised gains resulting from the holding of non-current assets, e.g., fixed assets;
- (b) Unrealised holding gains resulting from the change in value of current assets, and the natural increase in the herds and agricultural and forest products;
- (c) Realised or unrealised gains resulting from changes in foreign exchange rates and adjustments arising on the translation of foreign currency financial statements;
- (d) Realised gains resulting from the discharge of an obligation at less than its carrying amount;
- (e) Unrealised gains resulting from the restatement of the carrying amount of an obligation.

Thus, revenue does not include all recognised increases in assets or decreases in liabilities. Receipts of the proceeds of a cash sale is revenue under generally accepted accounting principles because the net result of the sale is a change in owners' equity. On the other hand, receipts of proceeds of a loan, investment by owners or receipt of an asset purchased for cash, income on investments, gains on the sale of fixed assets are not revenues, as per the accounting standard issued by the ICAI.

The second narrower interpretation of revenues is more appropriate and useful to the external user and other decision makers as revenues are defined in terms of primary activities and operations of a firm which are truly income-generating business activities.

In spite of the distinction between revenues and gains, both are included in the income of a business enterprise.

REVENUE-PRODUCING ACTIVITIES

As stated earlier, revenues arise only from those activities that are designated business operations. These activities are known as earning process or operating cycle of a business enterprise, especially in a manufacturing concern. These activities undertaken by the firm together make a profit and include a fairly long chain of events. In the earning process or operating cycle of a manufacturing concern, the following six critical events (activities) are generally found:

- (1) Acquisition of resources.
- (2) Receipt of customer orders.
- (3) Production.
- (4) Delivery of goods or performance of services.
- (5) Collection of cash.

Corporate Insight

Tech Mahindra irks analysts on accounts

Tech Mahindra Ltd, the software company that took control of fraud-hit Satyam Computer Services Ltd in a government-backed rescue, has come under attack from analysts over an accounting decision separate from the acquisition.

Their ire was shared by investors as shares plunged 7.38% to ₹ 1,051.60 each on Monday, having fallen as much as 9.6% during the day. The benchmark equity index, the Bombay Stock Exchange Sensex, was down 0.47%, while the BSE IT index fell 1.31%.

At issue is ₹ 126 million (₹ 938.7 crore) that the firm received in the third quarter from its largest client BT Group Plc for restructuring a long-term contract that both had entered into in December 2006.

Analysts said the amount should "ideally" have been accounted for in a single quarter as a one-time event. Tech Mahindra's management maintains that the company is well within permitted accounting practices to recognize the revenue in parts, spread evenly across every quarter across the remaining four years of the contract.

Indian information technology companies have traditionally enjoyed flexibility in recognizing revenue over the several quarters and years that contracts run.

The rules on how the money should be accounted for are clear, said Kann Doshi, managing partner at Kann Doshi Associates, a Mumbai-based corporate audit services firm.

"What is critical is whether the payment is a compensation for restructuring the contract or an advance payment for future services to be delivered," Doshi said. "If it is compensation, then it has to be accounted for in the current fiscal and if it is advance payment, then accounting rules permit amortising the amount over a period of time."

Tech Mahindra has recognized ₹ 150 crore of the payment—unveiled on Saturday along with earnings for the three months ended December—in the first three quarters of the current fiscal year. The rest will be accounted for at ₹ 50 crore each in the coming quarters until the contract ends in 2014.

Analysts said this will inflate revenue and profit margins in a way that is not an accurate representation of performance.

Tech Mahindra rejected the contention in an emailed response to questions.

"Certain long-term contracts have been restructured and the restructuring fee we have received is for modifying these contracts," the company said. "Services will continue to be provided over the life of the contract and our auditors, after reviewing the transaction, I have advised us that as per accounting standards the appropriate treatment is to amortize the fee over the life of the contract."

Source: *Mint*, New Delhi, January, 26, 2010.

It may be mentioned that each of the above critical events is a productive activity, that adds value in some measure to the goods or merchandise purchased. On these grounds, a portion of the ultimate sale price ought to be recognised as revenue as each activity is performed. The difficulty is that the ultimate sale price is the joint product of all activities, and it is impossible to say with certainty how much is attributable to any one of them. For this reason, in accounting, revenue is recognised at a single point

in this earning process or operating cycle. The main reasons for choosing a single point or event or activity and not measuring the separate profit contribution of each activity is to have greater objectivity in revenue and income measurement. Obviously, profit cannot be objectively measured at each step of the operating cycle.

Revenues, in most cases, are the joint result of many profit-directed activities (events) of an enterprise and revenue is often described as being earned gradually and continuously by the whole of enterprise activities. Earnings in this sense is a technical term that refers to the activities that gave rise to the revenue—purchasing, manufacturing, selling, rendering service, delivering goods, the occurrence of an event specified in a contract and so forth. All of the profit-directed activities of an enterprise that comprise the process by which revenue is earned is, therefore, rightly called the earning process.

Figure 5.1 illustrates the above activities, constituting the operating cycle or earning process of a typical manufacturing concern.

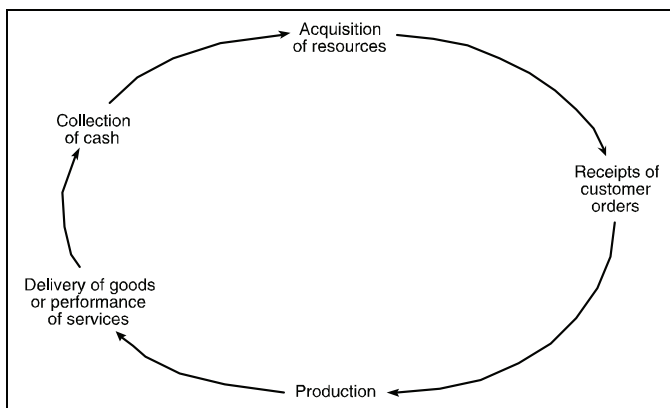


Fig. 5.1: Operating Cycle or Earning Process of a Manufacturing Concern

REVENUE RECOGNITION CRITERIA

In **accrual-basis accounting**, a firm recognises revenues and expenses in the period in which they occur, rather than in the period in which the cash flows related to the revenues and expenses are realized. In contrast, **cash-basis accounting** recognises revenues and expenses in the period in which the firm realizes the cash flow. For example, under the accrual basis, a firm that sells goods to customers on credit recognizes the sales revenue at the point of physical transfer of the goods. Under the cash basis, however, the firm waits to recognize the sale until it collects the cash. As the diagram in Fig. 5.2 illustrates, this difference in timing of revenue recognition can have a significant impact on the period in which the revenues are reported if the date of delivery of the goods falls in a different accounting period than the collection of cash. Because the cash might be collected in an accounting period later than the period in which the goods were delivered, it is clear that the choice of when to recognize revenue may have a significant impact on the statement of profit and loss.

Firms use accrual-basis accounting because it provides information about future cash flows that is not available under the cash method. In our sales example, investors want to know the firm's sales, even if the cash has not been collected, in order to better predict the future cash flows upon which the value of the firm depends. Similarly, a company's expected future payments are also relevant information. However, accrual accounting, while more informative than the cash basis, also involves considerable judgment. As a result, accounting standard setters developed criteria to assure that firms use similar assumptions in their judgments. In that way, the resulting revenue and expense numbers will be as consistent as possible with the qualitative characteristics of accounting information such as neutrality, reliability, and verifiability.

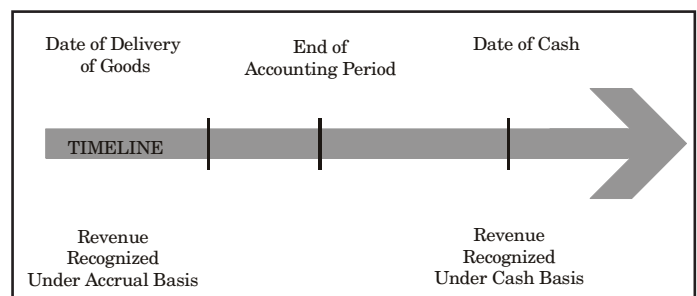


Fig. 5.2 : Revenue Recognition Timing

Revenue recognition refers to the point in time at which revenue should be reported on the statement of earnings, a crucial element of accrual accounting. Typically, firms implement accrual accounting by first determining the revenues to be recognized and then matching the costs incurred in generating that revenue to determine expenses. It follows that the timing of revenue and expense recognition determines the earnings that are reported. Given that the information conveyed by earnings is a factor in estimating the value of the firm, revenue recognition is particularly important to analysts, investors, managers, and others with an interest in those estimates.

It is generally accepted that revenue is earned throughout all stages of the operating cycle. However, accountants always debate and have problems as to when during the operating cycle can revenue be recorded as earned. For this, some criteria have been developed which are called 'Revenue Recognition Criteria.' Recognition criteria are based on the desire for both relevant and reliable accounting information. AS-9 'Revenue Recognition' contains the following criteria for revenue recognition.

(1) Revenue Recognised at the Point of Sale: With limited exceptions, revenue is recognised at the point of sale. Generally Accepted Accounting Principles, require the recognition of revenue in the accounting period in which the sale occurs. Throughout the operating cycle, the business enterprise works forward the eventual sale of the goods and collection of the sales price. The enterprise's earning process should be substantially complete before revenue is recorded. Also, the revenue should be realised before it is recorded in the accounts. Realised means the goods or services are exchanged for cash or claims to cash. It

is at the point of sale, then that the two important conditions for revenue recognition are met—at that time the revenue is both earned and realised.

Revenue for goods is not recognised when a firm receives sales order. Even though in some businesses the amount of income that will be earned can be reliably estimated at that time, there is no performance until the goods have been sold. A key point for determining when to recognise revenues from a transaction involving the sale of goods is that the seller has transferred the property in the goods to the buyer for a price. The transfer of property in goods, in most cases, results in or coincides with the transfer of significant risk and rewards of ownership to the buyer. However, there may be situations where transfer of property in goods does not coincide with the transfer of significant risk and rewards of ownership. Revenue in such situation is recognised at the time of transfer of significant risk and rewards of ownership to the buyer. Such cases may arise where delivery has been delayed through the fault of either the buyer or the seller and the goods are at the risk of the party at fault as regards any loss which might not have occurred but for such fault. Further, sometimes, the parties may agree that the risk will pass at a time different from the time when ownership passes.

(2) Revenue Recognition in Sale of Services: In transaction involving sale or rendering of services, revenues are usually recognised as the services are performed. For services, providing the service is the act of performance. For example, a real estate broker should record sale commission or brokerages as revenues when the real estate transaction is consummated. Revenues from renting hotel rooms are recognised each day the room is rented. Revenues from maintenance contracts are recognised in each month covered by the contract. Revenues from repairing an automobile will be recognised when the repairs have been fully completed. In the repair of automobile, revenues are not recognised in case of partial repairs, because the service is to provide a completed repair job.

(3) Revenue Recognition in Construction Work: Some transactions may involve long-term constructions and projects that may extend over several years. Examples are construction of roads, dams, large office buildings, bridges, ships, aircrafts, etc. In all such projects, the customer usually provides the product or project specifications. The long term construction contract has provisions for predetermined amounts the customer must pay at different points and stages of work or suggest a formula that will determine customer payments within the actual project costs plus a reasonable profit.

In construction projects, revenues are recognised by the (i) Percentage-completion method or (ii) Completed Contract method.

(i) Percentage-Completion Method: The percentage-completion method simply allocates the estimated total gross profit on contract among the several accounting periods involved in proportion to the estimated percentage of the contract completed in each period. To use this method, we must have a reasonably

accurate and reliable procedure for estimating periodic progress on the contract. Most often, estimates of the percentage of contract completion are tied to the proportion of total costs incurred. If the income earned by the work done in the period can be reliably estimated, then revenue is appropriately recognised in each such period. This method of revenue recognition is called the percentage-completion method because the amount of revenue is related to the percentage of the total project work that was performed in the period.

The percentage-completion method has four basic characteristics:

- (a) Costs are accumulated separately for each distinct work project, contract or job order; each of these may be referred to as a job.
- (b) The ratio of the amount of work done on each job to the total amount of work required by that job is estimated at the end of each period.
- (c) Revenue from each job is recognised in proportion to progress on the job, as measured by the ratio of the work done to total work required.
- (d) Job costs are recognised as expenses as revenues are recognised.

The percentage-completion method is most often used when the production cycle is long, the work is done under contracts with specific clients or customers, and adequate data on progress are available. The contracts provide a basis on which to estimate the amount of cash to be collected after all production work has been completed; if the progress percentage data are valid, they provide assurance that the work done to date is readily measurable, the revenue recognition criteria are satisfied at the time of production as long as reliable progress percentage data are available.

The percentage-completion method recognises net revenue (profit) prior to realisation. It is sanctioned in order to permit the reporting of profit on a yearly basis by those entities involved in longterm construction projects. It is significant to note that the matching process normally entails first identifying revenues of a given period and then matching certain costs against them to obtain net income or profit. That is, revenues are identified as the independent variable and costs, the dependent. But the percentage-completion method reverses the procedure by identifying the costs incurred in a given period as the independent variable and then matching future revenue to them.

Income Effects of Percentage-Completion Method

Percentage-completion method has two effects. First, it leads to earlier recognition of revenue. Investors and external users may be informed more promptly of changes in volume of business activity or in the profit rate. Second, this method is likely to report smoother income stream in longcycle operations. Income smoothing is said to occur when a business enterprise selects from

among acceptable alternative accounting methods to achieve income results that are relatively stable (*i.e.*, smooth) over time.

(ii) Completed Contract Method: Performance consists of the execution of a single act. Alternatively services are performed in more than a single act, and the services yet to be performed are so significant in relation to the transaction taken as a whole that performance cannot be deemed to have been completed until the execution of those acts. The completed contract method is relevant to those patterns of performance and accordingly revenue is recognised when the sole or final act takes place and the service becomes chargeable. As an alternative to percentage completion method, the completed contract method may be used to account for longterm construction projects. This method recognises revenues upon final approval of the project by the customer, *i.e.*, in effect at delivery.

The completed contract method would be suitable for an entity engaged in many long term projects some of which are completed each year. It should also be used in reference to the percentage completion method in cases in which reasonable estimates of future costs cannot be done.

Under the completed contract method cost incurred on a project are treated as assets and held in an asset account (Work in Progress Account) till the period in which revenue is recognised.

An example is taken here to illustrate the percentage-completion method and completed contract method. Assume the following data about a contract to be completed within three years.

In the above example, 20 per cent, 50 per cent and 30 per cent of the project work was completed in the years 2006, 2007 and 2008 respectively. Revenues for different years under the percentage-completion method has been calculated taking into account total contract price or project revenue and percentage of work performed each year, shown as follows:

Revenue: Total contract price $\times$ percentage of work completed.

2006: $4,50,000 \times 20\% = ₹ 90,000$

2007: $4,50,000 \times 50\% = ₹ 2,25,000$

2008: $4,50,000 \times 30\% = ₹ 1,35,000$

It can be noticed that both the methods report the same total income over the entire threeyear period. But, in percentage-

completion method, the total income ₹ 4,50,000 is allocated to each of the three years—2006, ₹ 90,000; 2007, ₹ 2,25,000; 2008, ₹ 1,35,000. Also the total payments received from the customer each year do not become revenue and are not relevant as well in determining the amount of revenue recognised each year under the two methods.

(4) Revenue Recognition in Installment Credit Sales: Many business and merchandising firms sell goods on installment basis wherein the customer pays a certain amount as instalment on the dates of installment. In installment sales revenue is not recognised at the point of sale. The reason is that the amount of income cannot reliably measured at the point of sale if customers do not pay the future installments. Therefore, in this case, revenue is recognised when the installment payments are received.

Under the installment method, the installment payment received is considered as revenue and a proportionate part of the cost of sales becomes costs in the same period. The cost of the product is allocated by the ratio, cash collected during the period provided by total sales price (total cash expected).

A more conservative view is sometimes taken for recognising revenue in the instalment method, which is known as the cost recovery method. In the cost recovery method, all cash collections until all costs are recovered are mere return of costs of product. Therefore, no income is reported until the installment payments have recovered the total costs of sales; thereafter any additional cash received is income. The installment method is more popular than the cost recovery method.

The installment method indicates a conservative picture on revenue recognition; because the sale of the product does not constitute sufficient evidence that revenue has been earned. Only the actual receipt of cash from the customer will provide the evidence required for revenue recognition. Thus, in the installment method, revenue realisation precedes revenue (profit) recognition. That is, first, installment money is to be received before it is to be recognised as revenue.

(5) Revenue Recognition Using Production Method: In some cases, the amount of income that can be earned can be reliably measured as soon as the production is over. When both the value and the assurance of sale can be estimated at the time of production, such as in certain agricultural and mining operations,

Year	Project cost incurred ₹	Payments Received from customer ₹	Works Completed % ₹	Percentage completion method			Complete contract method		
				Revenues ₹	Expenses ₹	Income ₹	Revenues ₹	Expenses ₹	Income ₹
2006	80,000	60,000	20	90,000	80,000	10,000	—	—	—
2007	2,00,000	2,05,000	70	2,25,000	2,00,000	25,000	—	—	—
2008	1,20,000	1,85,000	100	1,35,000	1,20,000	15,000	4,50,000	4,00,000	50,000
	4,00,000	4,50,000	—	4,50,000	4,00,000	50,000	4,50,000	4,00,000	50,000

a firm recognizes revenue at that point. Often, the company has a supply contract with a buyer that establishes the price of commodity to be delivered and a time schedule for its delivery. For instance, in case of certain grains and other crops, the government announces the price at which the farmers can sell their products. In such cases, although no sales has taken place, revenue can be reliably estimated at the point when the crops have been harvested. Therefore, revenue can also be recognised at the time of harvest. The ICAI (India) in its Accounting Standard No. 9, states:

“At certain stages in specific industries, such as when agricultural crops have been harvested or mineral ores have been extracted, performance may be substantially complete prior to the execution of the transaction generating revenue. In such cases, when sale is assured under forward contract or a government guarantee or where market exists and there is a negligible risk of failure to sell, the goods involved are often valued at net realisable value. Such amounts while not revenue, are sometimes recognised in the statement of profit and loss and appropriately described.⁵”

(6) Revenue Recognition when a firm receives interest, royalties and dividends: A firm may allow others to use its resources and thereby can receive:

- (i) Interest
- (ii) Royalties and
- (iii) Dividends.
 - (a) Interest are charges for the use of cash resources or amounts due to the enterprises;
 - (b) Royalties are charges for the use of such assets as know-how, patents, trademarks and copyrights;
 - (c) Dividends are rewards from the holding of investments in shares.

Interest accrues, in most circumstances, on the time basis determined by the amount outstanding and the rate applicable. Usually, discount or premium on debt securities held is treated as though it were accruing over the period to maturity. Royalties accrue in accordance with the terms of the relevant agreement and are usually recognised on that basis unless, having regard to the substance of the transactions, it is more appropriate to recognise revenue on some other systematic and rational basis.

Dividends from investments in shares are not recognised in the statement of profit and loss until a right to receive payment is established.

When interest, royalties and dividends from foreign countries require exchange permission and uncertainty in remittance is anticipated, revenue recognition may need to be postponed.

(7) Money Received or Amounts paid in Advance: Sometimes money is received or amounts are billed in advance of the delivery of goods or rendering of services, *i.e.*, before revenue is to be recognised, *e.g.*, rents or amount of magazine subscriptions received in advance. Such items are rightly not

treated as revenue of the period in which they are received but as revenue of the future period or periods in which they are earned. These amounts are carried as ‘unearned revenue’, *i.e.*, liabilities, until the earning process is complete. In the future periods when these amounts are recognised as revenues, it results in recording a decrease in a liability rather than an increase in an asset.

AMOUNT (MEASUREMENT) OF REVENUE RECOGNISED

Revenue is measured in terms of the value of the products or services exchanged and is the amount that customers are reasonably certain to pay. In order to determine the amount likely to be paid by customers and to be recognised as revenue, some adjustments shall be made in the gross sales value of the goods and services sold. These adjustments are as follows:

(1) Discounts: Discounts may be generally of two types—trade discount and cash discount. Trade discounts are used in determining the invoice prices, *i.e.*, actual selling price from published catalogs or list price, say list price less 30 per cent. Trade discounts and list prices do not appear in the accounting records of either the purchaser or seller and are disregarded. The amount of trade discount is deducted from the sales figure directly, without showing it as a separate item on the profit and loss account. Thus, the sales revenue will be recorded at not more than the sale value of actual transaction. Trade discounts enable a supplier to vary prices for small and large purchasers and by changing the discount schedules, to alter price periodically without the inconvenience and expense of revising catalogs and price lists.

Cash discounts, also known as sales discounts, are the amounts offered to the customers for making prompt payments. To encourage early payment of bills, many firms designate a discount period that is shorter than the credit period. Purchasers who remit payment during this period are entitled to deduct a cash discount from the total payment. The cash discount can be recorded in any of the two ways:

(i) If customers are making payment at the time of sales, cash discount can be deducted from gross sales and thus sales revenue will be recorded at the net amount of sales.

(ii) If customers are not making payments at the time of sales, but subsequently during the discount period, cash discount can be recorded as an expense of the period and sales revenue, then, will be recorded at the amount of gross sales without deducting the amount of cash discount

(2) Sales Returns and Allowances: Sometimes, the purchasers return a part of goods purchased to the seller if they are dissatisfied with the goods. In these cases, the amount of cash finally to be received can be expected to be less than the stated selling prices. The amounts of sales returns and allowances are therefore deducted from the gross sales and the remaining amount is recognised as the revenue. The amount of sales returns and allowances are shown separately in the profit and loss account and deducted from the gross sales amount.

It should be noted that sales returns and allowances deducted from the gross sales of a period may not relate totally to the actual sales of that period. This practice is a deviation from the matching concept but is followed because the amounts of sales returns are difficult to estimate in advance, even at the time of preparing profit and loss account.

(3) Bad Debts: Some customers usually do not make payments and the firm incurs a bad debt expense. Bad debt expense is classified as a selling expense on the profit and loss account, although some business enterprises include it with administrative expenses.

There are two methods to deal with bad debt expense in accounting:

- (i) Direct write-off method.
- (ii) Allowance method.

Under the Direct write-off method, bad debts are shown as expenses in the period when they are discovered. In this method, bad debts losses shown in the income statement of a period may not match with related sales of that period. The result is that sales and corresponding bad debts may appear in the income statements of different periods. Also, in some years, larger amount of bad debts will flow into the income statement as compared to lower amount in other years which may bring wide fluctuations and inconsistencies in reported net income figures of the different years. Since generally accepted accounting principles suggest that receivables and debtors be shown at the amount the firm expects to collect, most firms disapprove of the direct write off method.

The Allowance method is based on the matching concept. In this method, the amount of bad debt expense is estimated in advance that will result from a period's sales in order to show the bad debt expense in the same period. This procedure not only matches bad debt losses with related sales revenue but also results in an estimated realisable amount for debtors and accounts receivables in the balance sheet at the end of the period.

The amount of revenue to be recognised for a period should be adjusted for estimated bad debts expenses. This adjustment of revenue is done in the period when revenue is recognised and not in a later period when some customer's accounts are found to have bad debts to be uncollectible. If the adjustments of bad debts are postponed to future periods, reported income of subsequent periods would be affected by earlier decisions to extend credit to customers or to record bad debts when they occur. Thus, the performance of a business enterprise for the period of sale and the period when a customer's account is judged uncollectible would be measured inaccurately.

(4) Revenue Measurement in Non-Cash Transactions: If a sale involves a non-cash transaction or non-cash assets, such as the trade-in of an old car for a new car, the amount of revenue to be recorded will be the cash equivalent of the goods received or given up, whichever is more clearly determinable.

REVENUE RECOGNITION AND REALISATION PRINCIPLE

From the above discussion, it can be concluded that realisation principle primarily determines the question of revenue recognition. Revenue recognised under the realisation principle is recorded at the amount received or expected to be received. The realisation principle requires that revenue be earned before it is recorded. This requirement usually causes no problems because the earning process is usually complete or nearly complete by the time of the required exchange. McFerland⁶ defends realisation principle in recognition of revenue:

“There are strong reasons why revenues reported in the summary income statement should be realised revenues... the concept of realised revenue is consistent with the uses made of the income statement by management and by investors. Since adherence to the realisation concept brings revenues into close conformity with the current inflow of disposable funds from sales, reported profits constitute a reliable measure of a company's ability to pay dividends, to retire debt, or to increase shareholders equity and future profits by reinvesting earnings. The realisation concept also helps to avoid the possible disastrous consequences which may follow if financial obligations are undertaken in reliance on reported revenues which fail to materialise as disposable funds.”

Realisation, however, cannot take place by the holding of assets or as a result of the production process alone. It is true that increases and decreases in asset values take place prior to sale. However, these are only contingent values since their ultimate validation depends on completion of the entire production and marketing cycle. Unrealised increases in asset values do not produce any disposable funds for reinvestment in the business or for paying debts and dividends. Consequently, the accountant regards historical cost inputs as invested capital and ordinarily does not recognise changing values until realisation has occurred. Moreover, the amounts of these unrealised increases can be supported only by circumstantial evidence drawn from transactions to which the company owning the assets is not a party. A wide area for subjective judgements exists in selecting pertinent transactions and the reliability of the measurements of unrealised revenues is likely to be too low to merit the confidence placed in external financial statements.

According to some writers, revenue realisation and revenue recognition, although sometimes recorded concurrently, are distinct accounting phenomena and distinct occurrences. Revenue realisation occurs at the time of giving of goods or services by the entity in an exchange. Revenue recognition is the identifying of revenue to be admitted to a given year's income statement. Most often, revenue realisation and recognition occur contemporaneously and are recorded concurrently, *i.e.*, in the same entry. However, in some specialised cases, it is possible for revenue recognition to precede or to follow revenue realisation. Hendriksen feels that much confusion prevails because of the realisation concept which seems to predate the critical events

giving rise to income. Hendriksen⁷, therefore, advises to abandon the term (realisation):

“In its (realisation) place, emphasis should be placed on the reporting of valuation changes of all types, although the nature of the change and reliability of the measurement should also be disclosed. Furthermore, accountants may be able to provide more relevant information to users of external reports if less emphasis is placed on the relationship revenue to net income and more emphasis on the informational content of the several measurements of revenue. For example, it is likely that several attributes of revenue—such as sales price of goods produced, goods and services sold, and the final amount of cash received for goods and services rendered—may be relevant to external users. Acceptance of one attribute should not necessarily exclude disclosure of other attributes.”

The American Accounting Associations’s Committee on Concept and Standards has concluded that income should be reported as soon as the level of uncertainty has been reduced to a tolerable level. The Committee⁸ observes:

“Realisation is not a determinant in the concept of income; it only serves as a guide in deciding when events otherwise resolved as being within the concept of income, can be entered in the accounting records in objective terms; that is when the uncertainty has been reduced to an acceptable level.”

Effects of Uncertainties on Revenue Recognition

Revenue recognition inevitably falls short of its objective because of uncertainty and its effects on business and economic activities and their depiction and measurement. Uncertainty often clouds whether a particular event has occurred or what an event’s effects on assets or liabilities or both may have been. Uncertainty refers to a quality or state in which something is not surely or certainly known and thus is, at least to some extent, questionable, problematical, or doubtful. In case of uncertainties, the following guidelines may be helpful in revenue recognition⁹:

(i) Recognition of revenue requires that revenue is measurable and that at the time of sale or the rendering of the service it would not be unreasonable to expect ultimate collection.

(ii) Where the ability to assess the ultimate collection with reasonable certainty is lacking at the time of raising any claim, *e.g.*, for escalation of price, export incentives, interest etc., revenue recognition is postponed. In such cases, it may be appropriate to recognise revenue only as cash is received. Where there is no uncertainty as to ultimate collection, revenue is recognised at the time of sale or rendering of service even though cash payments are made by instalments.

(iii) When the uncertainty relating to collectability arises subsequent to the time of sale or the rendering of the service, it is more appropriate to make a separate provision to reflect the uncertainty rather than to adjust the amount of revenue originally recorded.

(iv) An essential criterion for the recognition of revenue is that the consideration receivable for the sale of goods, the rendering of services or from the use by others of enterprise resources is reasonably determinable. When such consideration is not determinable within reasonable limits, the recognition of revenue is postponed.

EXPENSES

Expenses are the monetary amount of resources used up or expended by an entity during a period of time to earn revenues. Expenses are essentially cost incurred in the process of earning revenues through the using or consuming of goods and services. They are sacrifices involved in carrying out the earning process of a business enterprise during a period. They involve using (sacrificing) goods or services, not acquiring item although acquisitions and use of many goods or services may occur simultaneously or during the same period.

Expenses represent actual or expected cash outflows (or the equivalent) that have occurred or will eventuate as a result of the enterprise’s ongoing major or central operations during the period. The expenses may be incurred in one period and payment made in another period. An expense may also represent the cost of using plant or buildings that were purchased earlier for use in operating the business rather than for sale. As such items are used in operating the business, a portion of their cost becomes expenses, which are known as depreciation expenses. Thus, expenses are measured by the costs of assets consumed or services used during accounting period. Depreciation on plant and equipment, salaries, rent, office expenses, costs of heat, light, power and other utilities, etc are examples of expenses incurred in producing revenue.

The effects of expenses are gross decrease in assets or gross increase in liabilities relating to producing the revenues. Cash expenditures made to acquire assets do not represent expenses and do not affect owners’ equity. Cash expenditures made to pay liabilities, such as payment of creditors and bank loan, also do not represent expenses and do not affect owners’ equity, *i.e.*, capital. Similarly owners’ withdrawals, although they reduce owners’ equity, do not represent expenses. Expenses are directly related to the earning of revenue. They are determined by measuring the amount of assets or services consumed or expired during an accounting period.

Expenses and Unexpired Costs

Expenses are incurred costs associated with the revenue of the period, often directly but frequently indirectly through association with the period to which the revenue has been assigned. Costs to be associated with future revenue or otherwise to be associated with the future accounting periods are deferred to future periods as unexpired costs (assets). Costs associated with past revenue or otherwise associated with prior periods are adjustment of the expense of those prior periods. The expenses of a period are:

- (a) Costs directly associated with the revenue of the period;
- (b) Costs associated with the period on some basis other than a direct relationship with revenue; and
- (c) Costs that cannot, as a practical matter, be associated with any other period.

Categories of Expenses

Important classes of expense are:

- (i) Cost of assets used to produce revenue (for example, cost of goods sold, selling and administrative expenses, and interest expenses).
- (ii) Expenses from nonreciprocal transfers and casualties (for example, taxes, fires and theft).
- (iii) Cost of assets other than products (for example, plant and equipment or investments in other companies) disposed of.
- (iv) Costs incurred in unsuccessful efforts.

Expenses do not include repayments of borrowing, expenditures to acquire assets, distributions to owners, or adjustments of expenses of prior periods. Sales discounts and bad debts have been treated conventionally as expenses. Sales returns and allowances are normally treated as revenue offsets. However, sales discounts do not represent the use of goods or services. If discount is given, the net price represents the price of goods; the discount is a reduction of the revenue and not a cost of borrowing funds. Similarly, bad debt losses do not represent expirations of goods or services, but it simply reduces the amount to be received in exchange for the product.

It should be noted that no priorities need to be given to expenses. The cost of goods sold is an expense just as much as salesmen's salaries; all expenses are equal in the income determination. Expenses are not recovered in preferential order. There can be no useful income measurement until all expenses have been subtracted from the revenues.

Expense Recognition

In accounting, an expense is incurred when goods or services are consumed or used in the process of obtaining revenue. Recognition of expense may be done at the time of recording activity in accounts or after the activity or before the activity in some situations. The following three principles are important in recognition of expenses that are deducted from revenue to determine the net income or loss of a period.

(1) Matching Process: Income of an enterprise is assumed to represent the excess of revenue reported during a period over the expenses associated and reported during the same period. Matching is the process of reporting expenses on the basis of a cause-and-effect relationship with reported revenues. The matching concept requires that firms recognize both the revenue and costs required to produce the revenue (expenses) at the same time. Some costs are recognised as expenses on the basis of a presumed direct

association with specific revenue. Perhaps the best example of direct matching is when a retail or wholesale company recognizes revenue at the time of delivery. Here, a related expense, cost of goods sold, which represents the cost of inventory that the company had on its balance sheet as an asset prior to the sale, must also be recognized. Recognition of expense through matching process requires (i) association with revenue and (ii) reporting in the same period as the related revenue is reported. Examples of expenses that are recognised by matching process are costs of products sold or services provided and sales commission.

However, there may be situations where expenses may be incurred without generating revenues. For example, advertisement expenses may be incurred although no sales may result. This is the reason that in case no relationship is possible between revenue and expenses incurred, such expenses are classified as indirect or period expenses.

(2) Systematic and Rational Allocation: In the absence of a direct matching between revenue and expenses, some costs are associated with specific accounting period as expenses on the basis of an attempt to allocate costs in a systematic and rational manner among the periods in which benefits are provided. The cost of an asset that provides benefits for only one period is recognised as expenses of that period. This may be also termed as systematic and rational allocation. If an asset provides benefits for several periods, its cost is allocated to the periods in a systematic and rational manner in the absence of a more direct basis for associating cause and effect. The allocation method used should appear reasonable and should be followed systematically.

(3) Immediate Recognition: Some costs are associated with the current accounting period as expenses because (a) costs incurred during the period provide no discernible future benefits; (b) costs recorded as assets in prior periods no longer provide discernible benefits or (c) allocating costs either on the basis of association with revenue or among several accounting period is considered to serve no useful purpose. Application of this principle of expense recognition results in charging many costs to expenses in the period in which they are paid or liabilities to pay them accrue. Examples include officers salaries, most selling costs, amounts paid to settle law suits, and costs of resources used in unsuccessful efforts. The principle of immediate recognition also requires that items carried as assets in prior periods that are discovered to have no discernible future benefit be charged to expenses, for example, a patent that is determined to be worthless.

To apply principles for expenses recognition, costs are analysed to see whether they can be associated with revenue on the basis of matching principles, or systematic and rational allocation or immediate recognition. Practical measurement difficulties and consistency of treatment over time are important factors in determining the appropriate expenses recognition principle.

The guidelines provided for expense recognition give less guidance to the accountant than those provided for revenue

recognition and, therefore, are less reliable. This position is summarised by Jaenicke as follows:

“Revenue recognition principles generally specify how much revenue should be recognised at the same time that they specify when revenue should be recognised, *e.g.*, recognition on the instalment basis defines the amount of revenue recognition each period, *i.e.*, the amount of cash received. Such is not the case with expenses. Principles can specify that the service potential of an asset should be allocated over its future benefit. But unless those principles also provide a means for determining how the asset releases its service potential, they provide little practical guidance.”¹⁰

GAINS AND LOSSES

Gains are defined as increase in net assets other than from revenues or from changes in capital. Gains are increases in equity (net assets) from peripheral or incidental transactions of an entity and from all other transactions and other events and circumstances affecting the entity during a period except those that result from revenues or investment by owners. Losses are decreases in equity (net assets) from peripheral or incidental transactions of an entity and from all other transactions and other events and circumstances affecting the entity during a period except those that result from expenses or distribution to owners¹¹. Gains and losses represent favourable and unfavourable events not directly related to the normal revenue producing activities of the enterprise. Revenue and expenses from other than sales of products, merchandise, or services such as disposition of assets may be separated from other revenue and expenses and the net effects disclosed as gains or losses. Other examples of gains and losses are sizeable write-down of inventories, receivables, and capitalised research gains and losses on sale of temporary investments and gains and losses on foreign currency devaluations.

Features of Gains and Losses

Gains and losses possess the following characteristics:

Gains and losses result from enterprises' peripheral or incidental transactions and from other events and circumstances stemming from the environment that may be largely beyond the control of individual entities and their management. Thus, gains and losses are not all alike. They are several kinds, even in a single entity, and they may be described or classified in a variety of ways that are not necessarily mutually exclusive.

Gains and losses may be described or classified according to sources. Some gains and losses are net results of comparing the proceeds and sacrifices (costs) in incidental transactions with other entities—for example, from sales of investments in marketable securities, from disposition of used equipment, or from settlement of liabilities at other than their carrying amounts. Other gains or losses result from nonreciprocal transfers between an enterprise and other entities that are not its owners—for example, from gifts or donation, from winning a lawsuit, from thefts, and from assessments of fines or damages by courts. Still other gains/losses

result from holding assets or liabilities while their value changes—for example, from price changes that cause inventory items to be written down from cost to market, from changes in market prices of investments in marketable equity securities accounted for at market values or at the lower of cost and market, and from changes in foreign exchange rates. And still other gains or losses result from other environmental factors, such as natural catastrophes (for example, damages to or destruction of property by earthquake or flood), technological changes (for example, obsolescence).

(3) Gains and losses may also be described as operating or nonoperating depending on their relation to an enterprise's earning process. For example, losses on writing down inventory from cost to market are usually considered to be operating losses, while losses from disposing of segment of enterprises are usually considered nonoperating losses.¹²

Other descriptions or classifications of gains and losses, are also possible. A primary purpose for describing or classifying gains and losses and for distinguishing them from revenues and expenses associated with normal revenue-producing activities is to make display of information about an enterprise's performance as useful as possible.

Recognition of Gains and Losses

The realisation principle is more strictly followed in recognition of gains and losses. Gains are not generally recognised until an exchange or sale has taken place. However, an increase in the market value of securities may under some circumstances, be sufficient evidence to recognise gain. However, some persons oppose recognising appreciation in values due to two reasons: (a) Increase in value is uncertain. (b) An increase in value does not generate liquid resources that can be used for payment of dividends. The emphasis on liquid resources and cash flows, although useful for decision making purposes, may not be relevant for income measurement purposes. Relative certainty and verifiability of measurements are satisfactory guides for income measurement purposes. For investments in marketable securities, the recognition of gains and losses arising from material changes in market prices is being accepted in accounting although no sale or exchange might have taken place. However, change in value of land is generally not recorded in accounting.

The criteria for recognition of losses are similar to the criteria for the recognition of period expenses. Losses cannot be matched with revenue, so they should be recorded in the period in which it becomes fairly definite that a given asset will provide less benefit to the firm than indicated by the recorded valuation. In the case of sale of an asset or loss by fire or other catastrophe, the timing of the event is fairly definite. If an asset has lost its usefulness, the loss should be recognised and the final disposition should not be waited for. Loss arising should not be carried forward to future periods. If it is fairly definite and if the amount of the loss can be measured reasonably well, it should be recorded as soon as it is ascertainable.

Recognising Unrealised Holding Gains and Losses

As stated earlier, gains are generally not recognised until sale or exchange has taken place. However, during recent years, a large number of writers have expressed the opinion that the usefulness of financial statements would be enhanced by recognising unrealised gains or losses which arise while assets are being held. These writers advocate reporting fixed assets and inventories of materials and unfinished products at current replacement costs and finished products ready for sale at realisable market prices rather than at historical acquisition costs.

Such proposals are concerned with changes in values of individual assets rather than with changes in the purchasing power of money which is reflected in the general price level. Replacement costs are measured by appraising individual assets (perhaps with the aid of price indexes for specific classes of assets), while the general price level is measured by a general price index for all commodities and services.

Revenues, Expenses, Gains and Losses—A Comparison

The following points of differences are found with regard to revenues, expenses, gains and losses.

(1) Revenues and gains are similar in several ways, but some differences are significant, especially in displaying information about an enterprise's performance. Revenues and expenses provide different kinds of information from gains and losses, or at least information with a different emphasis. Revenues and expenses result from an enterprise's ongoing major or central operations and activities that constitute an enterprise's process—that is, from activities such as producing or delivering goods, rendering services, lending, insuring, investing and financing. In contrast, gains and losses result from incidental or peripheral transactions of an enterprise with other entities and from other events and circumstances affecting it.

(2) Some gains and losses may be considered operating gains and losses and may be closely related to revenue and expenses. Revenue and expenses are commonly displayed as gross inflows or outflows of net assets, while gains and losses are usually displayed as net inflows or outflows.

(3) Distinctions between revenues and gains and between expenses and losses in a particular enterprise depend to a significant extent on the nature of the enterprise, its operations, and its other activities. Items that are revenues for one kind of enterprise are gains for another, and items that are expenses for one kind of enterprise are losses for another. For example, investments in securities that may be sources of revenues and

expenses for insurance or investment companies may be sources of gains and losses in manufacturing or merchandising firms. Sales of furniture result in revenues and expenses and for a furniture manufacturer, a furniture jobber, or a retail furniture store, which are selling products or inventories, but usually result in gains or losses for an automobile manufacturer, a bank, a pharmaceutical company or a theatre, which are selling part of their facilities.

Technological changes may be sources of gains or losses to most kinds of enterprises but may be characteristic of the operations of high technology or research-oriented enterprises. Events such as commodity price changes and foreign exchange rate changes that occur while assets are being used or produced or liabilities are owed may directly or indirectly affect the amount of revenues or expenses for most enterprises, but they are sources of revenues or expenses only for enterprises for which trading in foreign exchange or investing in securities is a major or central activity.

(4) Revenues and expenses are normally displayed "gross" while gains and losses are normally displayed 'net.' For example, sales by a furniture manufacturer to furniture jobbers usually result in displays in financial statements of both the inflow and outflow aspects of the transaction—that is both revenues and expenses are displayed. Revenues are a 'gross' amount reflecting actual or expected cash receipts from the sales. Expenses are also a 'Gross' amount reflecting actual or expected cash outlays to make or buy the assets sold. The expenses may then be deducted from the revenues to display a 'net' amount often called gross margin or gross profit on sale of product or output. If, however, a pharmaceutical company or a theatre sells furniture, it normally displays only the 'net' gain or loss. That is, it deducts the carrying amount of the furniture sold from the net proceeds of the sale before displaying the effects of the transaction and normally displays only the 'net' gain or loss from sale of capital assets.

(5) It is generally deemed useful or necessary to display both inflow and outflow aspects (revenues and expenses) of the transactions and activities that constitute an enterprise's ongoing major or central earning process. In contrast, it is generally considered adequate to display only the net results (gains or losses) of incidental or peripheral transactions or of the effects of other events or circumstances affecting an enterprise, although some details may be disclosed in financial statements, in notes, or outside the financial statements. Since a primary purpose of distinguishing gains and losses from revenues and expenses is to make displays of information about an enterprise's sources of comprehensive income as useful as possible, fine distinctions between revenues and gains and between expenses and losses are principally matters of meaningful reporting.

Problem 1

The Board of Directors decided on 31.3.2016 to increase the sale price of certain items retrospectively from 1st January, 2016. In view of this price revision with effect from 1st January, 2016, the company has to receive ₹ 15 lakhs from its customers in respect of sales made from 1st January, 2016 to 31st March, 2016. Accountant cannot make up his mind whether to include ₹ 15 lakhs in the sales for 2015-16. Advise.

Solution

Price revision was effected during the current accounting period 2015-16. As a result, the company stands to receive ₹ 15 lakhs from its customers in respect of sales made from 1st January, 2016 to 31st March, 2016. If the company is able to assess the ultimate collection with reasonable certainty, then additional revenue arising out of the said price revision may be recognised in 2015-16 as per AS 9.

Problem 2

You have been asked to advise a business-to-business manufacturing company how to detect fraudulent financial reporting. Management does not understand how early revenue recognition by backdating invoices from next year to this year would affect financial statements. Further, management wants to know which accounts could be audited for evidence of fraud in the case of early revenue recognition.

- Using your own numbers, make up an example to show management the effect of early revenue recognition.
- Prepare a short report to management explaining the accounts that early revenue recognition would affect. Suggest some ways management could find errors in those accounts.

Solution

- The example should be similar to the following:

(Amount in lakhs)

	Actual Year 1 (Actual)	Fraudulent Year 1 (Fraud)
Revenue	₹ 100	₹ 120
Cost of Goods Sold	50	60
Gross Profit	₹ 50	₹ 60
	Year 2 (Actual)	Year 2 (Assuming No Additional Fraud)
Revenue	₹ 100	₹ 80
Cost of Goods Sold	50	40
Gross Profit	₹ 50	₹ 40

- Accounts Receivable and Revenue would be overstated. Inventory would be understated because the goods that are still in physical inventory would be reported to be sold. Cost of Goods Sold would be overstated. To find the errors, try the following:

- Confirm accounts receivable with customers. If customers say they did not owe the money or purchase the goods as of the end of the year, then the company's records may be wrong.
- Count the inventory, physically. The physical count should reveal inventory that has been reported to be sold as of the end of the year.
- Analyze the accounts to see if Accounts Receivable are old, which may indicate customers do not owe the money. Determine whether year-end Accounts Receivable are growing faster than the company is growing.

Problem 3

The stages of production and sale of a product are as follows (all in Rupees):

Stage	Activity	Costs to date	Net Realisable Value
A	Raw Materials	10,000	8,000
B	WIP 1	12,000	13,000
C	WIP 2	15,000	19,000
D	Finished Product	17,000	30,000
E	Ready for Sale	17,000	30,000
F	Sale Agreed	17,000	30,000
G	Delivered	18,000	30,000

State and explain the stage at which you think revenue will be recognized and how much would be gross profit and net profit on a unit of this product?

Solution

According to AS 9, sales will be recognized only when following two conditions are satisfied:

- The sale value is fixed and determinable.
- Property of the goods is transferred to the customer.

Both those conditions are satisfied only at Stage F when sales are agreed upon at a price and goods allocated for delivery purpose.

Gross Profit will be determined at Stage E, when goods are ready for sale after all necessary process for production is over i.e. ₹ 13,000 (30,000 – 17,000).

Net Profit will be determined at Stage G, when goods are delivered and payment becomes due ₹ 12,000 (30,000 – 18,000).

REFERENCES

- American Institute of Certified Public Accountants, Accounting Terminology Bulletin No. 2, *Proceeds, Revenue Income, Profit and Earnings*, AICPA, 1955, p. 2.
- The Institute of Chartered Accountants of India, AS No. 9, *Revenue Recognition*, ICAI, 1986, para 4.
- Financial Accounting Standards Board, Concept Statement No. 6, *Elements of Financial Statements*, 1985, para 78.

4. Vernonkam, *Accounting Theory*, John Wiley and Sons, 1990, p. 238.
5. The Institute of Chartered Accountants of India, AS No. 9, *Ibid.*
6. Walter B. McFerland, *Concepts for Management Accounting*, NAA, 1966, p. 148.
7. Eldon S. Hendriksen, *Accounting Theory*, Irwin, 1984, p. 179.
8. American Accounting Association, Committee on Concepts and Standards—External Reporting, *The Accounting Review Supplement*, 1974, p. 209.
9. The Institute of Chartered Accountants of India, AS No. 9, *Ibid.*
10. H.R. Jaenicke, *Survey of Present Practices in Recognising Revenues, Expenses, Gains and Losses*, FASB, 1981.
11. Financial Accounting Standards Board, Concept No. 6, *Elements of Financial Statements*, 1985, para 82..
12. FASB, Concept No. 6, *Ibid.*, para 84–86.
- (b) What is the rationale underlying the appropriateness of treating costs as expenses instead of assigning the costs to an assets? Explain
- (c) In what general circumstances would it be appropriate to treat a cost as an asset instead of as an expense? Explain. (M.Com., Delhi, 1997)
8. Why is time of sale the most common point for revenue recognition?
9. What points are considered while measuring revenue?
10. Explain the difference between gross sales and net sales.
11. What is a trade discount? A cash discount? What is their significance in determining revenue?
12. Distinguish between a revenue and a cash receipt. Under what conditions will they be the same?
13. Distinguish between an expense and a cash expenditure. Under what conditions will they be the same?
14. “Cash flows may determine the amount of revenue and expenses but not the timing of their recognition.” Explain.
15. How do accountants justify using the point of sale for revenue recognition?
16. Explain the procedures and justification for using the following methods of revenue recognition: (a) Instalment method (b) Percentage completion method.
17. What is the difference between revenue and gain?
18. What is the earning process? How does the earning process relate to the operational view of revenue?
19. What is meant by substantial completion of the earning process? What is the significance of this criteria?
20. What is the significance of the title passing in determining whether a sale has taken place?
21. What are the reasons for permitting some firms to recognise revenue at the end of production?
22. When should revenue be recognised by the following business:
 - (a) A softdrinks company.
 - (b) An auditing firm.
 - (c) A magazine publisher.
 - (d) A gold mining company.
 - (f) A farmer who grows wheat.
 - (g) A contractor building a bridge.
23. How is the using up of goods or services related to expenses?
24. What is the difference between expense and loss?
25. Name three basic guidelines in recognition of expense.
26. What are some of the problems connected with the cause-and-effect rule?
27. What are some of the problems related to the immediate recognition rule?
28. “Revenue should be recognised when goods are produced instead of when the sale is made.” Do you agree with this statement? Give reasons. (M.Com., Delhi, 1994)
29. “A business enterprise recognises the earning of revenue for accounting purposes when the transaction is recorded. In some

QUESTIONS

1. What is revenue? What are the rules regarding revenue recognition? (M.Com., Delhi, 1997, 2011)
2. Discuss the activities associated with generation of revenue in a manufacturing concern.
3. What is the meaning of the term expense. How does expenses differ from unexpired costs?
4. How are expenses associated with revenue recognised in financial accounting?
5. Define the term ‘gains’ and ‘losses’. Discuss the principles for recognition of gains and losses in accounting.
6. “The term ‘revenue realisation’ is used in a technical sense by accountants to establish specific rules for the timing of revenue reporting under circumstances where no single solution is necessarily superior to others in the above context of revenue. The realisation concepts has, therefore, become a pragmatic test for the timing of revenue.”
In the light of above statement:
 - (a) Explain and justify why revenue is often recognised as earned at the time of sale.
 - (b) Explain in what situations it would be appropriate to recognise revenue as the productivity activity takes place.
 - (c) At what times, other than those included in (a) and (b) above, may it be appropriate to recognise revenue? Explain.
7. The amount of earnings reported for a business entity is dependent on the proper recognition, in general, of revenue and expenses for a given time period. In some situations, costs are recognised as expenses at time of product sale; in other situations, guidelines have developed for recognising costs as expenses or losses by other criteria.
Required:
 - (a) Explain the rationale for recognising costs as expenses at the time of product sale.

situations, revenue is recognised approximately as it is earned in the economic sense.”

Explain this statement. Also, discuss fully the guidelines in AS-9 issued by the Institute of Chartered Accountants of India.

(M.Com., Delhi, 1995)

30. Explain the guidelines and disclosure requirements as given in AS-9 Revenue Recognition.

31. Explain revenue recognition criteria as per AS 9.

(M.Com., Delhi, 2013)

MULTIPLE CHOICE QUESTIONS

Select the correct answer for the following multiple choice questions:

- Revenue is generally recognised when the earning process is virtually complete and an exchange has taken place. What principle is described herein?
 - Consistency
 - Matching
 - Realisation
 - Conservatism
- Rent revenue collected one month in advance should be accounted for as:
 - Revenue in the month collected
 - A current liability
 - A separate item in stock holders' equity
 - An accrued liability
- The term 'revenue recognition' conventionally refers to:
 - The process of identifying transaction to be recorded as revenue in an accounting period.
 - The process of measuring and relating revenues and expenses of an enterprise for an accounting period.
 - The earning process which gives rise to revenue realisation.
 - The process of identifying those transactions that result in an inflow of assets from customers.
- Under what conditions is it proper to recognise revenues prior to the sale of merchandise?
 - When the concept of internal consistency (of amounts of revenue) must be complied with.
 - When the revenue is to be reported as an instalment sale.
 - When the ultimate sale of the goods is at an assured sale price.
 - When management has a long established policy to do so.
- The percentage-of-completion method of accounting for long term construction type contracts is preferable when.
 - Estimates of costs to complete and extent of progress towards completion are reasonably dependable.
 - The collectibility of progress billings from the customer is reasonably assured.
 - A contractor is involved in numerous projects.
 - The contracts are of a relatively short duration.
- The principal disadvantage of using the percentage of completion method of recognising revenue from long-term contract is that it:
 - Is unacceptable for income tax purposes.
 - May require that interperiod tax allocation procedures be used.
 - Give results based upon estimates which may be subject to considerable uncertainty
 - Is likely to assign a small amount of revenue to a period during which much revenue was actually earned.
- How should the balance of progress billings and construction in progress be shown at reporting dates prior to the completion of a long term contract?
 - Progress billing as deferred income, construction in progress as a deferred expense.
 - Progress billing as income, construction in progress as inventory.
 - Net, as a current asset if debit balance and current liability if credit balance.
 - Net as income from construction if debit balance.
- Arid Lands Co. is engaged in extensive exploration for water in the desert. If upon discovery of water the company does not recognise any revenue from water sales until the sales exceeds the cost of exploration, the basis of revenue recognition being employed is the:
 - Production basis
 - Cash (or collection) basis
 - Sales (or accrual) basis
 - Sunk cost (or cost recovery) basis
- What is the underlying concept that supports the immediate recognition of a loss?
 - Matching
 - Consistency
 - Judgement
 - Conservatism
- Which of the following reflects the conditions under which a loss contingency should affect net earnings?
 - The loss is probable and the amount can be reasonably estimated.
 - The loss is possible and the amount can be reasonably estimated.
 - The loss is remote and the amount can be reasonably estimated.
 - A loss contingency should never affect net earnings but should only be disclosed in footnotes.
- Which of the following is the proper accounting treatment of a gain contingency?
 - An accrued amount.
 - Deferred earnings.
 - An account receivable with an additional disclosure explaining the nature of the transaction.
 - A disclosure only.

12. Revenue recognition
- takes place at the point of sale
 - takes place when goods are received
 - may take place only after a purchase order is signed
 - is an objectively, determinable point in time requiring little or no judgement.
13. The determination of the expenses for an accounting period is based largely on application of the principle.
- Cost
 - Consistency
 - Matching
 - Objectivity
14. The net increase in owner's equity resulting from business operations is called:
- net income
 - revenue
 - expense
 - asset
15. If revenue was ₹ 45,000, expenses were ₹ 37,500 and dividends paid were ₹ 10,000, the amount of net income or net loss was:
- ₹ 45,000 net income
 - ₹ 7,500 net income
 - ₹ 37,500 net loss
 - ₹ 2,500 net loss
16. Deciding whether to record a sale when the order for services is received or when the services are performed is an example of
- recognition problem
 - valuation problem
 - classification problem
 - communication problem
17. Recording an asset at its exchange price is an example of the accounting solution to the:
- recognition problem
 - valuation problem
 - classification problem
 - communication problem
18. The cost of goods sold and services used up in the process of obtaining revenue are called:
- net income
 - revenues
 - expenses
 - liabilities
19. A net income will always result if
- cost of goods sold exceeds operating expenses.
 - revenues exceed cost of goods sold.
 - revenues exceed operating expenses.
 - gross margin from sales exceeds operating expenses.
20. For financial statement purposes, the instalment method of accounting may be used if the
- collection period extends over more than twelve months.
 - instalments are due in different years.
 - ultimate amount collectible is indeterminate.
 - percentage of completion method is inappropriate.
- Ans. (c)**
21. According to the instalment method of accounting, gross profit on an instalment sale is recognized in income
- on the date of sale.
 - on the date the final cash collection is received.
 - in proportion to the cash collection.
 - after cash collections equal to the cost of sales have been received.
- Ans. (c)**
22. Income recognized using the instalment method of accounting generally equals cash collected multiplied by the
- net operating profit percentage.
 - net operating profit percentage adjusted for expected uncollectible accounts.
 - gross profit percentage.
 - gross profit percentage adjusted for expected uncollectible accounts.
- Ans. (c)**
23. It is proper to recognize revenue prior to the sale of merchandise when
- The revenue will be reported as an instalment sale.
 - The revenue will be reported under the cost recovery method.
- I only.
 - II only
 - both I and II
 - neither I nor II
- Ans. (d)**



Assets

DEFINITION

Financial accounting has basic elements like assets, liabilities, owners' equity, revenue, expenses and net income (or net loss) which are related to the economic resources, economic obligations, residual interest and changes in them. Similarly, balance sheet which displays financial position of a business enterprise, has basic elements like assets, liabilities, and owners' equity. Assets denote economic resources of an enterprise that are recognised and measured in conformity with generally accepted accounting principles. Assets also include certain deferred charges that are not resources but that are recognised and measured in conformity with generally accepted accounting principles.¹ Deferred charges are carried forward on a trial balance. Financial Accounting Standards Board of U.S.A. defines assets as "probable future and economic benefits obtained or controlled by a particular entity as a result of past transactions or events."² The Institute of Chartered Accountants of India defines assets as "tangible objects or intangible rights owned by an enterprise and carrying probable future benefits"³

CHARACTERISTICS OF ASSETS

Assets have the following main characteristics:

(1) Future Economic Benefits: 'Future economic benefit' or 'service potential' is the essence of an asset. This means that the asset has capacity to provide services or benefits to the enterprises that use them. In a business enterprise, that service potential or future economic benefit eventually results in net cash inflows to the enterprise. Money (cash, including deposits in banks) is valuable because of what it can buy. It can be exchanged for virtually any goods or services that are available or it can be saved and exchanged for them in the future. Money's command over resources—its purchasing power—is the basis of its value and future economic benefits.

Assets other than cash provide benefits to a business enterprise by being exchanged for cash or other goods or services, by being used to produce or otherwise increase the value of other assets, or by being used to settle liabilities. Services provided by other entities including personal services, cannot be stored and are received and used simultaneously. They can be assets of a business enterprise only momentarily—as the enterprise receives and uses them—although their use may create or add value to other assets of the enterprise. Rights to receive services of other entities for specified or determinable future periods can be assets of particular business enterprises.

(2) Control by a Particular Enterprise: To have an asset, a business enterprise must control future economic benefit to the extent that it can benefit from the asset and generally can deny or regulate access to that benefit by others, for example, by permitting access only at a price. Thus, an asset of a business enterprise is future economic benefit that the enterprise can control and thus, within limits set by the nature of the benefit or the enterprise's right to it, use as it desires. The enterprise having an asset is the one that can exchange it, use it to produce goods or services, use it to settle liabilities, or perhaps distribute it to owners. Ijiri placed considerable emphasis on control criteria in his definition of assets. That is, assets are resources under the control of the entity.⁴

Although the ability of an enterprise to obtain the future economic benefit of an asset and to deny or control access to it by others rests generally on foundation of legal rights, legal enforceability of a right is not an indispensable prerequisite for an enterprise to have an asset if the enterprise otherwise will probably obtain the future economic benefit involved. For example, exclusive access to future economic benefit may be maintained by keeping secret a formula or process.

Some future economic benefits cannot meet the test of control. For example, public highways and stations and equipment of municipal fire and police departments may qualify as assets of governmental units but they cannot qualify as assets of individual business enterprises. Similarly, general access to things such as clean air or water resulting from environmental laws or requirements cannot qualify as assets of individual business enterprises, even if the enterprises have incurred costs to help clean up the environment. These examples should be distinguished from similar future economic benefits that an individual enterprise can control and thus are its assets. For example, an enterprise can control benefits from a private road on its own property, clean air it provides in a laboratory or water it provides in a storage tank, or a private fire department or private security force, and the related equipment probably qualifies as an asset even if it has no other use to the enterprise and cannot be sold except as scrap.

(3) Occurrence of a Past Transaction or Event: Assets imply the future economic benefits of present assets only and not the future assets of an enterprise. Only present abilities to obtain future economic benefits are assets and these assets are the result of transactions or other events or circumstances affecting the enterprise. For example, the future economic benefits of a particular building can be an asset of a particular entity only after a transaction or other event—such as a purchase or a lease agreement—has occurred that gives it access to and control of those benefits. Similarly, although an on deposit may have existed in a certain place for millions of years, it can be an asset of a

particular enterprise only after the enterprise has discovered it in circumstances that permit the enterprise to exploit it or has acquired the rights to exploit it from whoever had them.

This characteristic of assets excludes from assets items that may in the future become an enterprise's assets but have not yet become its assets. An enterprise has no asset for a particular future economic benefit if the transactions or events that give it access to and control of the benefit are yet in the future. For example, an enterprise does not acquire an asset merely by budgeting the purchase of a machine, and does not lose an asset from fire until a fire destroys or damages some assets.

Once acquired, an asset continues as an asset of the enterprise until the enterprise collects it, transfers it to another entity, or uses it, or some other event or circumstance destroys the future benefit or removes the enterprise's ability to obtain it.

In addition to the above, assets commonly have other features that help identify them—for example, assets may be acquired at a cost and they may be tangible, exchangeable or legally enforceable. However, those features are not essential characteristics of assets. Their absence, by itself, is not sufficient to preclude an item's qualifying as an asset. That is, assets may be acquired without cost, they may be intangible, and although not exchangeable they may be usable by the enterprise in producing or distributing other goods or services.

(4) Transactions and Events That Change Assets: Assets of an entity are changed both by its transactions and activities and by events that happen to it. An entity obtains cash and other assets from other entities and transfers cash and other assets to other entities. It adds value to noncash assets through operations by using, combining, and transforming goods and services to make other desired goods or services. Some transactions or other events decrease one asset and increase another. An entity's assets or their values are also commonly increased or decreased by other events and circumstances that may be partly or entirely beyond the control of the entity and its management, for example, price changes, interest rate changes, technological changes, impositions of taxes and regulations, discovery, growth or accretion, shrinkage, vandalism, thefts, expropriations, wars, fires and natural disasters.

OBJECTIVES OF ASSET VALUATION

Financial accounting requires quantification of assets in terms of monetary units which is known as valuation. In other accounting such as managerial accounting, other measures, *e.g.*, physical units may be useful for the managerial purposes. The question of asset valuation, it is argued, should be decided in terms of user of the information, and the purpose for which the information is to be used. In financial accounting the following are the objectives of asset valuation:

(1) Income determination: In accounting, valuation is a prerequisite in the income measurement. In the capital maintenance concept, valuation of assets is needed to compute income from the increase in these valuations over time. In behavioural

accounting theory, valuations should help the decision makers in making proper predictions and decisions. Two basic approaches to valuation for income determination purposes are: (a) the emphasis may be placed on the valuation of the inputs as they expire. For example, the cost of goods sold may be valued on a current basis, by the use of LIFO or current replacement costs, while the ending inventories are left in terms of residuals. (b) the non-monetary assets may be restated at the balance sheet date or periodically during the year, permitting assumed matching as these assets expire.

(2) Determination of financial position: A basic purpose of financial accounting is to determine the financial position of a business enterprise, and balance sheet determines the financial position. Balance sheet uses valuations for meaningful preparation of statement of financial position. Investors are generally interested in predicting the future cashflows to shareholders in the form of dividends and other distributions, in order to make proper decisions about purchase and sale of shares. Income statements, cash flow statements and funds flow statements are relevant for this purpose, and a position statement should also provide relevant information for the making of these predictions. In order for a statement of financial position to provide information relevant to a prediction of future cash flows, it should include quantitative measurements of resources and commitments for comparisons with other periods or with other firms. Valuations of assets held by the firm can provide relevant information only if the investor can detect some relationship between such measurements and expected cash flows.⁵

(3) Managerial Decisions: Valuation figures are also useful to management in making operating decisions. However, the informational requirements of management are quite different from the informational requirements of the investors and creditors. Investors and creditors are interested primarily in predicting the future course of the business from an evaluation of the past and from other information; but management must continually make decisions that determine the future course of action. Therefore, management has greater need for information regarding valuations arising from different courses of action. For example, opportunity costs, marginal or differential costs, and present values from expected differential cash flows are relevant for many types of managerial decisions. But just because they are relevant to managerial decisions does not necessarily mean that they are also relevant to the decision of investors and creditors. Therefore these valuations do not need to be reported in the position statement; they can be made readily available to management in supplementary reports.

ASSET VALUATION AND INCOME DETERMINATION MODELS

As stated in Chapter 5, income may be recognised only after capital has been kept intact. Consequently, income measurement depends on the particular concept of capital maintenance chosen. The various concepts of capital maintenance imply different ways

of evaluating and measuring the elements of financial statements. Thus, both income determination and capital maintenance are defined in terms of the asset valuation base used. A given asset valuation base determines a particular concept of capital maintenance and a particular income concept. An asset valuations base is a method of measuring the elements of financial statements, based on the selection of both an attribute of the elements to be measured and the unit of measure to be used in measuring that attribute. According to Hendriksen, valuation in accounting is the process of assigning meaningful quantitative monetary amounts to assets.⁶

Generally, the following four valuation concepts are popularly used:

- (1) *Historical Cost*—It measures historical cost of units of money.
- (2) *Current entry price, (for example, replacement cost)*—It measures current entry price, i.e., replacement cost in units of money.
- (3) *Current exit price (for example, net realisable value)* — It measures net realisable value (that is, current exit price) in units of money.
- (4) *Present value of expected cash flows* — It measures present value in units of money.

Each of these valuation models yields a different financial statement, with different meaning and relevance to its users. The above valuation models can be classified in different ways. First, they may be classified with respect to whether they focus on the past, present or future. Hence, historical cost focuses on the past, replacement cost and net realisable value focuses on the present, and present value focuses to the future. Second, we may classify these measures with respect to the kind of transactions from which they are derived. Hence, historical cost and replacement cost concern the acquisition of assets or the incurrence of liabilities, while net realisable value and present value concern the disposition of assets or the redemption of liabilities. Thirdly, classification may be done with respect to the nature of event originating the measure.

Hence, historical cost is based on an actual event, present value on an expected event, and replacement cost and net realisable value on hypothetical event.

1. Historical Cost

Cost has been the most common valuation concept in the traditional accounting structure. Assets are generally recorded initially on the basis of the exchange prices at which the acquisition transactions take place. They are then presented in financial statements at this acquisition cost or some unamortized portion of it. Therefore, cost is the exchange price of goods and services at the time they are acquired. When the consideration given in the exchange consists of nonmonetary assets, the exchange price is determined by the current fair value of assets

given up in the exchange. Cost is thus the economic sacrifice expressed in monetary terms required to obtain a specific asset or a group of assets. Very often cost is not represented by a single exchange price, but it includes many sacrifices of economic resources necessary to obtain the asset in the form, location, and time in which it can be useful to the operations of the firm. Thus, all of these sacrifices should be included in the concept of cost valuation. But it should be recognized that the term cost is used in many senses and for various purposes. In many cases, it includes only a part of the total sacrifices and in other cases, it includes too much.

Arguments in Favour of Historical Cost

Historical cost valuation differs from other (e.g., replacement cost, net realisable value, and present value of future cash flows) valuation models in many respects. Historical cost accounting has the following advantages relative to other alternative methods of asset valuation.

Firstly, historical cost principle automatically requires the recording of all actual transactions in the past. The market value of finished goods can be ascertained without knowing how the goods were actually produced. But there is no way to determine the historical cost of the goods without a record of how the goods were actually produced and how the materials and labour that contributed to the production of the goods were actually obtained. Thus, implicit in financial statements under historical cost is a supporting record of all actual transactions in the past. There is no such assurance when financial statements are prepared—under a valuation method other than historical cost. A balance sheet, for example, can be prepared based only on a yearend inventory of all assets and liabilities.

Secondly, historical cost is essential for the proper functioning of accountability, the concept upon which our modern economic society is built. Without historical cost data, a manager will have a difficult time demonstrating that he has properly utilised the resources entrusted to him by the shareholders. The power of historical cost and double-entry bookkeeping has stimulated us to develop an interrelated network of accountability in describing a business enterprise's activities.⁷ In this respect, alternative valuation data may be used as a supplementary basis for accountability evaluation, but they hardly ever replace the accountability network based on actual transactions. For example, if a manager purchases merchandise for ₹ 1,00,000 when he could have purchased it for ₹ 90,000, the manager may be held accountable for the opportunity loss. The manager may, however, be able to demonstrate that without his special care and talent in bargaining, the firm would have bought the merchandise for ₹ 1,20,000. Many speculations and hypothesis may be offered concerning what the firm could have done but the evaluation of accountability must always depend on what has actually happened and any speculations or hypotheses must be compared to actual events. Ijiri argues that, "insofar as accountability remains the key function of accounting, it is inconceivable that

historical cost will be replaced by another valuation method in the future, although it may be supplemented by other methods.”⁸

Thirdly, different valuation methods could be compared in terms of their effect on performance measurement of business enterprises. The important issue concerning asset valuation is whether the economic performance of an entity should be measured based on historical cost or another valuation method. For individual decisions each valuation method, including historical cost has some uses under certain conditions. For example, with a decision to sell or to hold resources, a decision maker would want to know the best estimates of net realisable value from an immediate sale of the resources and of the discounted value of the net realisable value from a sale at some point in the future. Replacement cost may be a crucial input to a decision to rebuild a factory. However, the fact that data collected for a specific decision are very useful for that particular decision, does not necessarily imply that such data should be recorded and reported regularly. A need for tailor-made data for a specific decision does not imply that the same kind of data will be useful for decision making in general.

Similarly, the usefulness of such data on individual resources does not imply the usefulness of the same kind of data on aggregate resources. The disposal value of a plant is very useful information if the manager is contemplating its disposal. But the disposal value of all plants of the firm is not necessarily useful for decisions.

Fourthly, historical cost being sunk cost does not influence the optimality of the decision. Yet, there are at least three reasons why historical cost is relevant to a decision:

- (a) Historical cost affects evaluation and selection of decision rules.
- (b) Historical cost provides input to the “satisficing” notion.
- (c) Historical cost is used as a basis for a decision objective imposed upon the decision maker by his environment.⁹

(a) In making a decision, the decision maker must seek any relevant or potentially valuable information, even if he knows that each piece of information may not directly affect a specific decision he faces at a particular moment in time. Historical cost is certainly an important input in evaluating the past performance of a decision rule or a method to select a decision rule.

(b) Historical cost is also important because it provides input to what is called the “satisficing” model, in contrast to the classical model of optimising. Under complete certainty, it is clearly irrational not to optimise. However, faced with uncertainty, it is perfectly rational for a man to seek for satisficing rather than optimising his goal. The behavioural proposition of satisficing is observable in many kinds of human behaviour.

Optimising implies that the decision maker searches for all possible alternatives and selects the one that maximises his achievement with respect to a given goal. Satisficing means that a decision maker searches for alternatives until he finds an alternative that is satisfactory for him relative to his level of

aspiration. He then chooses this alternative, even if there is a chance that he may find a better alternative were he to continue his search.

For example, in the case of selling shares, optimising means that the consequences of selling the shares now, a day later or two days later should all be evaluated and the alternative that yields the best results should be selected. However, when choosing an alternative (selling after some specified days) under uncertainty, the estimate in many cases is so unreliable that almost any alternative can be considered optimum by adjusting estimates within a reasonable bound.

In such an ambiguous situation, a decision maker may reasonably aim at achieving a satisfactory result. Thus, instead of asking how much more he can earn by holding the shares, the questions of how much he has earned so far becomes the relevant issue to a satisficer. In addition it is often very difficult to prove that the decision maker selected the optimum alternative under the circumstances, but it is easy to show that the selected alternative yields a satisfactory result relative to a preannounced level of aspiration. In this way, historical cost becomes an important input to a satisficing decision maker.

(c) Historical cost is also relevant to economic decisions because a decision maker cannot neglect the intricate social systems based on historical cost. The most typical example is the income tax. Since taxable income is based on historical cost, a decision maker cannot analyse the full financial impact of his decision unless he knows the historical cost of the resource in question. In addition, there are many instances, where a decision maker must take into account historical cost because his environment is based on historical cost. Costplus contracts, pricing in a regulated industry and incentive compensation based on accounting profit are such examples.

Fifthly, business activities are all interrelated and collectively contribute to the profit making goal. Theoretically, we would be correct in saying that the final achievement must be allocated among the various factors which contribute to the achievement. However businesses generally engages in millions or billions of transactions. Without adopting a convention that value changes occur at certain discrete points in time rather than continuously over time, it is practically impossible to generate timely measures in accounting measurement. Therefore, although (i) the procurement of materials and labour, (ii) production, (iii) sales and (iv) collection all contribute to profit making, profit is considered to be realised only at the point of sales under historical cost, because the sale is considered to be the most difficult or critical point in the cycle.¹⁰ The key question is what improvements can be made by spreading profits over several recognition points instead of retaining the present realisation principle which recognises profit only at the point of sales.

Sixthly, *accountants must guard the integrity of their data against internal modifications*. Most would argue that historical cost is less subject to manipulation than current cost or selling price.

Disadvantages

One of the main disadvantages of historical cost valuation is that the value of the assets to the firm may change over time; after long periods of time it may have no significance whatever as a measure of the quantity of resources available to the enterprise. Historical cost valuation is also disadvantageous because it fails to permit the recognition of gains and losses in the periods in which they may actually occur. Also, because of changes over time, costs of assets acquired in different time periods cannot be added together in the balance sheet to provide interpretable sums. The historical cost valuation concept has the added practical disadvantage of blocking out other possibly more useful valuation concepts.

Historical cost overstates profit in a time of rising prices because it offsets historical costs against current (inflated) revenues. As such, it could lead to the unwitting reduction of capital where capital is defined in terms of the entity's ability to produce, transact, or otherwise operate into the future. The profit figure under historical cost may deceive management to the extent that dividends paid could exceed annual 'real' profit and erode the capital base.

Ijiri¹¹ observes:

"Relevance to decisions is considered to be the primary requirement of accounting information, and hence irrelevance to decisions appears to be the most fatal weakness of historical cost. Clearly, the focus of attention in the accounting theory of valuation has shifted to replacement cost, net realisable value, discounted future cash flows, and some synthesis of these, in the attempt to make accounting data more relevant to economic decision."

2. Current Entry Price (Replacement Cost)

Current entry price represents the amount of cash or other consideration that would be required to obtain the same asset or its equivalent. The following interpretations of current entry price have been used.

Replacement cost-used is equal to the amount of cash or other consideration that would be needed to obtain an equivalent asset on the second-hand market having the same remaining useful life.

Reproduction cost is equal to the amount of cash or other consideration that would be needed to obtain an identical asset to the existing asset.

Current entry price, *i.e.*, current replacement costs and historical costs are the same only on the date of acquisition of an asset. After that date the same asset or its equivalent may be obtainable for a larger or small exchange price. Thus current costs represent the exchange price that would be required today to obtain the same asset or its equivalent.

In current entry price, the issue that remains to be solved is the choice of the method of measurement of current entry prices.

The three most advocated methods use *quoted market prices, specific price indexes, and appraisals or management estimates*.

If a good market exists in which similar assets are bought and sold, an exchange price can be obtained and associated with the asset owned; this price represents the maximum value to the firm (unless net realizable value is greater), except for very short periods until a replacement can be obtained. It should be noted, however, that this current exchange price is cost price only if it is obtained from quotations in a market in which the firm would acquire its assets or services; it cannot be obtained from quotations in the market in which the firm usually sells its assets or services in the normal course of its operations, unless the two markets are coincident.

Accounting for holding gains and losses

The valuation of assets and liabilities at current entry prices gives rise to *holding gains and losses* as entry prices change during a period of time when they are held or owed by a firm. Holding gains and losses may be divided into two elements:

(1) the realized holding gains and losses that correspond to the items sold or to the liabilities discharged; and

(2) the non-realized holding gains and losses that correspond to the items still held or to the liabilities owed at the end of the reporting period.

These holding gains and losses may be classified as income when capital maintenance is viewed solely in money terms. They may also be classified as capital adjustments because they measure the additional elements of income that must be retained to maintain the existing productive capacity. Thus, justification for the holding gains and losses on capital adjustment may be related to a particular definition of income.

Proponents of the capital-adjustment alternative favour a definition of income based on the preservation of physical capital. Such an approach would define the profit of an entity for a given period as the maximum amount that could be distributed and still maintain the operating capability at the level that existed at the beginning of the period. Because the changes in replacement cost cannot be distributed without impairing the operating capability of the entity, this approach dictates that replacement-cost changes be classified as capital adjustments.

Current cost has become an important valuation basis in accounting, particularly as a means of presenting information regarding the effect of inflation on an enterprise. In a number of other situations, current cost is an appropriate measure of fair value, either in establishing an initial acquisition price (as in certain exchanges of non-monetary assets) or in establishing a maximum value (as in determining the present value of a capital lease for the lessee). Because of the potential increase in relevance of current costs as compared with historical costs, its use is likely to increase in the future.

Belkaoui¹² has pointed out the following advantages of entry-price-based accounting.

First, the dichotomy between current operating profit and holding gains and losses is useful in evaluating the past performance of managers. Current operating profit and holding gains and losses constitute the separate results of holding or investment decisions and production decisions, allowing a distinction to be made between the recurring and relatively controllable gains arising from production and the gains arising from factors that are independent of current and basic enterprise operations.

Second, the dichotomy between current operating profit and holding gains and losses is useful in making business decisions. Such a dichotomy allows the long-run profitability of the firm to be assessed, assuming the continuation of existing conditions. Because it is recurring and relatively controllable, the current operating profit may be used for predictive purposes.

Third, current operating profit corresponds to the income that contributes to the maintenance of physical productive capacity, that is the maximum amount that the firm can distribute and maintain its physical productive capacity. As such, current operating profit has been appropriately labeled *distributable or sustainable income*.

An important characteristic of distributable income from operations is that it is sustainable. If the world does not change, the company maintains its physical capacity next year and will have the same amount of distributable income that it had this year.

Fourth, the dichotomy between current operating profit and holding gains and losses provides important information that can be used to analyze and compare interperiod and intercompany performance gains.

Fifth, in addition to the dichotomy between current operating profit and holding gains and losses, the current-entry-price method allows the separation to be made between realized holding gains and losses and unrealized holding gains and losses. It represents an abandonment of the realization and conservatism principles, so that holding gains and losses are recognized as they are accrued rather than as they are realized.

The feasibility of financial statements based on replacement costs is apparently becoming more and more accepted.

There are, however, some disadvantages to the current-entry-price system. The current-entry-price system is based on the assumption that the firm is a going concern and that reliable current-entry-price data may be easily obtained. Both assumptions have been called "invalid" and "unnecessary".

The current-entry-price system recognizes current value as a basis of valuation but does not account for changes in the general price level and gains and losses on holding monetary assets and liabilities.

Finally there is the difficulty of correctly specifying what is meant by "current entry price". Is an asset held for use or sale to be replaced by an equivalent, identical, or new asset? A defensible argument may be made for each of the interpretations of current

entry price namely, replacement cost-used, reproduction cost, and replacement cost-new.

3. Current Exit Price (Net Realisable Value)

Current exit price represents the amount of cash for which an asset might be sold or a liability might be refinanced. The current exit price is generally agreed to correspond (1) to the selling price under conditions of orderly rather than forced liquidation, and (2) to the selling price at the time of measurement. In case the adjusted future selling price is of concern, the concept of *expected exit value*, or *net realizable value*, is employed instead. More specifically, expected exit value or net realizable value is the amount of cash for which an asset might be expected to be sold or a liability might be expected to be refinanced. Thus, expected exit value or net realizable value refers to the proceeds of expected future sales, whereas current exit price refers to the current selling price under conditions of orderly liquidation, which may be measured by quoted market prices for goods of a similar kind and condition. This current cash equivalent is assumed to be relevant because it represents the position of the firm in relation to its adaptive behaviour to the environment. That is, it is assumed to be the contemporary property of all assets, which is relevant for all actions in markets and thus uniformly relevant at a point in time. Past prices are irrelevant to future actions, and future prices are nothing more than speculation. Therefore, the current cash equivalent concept avoids the necessity to aggregate past, present, and future prices.

The primary characteristic of current-exit-price systems is the complete abandonment of the realization principle for the recognition of revenues. Valuing all non-monetary assets at their current exit prices produces an immediate recognition of all gains. The operating gains are recognized at the time of production, whereas holding gains and losses are recognized at the time of purchase and, consequently, whenever prices change rather than at the time of sale. The critical event in the accounting cycle becomes the point of purchase or production rather than the point of sale.

Evaluation of current exit-price

The use of current-value accounting based on current exit price presents advantages and disadvantages. First, we will discuss some of the advantages attributed to *current exit-price-based accounting*.

First the current exit price and the capitalized value of an asset provide different measures of the economic concept of *opportunity costs*. Thus, a firm's *opportunity cost* is either the cash value to be derived from the sale of the asset or the present value of the benefits to be derived from the use of the asset. Both values are relevant to making decisions concerning whether a firm should continue to use or to sell assets already in use and whether or not a firm should remain a going concern.

Second, current exit price provides relevant and necessary information on which to evaluate the financial adaptability and liquidity of a firm. Thus, a firm holding fairly liquid assets has a

greater opportunity to adapt to changing economic conditions than a firm holding assets with little or no resale value.

Third, current exit price provides a better guide for the evaluation of managers in their stewardship function because it reflects current sacrifices and other choices.

Fourth, the use of current exit price eliminates the need for arbitrary cost allocation on the basis of the estimated useful life of the asset. More explicitly, depreciation expense for a given year is the difference between the current exit price of the asset at the beginning and at the end of the period.

There are, however, some significant disadvantages to the current exit-price-based system that need to be mentioned.

First, the current exit-price-based system is relevant only for assets that are expected to be sold for a determined market price. The current exit price may be easily determined for an asset for which a second-hand market exists. It may be more difficult to determine the current exit price of specialized, custom-designed plant and equipment that has little or no alternative use. Scrap values may be the only alternative measure for such assets.

Second, the current exit-price-based system is not relevant for assets that the firm expects to use. The disclosure of the amount of cash that would be available if the firm sold such assets to move out of its industry and move into another one is not likely to be relevant to any user interested in the actual profitability of the firm in its present industry.

Third, the valuation of certain assets and liabilities at the current exit price has not yet been adequately resolved. On one hand, there is the general problem of valuation of intangible and the specific problem of valuation of goodwill. Also, the absence of marketable value makes the determination of realizable value difficult. On the other hand, there is the problem of valuation of liabilities. Should they be valued at their contractual amounts or at the amounts required to fund the liabilities?

Fourth, the abandonment of the realization principle at the point of sale and the consequent assumption of liquidation of the firm's resources contradict the established assumption that the firm is a going concern.

Finally, the current exit-price-based system does not take into account changes in the general price level.

Further, one of the major difficulties with the current cash equivalent concept is that it provides justification for excluding from the position statement all items that do not have a contemporary market price. For example, non-vendible specialized equipment, as well as most intangible assets, would be written off at the time of acquisition because of an inability to obtain a current market price. However, it is suggested to modify the procedures somewhat to provide approximations of the current cash equivalents by the use of specific price indexes and by making subjective depreciation computations. The main deficiency in using the current cash equivalent concept for all assets is that it does not take into consideration the relevancy of the information to the prediction and decision needs of the users of financial

statements, although it does provide the investor with contemporary information regarding the financial position of the firm and some alternatives available to it.

4. Present Value of Expected Cash Flows

Present value refers to the present value of net cash flows expected to be received from the use of asset or the net outflows expected to be disbursed to redeem the liability. This valuation concept requires the knowledge or estimation of three basic factors—the amount or amounts to be received, the discount factor and the time periods involved. When expected cash receipts require a waiting period, the present value of these receipts is less than the actual amount expected to be received. And the longer the waiting period, the smaller is the present value. Conceptually, the present value is determined by the process of discounting. But discounting involves not only an estimate of the opportunity cost of the money, but also an estimate of the probability of receiving the expected amount. The longer the waiting period, the greater is the uncertainty that the amount will be received. Furthermore, a single amount may be received after a time period or different amounts are to be received at different time periods. In later case, each amount must be discounted at the appropriate discount rate for the specific waiting period.

Economists use this valuation model to measure income. Using the Hicks definition of income, economists express income as the net present value of expected future cash flows, discounted at a reasonable rate of discount. Income is, thus, determined in terms of capitalised money value of an enterprise's prospective cash flows or receipts. Income will be found only when there is an increase in the capitalised value over the period. Also, income in this approach depends upon assets valuation and assets valuation is prerequisite to income measurement.

Present value model, although considered theoretically best model, has been found largely as impractical. It has many limitations such as the following:

- (i) The expected cash receipts generally depend upon subjective probability distributions that are not verifiable by their nature.
- (ii) Even though opportunity discount rates might be obtainable, the adjustment for risk preference must be evaluated by management or accountants, and it might be difficult to convey the meaning of the resultant valuation to the readers of financial statements.
- (iii) When two or more factors, including human resources as well as physical assets, contribute to the product or service of the firm and the subsequent cash flow, a logical allocation to the separate service factors is generally impossible. It has been suggested that the marginal net receipts associated with the asset can be used, but the sum of the individual marginal net receipts is not likely to add to the total net receipts from the product or services.

- (iv) The discounted value of the differential cash flows of all of the separate assets of the firm cannot be added together to obtain the value of the firm. This is partly due to the jointness of the contributions of the separate assets, but it is also due to the fact that some assets, such as intangibles, cannot be separately identified.

In spite of the above difficulties, the discounted cash flow concept has some merit as a valuation concept for single ventures where there are no joint factors requiring separate accounting or where the aggregation of assets can be carried far enough to include all of the joint factors. But it is also relevant for monetary assets where waiting is the primary factor determining the net benefit to be received in cash by the firm. For example, if bill receivable is fairly certain of being collected and if the timing of the payment is specified by contract, the discounted value of the bill represents the amount of cash that the firm would be indifferent to holding as compared to holding bill. The minimum amount, however, would be the amount of cash that could be obtained by discounting or selling the bill to a bank or other financial institution. The longer the waiting period, however, the greater the uncertainties will usually be, making the discounted cash receipts concept less applicable. On the other hand, when the waiting period is short, the discounting process can usually be ignored for monetary assets because the amount of the discount is usually not material.

EVALUATION OF VALUATION CONCEPTS

In the valuation of assets, there is no single concept or procedure that is ideal in the presentation of the statement of financial position, in the determination of income, or in the presentation of other information relevant to decisions of investors, creditors, and other users of financial statements. From a structural point of view, historical cost valuation is frequently assumed to be the ideal in so far as it is based on double entry book-keeping, which requires the recording of all resources changes and permits their subsequent identification. However, formal structures can also be devised for other valuation concepts.

An objective of asset valuation from an interpretational point of view is to provide a relative measurement of the resources available to the firm in the generation of future cash flows. Historical cost valuation lacks interpretation and current replacement costs permits greater interpretation if the measurements are taken from used-asset markets rather than restating historical costs by the use of specific price indexes. Net realisable and current cash equivalents permit interpretations if the valuations are taken from prices existing in markets.

Realisable value may be useful in a situation where its amount and recoverability are known almost with certainty and the main bottleneck in the cycle of activities is in purchasing. Replacement cost is useful when the true goal of an entity is to reproduce the existing resource mix on a larger scale. That target is not attained until assets are replaced at their proper levels. Realisable value

may be justified when the entity's aim is to return the maximum amount of money to the owners.

Replacement cost and realisable value are suitable when resources are disposed of or replaced at frequent intervals. However, a business enterprise controls many resources which it does not intend to dispose of or replace. A decision to shutdown or replace a plant may occur only once every ten years for any given plant. During this ten year period, management does not consider disposal or replacement plans, not because they are unaware of this alternative, but because during most of the plant's economic life such an alternative is not likely to be more profitable than continuing the existing operation.

There is no doubt that replacement cost and realisable value provide useful information if they are tailor-made for a specific decision and reported at the appropriate time. The question raised here is whether the continuous recording and reporting of such data, and especially whether performance measurement based on such data, are likely to be of any use.

In addition, valuation by replacement cost or realisable value has a particular weakness since the evaluation of assets by these methods is based on actions that the entity is not likely to take. Other methods, such as appreciation or realised value, are based on estimates of actions that the entity will most likely take. Therefore, when we use appreciation or realised value we may later verify the estimates that were made. Verifying the accuracy of data on replacement cost or realisable value is not possible because the data cannot be compared with actual results. Littleton¹³ states this problem pointedly: "Accounting has no facility for reporting what might have been.... It might be interpretively interesting later to think of what might have been or of how the event would look if just now completed. It might even be wise to 'rethink' some important transactions. But present prices cannot change the amounts of recorded transactions already completed."

About different valuation concepts, Ijiri concludes:

"Though each of these (alternative asset valuation) methods can be rationalised and justified under some conditions, there is no convincing argument that one is better than the others in every situation."¹⁴

Using normative investment models, it may be assumed that an objective of asset valuation is to provide information that will permit the prediction of future cash outflows necessary to acquire similar resources in the future in the continuation of business operations and to permit the prediction of future cash receipts. Current replacement costs obtained from existing markets may reflect the cash outflows required to duplicate the existing facilities. Thus, as a prediction of future cash outflows, current input costs, and expected future input prices are more significant than past input valuations. In the prediction of future cash receipts, output concepts are generally superior to input valuation concepts. Thus, net realisable values and current cash equivalents may be relevant for many predictions. But when the expected future

benefits are highly uncertain, the use of input valuations may offer a reasonable substitute in some situations.

COMBINATION OF VALUATION BASES

The combination of values approach has been suggested as a way of avoiding some of the disadvantages of the different current value valuation methods. The Canadian Accounting Research Committee (CARC) favours a combined use of current entry and current exit prices. More specifically, the following values are advocated by CARC:

- (1) Monetary assets should be shown at discounted cash flow except for shortterm items where the time value of money effect is small.
- (2) Marketable securities should be valued at current exit price with adjustments for selling costs.
- (3) In general, inventory items should be valued at current entry prices.
- (4) Fixed assets should normally be valued at replacement cost—new (less applicable depreciation calculated on the basis of the estimated useful life of the assets held).
- (5) In general, intangible values should be valued at current value.
- (6) Liabilities should be shown at the discounted value of future payments except for shortterm items when the time value of money effect is small.

Although the combination of values approach may appear to rest on arbitrary rules, supporters of the combination approach suggests specific decision rules for the choice of a valuation method. Under the combination of values approach, the following three bases of valuation are generally considered:

- (1) Current Purchase Price [Replacement cost of the asset (RC)]
- (2) Net Realisable Value of the Asset (NRV)
- (3) Present Value of Expected Future Earnings (or Cash flows) from the Asset (PV).

Six hypothetical relationships exist between these three values:

	Correct valuation basis
1. $NRV > PV > RC$	RC
2. $NRV > RC > PV$	RC
3. $PV > RC > NRV$	RC
4. $PV > NRV > RC$	RC
5. $RC > PV > NRV$	PV
6. $RC > NRV > PV$	NRV

In 1 and 2 above, NRV is greater than PV. Hence, the firm would be better off selling rather than using the asset. The sale of the asset necessitates its replacement, if the NRV is to be restored. It can be said therefore, that the maximum loss which the firm would suffer by being deprived of the asset is RC

In 3 and 4 above, PV is greater than NRV, so that the firm would be better off using the asset rather than selling it. The firm must replace the asset in order to maintain PV, so that the maximum loss which the firm would suffer by being deprived of the asset is again RC.

The general statement which may be made, therefore, in respect of the first four cases 1 to 4 is that, where either NRV or PV, or both, are higher than RC, RC is the appropriate value of the asset to the business. As regards a current asset, such as stocks, RC will be the current purchase price (entry value). In the case of a fixed asset, RC will be the written down current purchase price (replacement cost), since the value of such an asset will be the cost of replacing it in its existing condition, having regard to wear and tear.

In cases 5 and 6, RC does not represent the value of the asset to the business, for if the firm were to be deprived of the asset, the loss incurred would be less than RC. Case 5 is most likely to arise in industries where assets are highly specific, where NRV tends to zero and where RC is greater than PV, so that it would not be worth replacing the asset if it were destroyed, but it is worth using it rather than attempting to dispose of it.

Case 6 applies to assets held for resale, that is, where NRV must be greater than PV. If RC should prove to be greater than NRV, such assets would not be replaced. Hence, it implies that they should be valued at NRV or RC whichever is the lower.

The combination of values approach has been found relevant by the US's FASB Study Group on the Objectives of Financial Statements within a particular set of financial statements:

“The Study Group believes that the objectives of financial statements cannot be best served by the exclusive use of a single valuation basis. The objectives that prescribe statements of earnings and financial position are based on user's needs to predict, compare, and evaluate earning power. To satisfy these information requirements, the Study Group concludes that different valuation bases are preferable for different assets and liabilities. That means that financial statements might contain data based on a combination of valuation bases. Current replacement cost may be the best substitute for measuring the benefits of longterm assets held for use rather than sale. Current replacement cost may be particularly appropriate when significant price changes or technological developments have occurred since the assets were acquired.... Exit value may be an appropriate substitute for measuring the potential benefit or sacrifice of assets and liabilities expected to be sold or discharged in a relatively short time.”

LOWER OF COST OR MARKET (LCM) RULE

The lower of cost or market valuation approach is a rule which has long and widely been observed in financial accounting. The rule was originally justified in terms of conservatism which meant that there should be no anticipation of profit and that all foreseeable losses should be provided for in the value report to shareholders.

The lower of cost or market concept has a long history in financial accounting. But there seems to be little unanimity as to which market value is the most useful. With regard to inventories, the term market usually refers to replacement cost (an input concept), but it may refer to selling price or net realisable value (output concepts) under certain conditions. When it is applied to the valuation of investments in securities, market usually refers to the selling price.

There is some question whether the cost or market rule is a basic accounting concept or merely an accepted accounting procedure. It does not use any valuation concept different from the concepts discussed above, but because it does not apply any one of the valuation concepts consistently, it can be considered a different concept at least in its application, or it can be considered an eclectic application of various valuation concepts. Regardless of the level of dignity ascribed to the method, it has been vigorously criticized for many years in discussions of accounting theory. Its most amazing attribute is that it has found so many followers for so many years.

Limitations of LCM Rule: The LCM rule has obtained support from the accounting bodies all over the world. However, LCM rule has the following limitations:

(1) As a method of conservatism, it tends to understate total asset valuations. Individual asset valuations may also be understated. This understatement may not harm creditors but it is deceiving to shareholders and potential investors.

(2) The conservatism in asset valuations is off set by an unconservative statement of net income in a future period. A lower asset valuation in the current period will result in a larger reported profit or smaller loss in some future period when the asset valuation is charged off as an expense. Because gains are not reported currently, the resulting net income will be less useful as a predictive device or as a measure of efficiency.

(3) The LCM rule suffers from inherent inconsistency. Thus; if replacement cost is objective, definite, verifiable and more useful when it is lower than acquisition cost it also possesses these attributes when it is higher than acquisition cost.

(4) A less convincing argument is that the cost or market rule applies to decreases in cost as well as to diminished utility due to deterioration, obsolescence, or decreased earning capacity. There may not be any changes in net realisable value just because costs have changed.¹⁵

TYPES OF ASSETS

Different assets possessed by a business enterprise appear on the balance sheet. These assets are classified as follows:

(1) Fixed Assets: Fixed assets are tangible assets and refer to a firm's property, plant and equipment. Fixed assets are assets held with the intention of being used for the purpose of producing or providing goods or services and is not held for sale in the normal course of business.

(2) Investments: Investments are created by a firm through purchase of shares and other securities. Investment by a firm can be made for long-term or short-term.

(3) Intangible assets: Intangible assets do not have physical substance but they are the resources that benefit an enterprise's operations. Intangible assets provide exclusive rights or privileges to the owner. Examples are patents, copyrights, trademarks. Some intangible assets arise from the creation of a business enterprise—organisation costs or reflect a firm's ability to generate above normal earnings—that is goodwill.

The term intangible assets is not used with cent per cent accuracy and precision in accounting. By convention, only some assets are considered as intangible assets. For example, some resources lack physical substance such as prepaid insurance, receivables, and investments, but are not classified as intangible assets.

(4) Current assets: Current assets include cash and assets that will be converted into cash or used up during the normal operating cycle of the business or one year, whichever is longer. Examples are debtors, closing stocks, marketable securities, besides the cash. The normal operating cycle of a business is the average period required for raw materials merchandise to be converted into finished product and sold and the resulting accounts receivables to be collected. Prepaid expenses such as rent, insurance, etc., are normally consumed during the operating cycle rather than converted into cash. These items are considered current assets, however because the prepayments make cash outflows for services unnecessary during the current period.

Plant and Equipment

Plant, equipment and other property cover a wide range of assets which are generally carried at cost, less depreciation. For plant and equipment, historical cost has generally been found to be a satisfactory basis, partly because there is no objective basis for any different value and partly because such assets are in reality deferred charges against future production and could not or normally would not, be sold separately.

Historical cost is defined as the aggregate price paid by the firm to acquire ownership and use of an assets including all payments necessary to obtain the asset in the location and condition required for it to provide services in the production or other operations of the firm. The main disadvantage of historical cost is that it does not continue to reflect either the value of its future services or its current market price if economic conditions or prices change in subsequent periods. Even if prices remained constant, it is unlikely that the expectations regarding future services would remain constant. Expectations may change because of greater certainty as the remaining life of the asset becomes shorter or because of changes in technology or in economic conditions. Price changes affect the relevancy and comparability of historical costs applied to non current assets to a greater extent than costs applied to current assets, because of the longer period from the date of acquisition to the average

period of use. The longer this period is, the greater is the cumulative effect of price changes since the date of acquisition.

Frequently, current valuations have been suggested as a means of obtaining better measurement of capital resources than can be obtained by using historical costs, particularly when the difference between the two is caused by relatively permanent changes in the structure of prices or changes in the price level rather than by ephemeral changes caused by temporary shortages in supply. Current values are generally suggested as a means of obtaining current measurements of depreciation. However, it should be noted that the allocation of current costs is just as arbitrary as the allocation of historical costs.

The current cost of plant and equipment means the current market price of a similarly used asset in the same condition and of the same age as the assets owned. It is, therefore, the price that would have to be paid for the assets if it were not already owned by the firm. Alternative costs include (a) the acquisition costs of an identical new item purchased in current market adjusted for depreciation to date (b) the current price or reproduction cost of new improved asset adjusted for technological differences and depreciation, and (c) historical cost restated by specific price level indexes.

Investments

In financial accounting investments are defined as shares and other legal rights acquired by a firm through the investment of its funds. Investments may be long-term or short-term, depending upon the intention of the firm at the time of acquisition. Where investment are intended to be held for a period of more than one year, they are in the nature of fixed assets; where they are held for a shorter period they are in the nature of current assets. Shares in subsidiaries and associated companies are usually not held for resale and hence would be classified as being of the nature of fixed assets. It is the practice, however, to show investments separately in the balance sheet and not to include them under the heading of 'fixed assets.' Investments are recorded at their cost of acquisition and whilst substantial decreases in value may be written off against current income, appreciations in value are not recognised until realised.

Current Assets

Current assets are defined as "cash and other assets that are expected to be converted into cash or consumed in the production of goods or rendering of services in the normal course of business". Items are included in current assets on the basis of whether they are expected to be realised within one year or within the normal operating cycle of the enterprise, whichever is the longer. However, the classification of items as current or noncurrent in practice is largely based on convention rather than on any one concept.

The above definition, however, does not place the main emphasis on nature of the operation of a going concern. The emphasis should be on the frequency of the opportunity to decide

whether or not to recommit the funds for use in current operations. Current assets in aggregate may be just as permanent as the investments in non current assets, but the opportunity for reinvestment in current operations occurs within the current operating cycle of business. However, once assets are committed by management for investment in specific long-term forms, they should not be classified as current assets. For example, cash, securities or other assets committed by management for the later acquisition of plant and equipment or for other non-current uses should not be included among the current assets. The commitment need not be legally binding on management, but it should be explicit.

The operating cycle is defined as the time it takes to convert cash into the product of the enterprise and then to convert the product back into cash again. This concept permits an operational demarcation between shortterm commitments and longterm commitments. Plant and equipment items are omitted from the current assets classification because their turnover periods cover many product turnover periods.

One of the difficulties in the way the operating cycle concept is applied in practice is that if it is less than one year, the one year rule still applies; the result is that the current assets classification does not disclose consistently the frequency of the circulations of assets. But even if the operating cycle criterion were applied consistently, there would still be some major difficulties because of the complexity of many business enterprises and the resultant inability to determine the length of the operating cycle. Because of these difficulties regarding the interpretation of the operating cycle and because of the lack of evidence regarding the relevance of the current assets classification to any specific user's needs, other methods of classifying assets should be investigated.¹⁶

Classification of Current Assets

Current assets are set off from noncurrent assets because of their importance in a company's current position. Current position is another concept, subsidiary to the overall notion of financial condition, which has to do with a company's ability to meet its immediate maturing obligations in the ordinary course of the business with the assets at hand.

Within the classification of current assets, one typically finds the following:

(1) Cash: Cash balances available for withdrawal are normally shown in a single account with the title cash. Separate disclosure should be made of cash that is restricted as to withdrawal. Cash and the various forms of money are expressed in terms of their current value, which is definite. Therefore, any gains or losses resulting from the exchange of other assets for the given amount of cash or money forms should have been recognised; no gain or loss should be recognised from the holding of cash and money forms except possibly in consideration of purchasing power gains and losses during periods of pricelevel changes. Holdings of convertible foreign currency or money should be expressed in terms of the domestic equivalent at the balance sheet date.

(2) Receivable: Receivables encompass monetary claims against debtors of the firm. They should be reported by source—those arising from (a) customers (b) parent and subsidiary companies (c) other affiliated companies (d) certain related parties such as directors, officers, employees, and major shareholders. The term accounts receivable is commonly used to refer to receivables from trade customers that are not supported by written notes. Receivables are typically presented at face values, with the required reduction for uncollectible accounts and unearned interest reported in adjacent contra accounts.

(3) Marketable securities: Marketable securities represent temporary investments made to secure a return on funds that might otherwise be unproductive. Whether an investment is classified as temporary or not depends largely on management intent. To be considered a temporary investment, a security must not only be marketable, but management must plan to dispose of it if it needs to raise cash.

Under conventional accounting procedures, securities (when held for current working capital purposes) are generally recorded on the basis on the lower of cost or market. The argument for this method has been that cost is generally the most relevant basis for measuring the gains or losses realised when the securities are sold. If market price rises above cost, the increase in value is not generally recorded because it is thought that this gain is unrealised in the technical sense of the word and because it possibly may disappear before the assets is sold. If the market value of the securities is less than cost, however, it is thought that the losses should be recorded and the securities should not be shown in the balance sheet in excess of their current realisable value.

(4) Inventories: Inventories include those items of tangible property that (a) are held for sale in the ordinary course of business, (b) are in process of production for such sale, or (c) are to be currently consumed in the production of goods or services to be available. The cost of inventory includes all expenditures that were incurred directly or indirectly to bring an item to its existing condition and location. Inventory is recorded at cost except when the utility of the goods is no longer as great as its cost. Several cost flow assumptions may be used to allocate costs between cost of goods sold and ending inventory. The most widely used are (a) FIFO, (b) LIFO, and (c) average cost.

Chapter 9 on inventories discusses the impact of alternative cost flow assumption on the calculation of net income and asset values.

(5) Prepaid expenses: Prepaid expenses include prepaid rent, insurance and interest. They are not current assets in the sense that they will be converted into cash; rather they are item that if not prepaid would have required the use of cash. They are sometimes referred to as deferred charges, because the charge to income resulting from the prepayment is delayed until it can be properly matched with appropriate revenues.

Other current assets represent those accounts that could not be included in other captions and may include deferred income

taxes, advances, or deposits held by a supplier, and property held for resale.

Intangible Assets

As stated earlier, intangible assets are of different types such as goodwill, patents, copyrights, trademarks, franchises, deferred charges and the like.

Goodwill

Goodwill arises when a business enterprise buys another firm and pays more than the fair market value of the firm's net assets.* The excess amount that the buyer pays, is known as goodwill and is recorded as an asset in the books of buying firm. Goodwill represents the potential of a business to earn above a normal rate of return on the investments made. When compared to similar competing firms, if a particular firm consistently earns higher profits, then such a firm is said to possess goodwill.

A firm may be said to have goodwill due to many factors such as superior customer relations, advantageous location, efficient management, high quality of goods and services, exceptional personnel relations, favourable financial sources, superior technology.

Furthermore, goodwill cannot be separated from entity and sold separately. Goodwill is created internally at no identifiable cost and it can stem from any factor that can make return on investment high. Because measuring goodwill is difficult, it is recorded as an intangible asset only when it is actually purchased at a measurable cost, *i.e.*, only when another firm is purchased and the amount paid to acquire it exceeds the market value of identifiable net assets involved.

Patents

A patent is an exclusive right and privilege, given by law, which provides the patent holder (owner) the right to use, manufacture and sell the subject of patent and the patent itself. According to AS-10 (Accounting for Fixed Assets), patents are normally acquired in two ways (i) by purchase, in which case patents are valued at the purchase cost including incidental expenses, stamp duty, etc. and (ii) by development within the enterprise, in which case all costs identified as incurred in developing patents are capitalised. The patents as per the Standard 10 should be amortised over their legal term of validity or over their working life, whichever is shorter. Patent laws aim to protect the inventors by protecting them from unfair imitators who might (mis) use the invention for commercial gain. A patent that is purchased is recorded at its cash equivalent cost. A patent which is developed internally by a business firm is recorded, at its registration and legal costs.

* Net assets means tangible assets plus intangible assets like patents, licences and trademarks minus any liabilities accepted by the buyer on behalf of the selling firm.

Copyrights

A copyright is similar to a patent. A copyright gives the owner the exclusive right to publish, use and sell a specific written work, musical or art work. It protects the owner against the unauthorised reproduction of his literary or other work. Copyright is recorded at the purchase price, if purchased, or at registration and legal fees, if acquired internally.

Trademarks

Trademarks and trade names give the owner—company the exclusive and continuing right to use certain teens, names or symbols, usually to identify a brand or family of products. Trademarks are recorded at purchase price, if purchased and at registration and legal costs, if not purchased but acquired internally within a firm.

Franchises and Licences

Franchises and licences give exclusive rights to operate or sell a specific brand of products in a given geographical area. They represent investments made to acquire them. If they are purchased, they are recorded at the cost paid for it. Alternatively, they are recorded at registration and legal costs.

Know-how

Know-how, according to the AS-10, should be recorded in the books only when some consideration in money or money's worth has been paid for it. Know-how can be of two types:

- (i) relating to manufacturing processes and
- (ii) relating to plans, designs and drawings of buildings or plant and machinery.

Know-how costs relating to manufacturing process are usually charged off to expenses in the year in which it is incurred. The know-how related to plans, designs and drawings of building or plant and machinery should be capitalised under the relevant assets heads. Where the knowhow is so capitalised, depreciation should be calculated on the total cost of such assets including the cost of knowhow.

If know-how is paid as a composite sum for manufacturing processes and other plans, designs and drawings, then the amount should be apportioned amongst the various purposes on a reasonable basis. Where the consideration for the knowhow is a series of annual payments such as royalties, technical assistance fees, contribution to research, etc., then such payments are charged to the profit and loss statement each year.

Deferred Charges

Deferred charges are the expenses paid in advance and are like prepaid expenses. Deferred charges are long term prepaid expenses and benefit several future years. They are also known as organisation costs, *i.e.*, costs incurred in organising a company

and related preoperating or startup costs of preparing the company. Some examples of deferred charges are:

- (1) Legal fees.
- (2) Fees paid to the government agencies.
- (3) Preliminary expenses incurred in the formation of a company.
- (4) Pre-operating expenses incurred from the commencement of business upto the commencement of commercial production.
- (5) Advertisement and sales promotion expenditure incurred on the launch of a new product. These expenditures are likely to be quite large and the revenue earned from the new product in the initial years may not be adequate to write off such expenditure.
- (6) Research and development costs (it has been discussed separately later).

It should be noted that during the preoperating or startup period, no revenue is earned and is therefore nothing against which to match these costs. Generally, deferred charges are capitalised and amortised over a (relatively short) period of time when the benefits are expected to be earned over a number of future periods. Some business firms show them as expenses in the period when they are incurred.

Financial Assets

IFRS define a financial instrument as a contract that gives rise to a financial asset of one entity, and a financial liability or equity instrument of another entity, such as a company's investments in stocks issued by another company or its investments in the notes, bonds, or other fixed-income instruments issued by another company (or issued by a governmental entity). Financial liabilities are such as notes payable and bonds payable issued by the company. Some financial instruments may be classified as either an asset or a liability depending on the contractual terms and current market conditions. One example of such a financial instrument is a derivative. A **derivative** is a financial instrument for which the value is derived based on some underlying factor (interest rate, exchange rate, commodity price, security price, or credit rating) and for which little or no initial investment is required.

All financial instruments are recognized when the entity becomes a party to the contractual provisions of the instrument. In general, there are two basic alternative ways that financial instruments are measured: fair value or amortised cost. Fair value is the a arm's length transaction price at which an asset could be exchanged or a liability settled between knowledgeable and willing parties under IFRS, and the price that would be received to sell an asset or paid to transfer a liability under U.S. GAAP. The amortised cost of a financial asset (or liability) is the amount at which it was initially recognized, minus any principal repayments, plus or minus

any amortisation of discount or premium, and minus any reduction for impairment.

Financial assets are measured at amortised cost if the asset's cash flows occur on specified dates and consist solely of principal and interest, and if the business model is to hold the asset to maturity. This category of asset is referred to as held-to-maturity. An example is an investment in a long-term bond issued by another company; the value of the bond will fluctuate, for example with interest rate movements, but if the bond is classified as *held-to-maturity*, it will be measured at amortised cost. Other types of financial assets measured at historical cost are loans (to other companies).

Financial assets not measured at amortised cost are measured at fair value. For financial instruments measured at fair value, there are two basic alternatives in how net changes in fair value are recognized: as profit or loss on the income statement, or as other comprehensive income (loss) which bypasses the income statement. Note that these alternatives refer to unrealized changes in fair value, i.e., changes in the value of a financial asset that has not been sold and is still owned at the end of the period. Unrealized

gains and losses are also referred to as holding period gains and losses. If a financial asset is sold within the period, a gain is realized if the selling price is greater than the carrying value and a loss is realized if the selling price is less than the carrying value. When a financial asset is sold, any realized gain or loss is reported on the income statement. The category **held for trading** (or "trading securities" under U.S. GAAP) refers to a category of financial assets that is acquired primarily for the purpose of selling in the near term. These assets are likely to be held only for a short period of time. These trading assets are measured at fair value, and any unrealized holding gains or losses are recognized as profit or loss on the income statement. **Mark-to-market** refers to the process whereby the value of a financial instrument is adjusted to reflect current fair value based on market prices.

Some financial assets are not classified as held for trading, even though they are available to be sold. Such **available-for-sale** assets are measured at fair value, with any unrealized holding gains or losses recognized in other comprehensive income.

Figure 6.1 summarizes how various financial assets are classified and measured.

Measured at Fair Value	Measured at Cost or Amortised Cost
- Financial assets held for trading (e.g., stocks and bonds issued by another company) - Available-for-sale financial assets (e.g., stocks and bonds issued by another company) - Derivatives whether stand-alone or embedded in non-derivative instruments. - Non-derivative instruments (including financial assets) with fair value exposures hedged by derivatives.	- Unquoted equity instruments (in limited circumstances where the fair value is not reliably measurable, cost may serve as a proxy (estimate) for fair value) - Held-to-maturity investments (investments in bonds issued by another company, intended to be held to maturity) - Loans to and receivables from another company.

Figure 6.1: Measurement of Financial Assets

AS 10: ACCOUNTINGS FOR FIXED ASSETS

The following are the main provisions of AS 10, Accountings for Fixed Assets.

1. Applicability

The standard deals with the accounting for tangible fixed assets. The standard does not take into consideration the specialized aspect of accounting for fixed assets reflected with the effects of price escalations but applies to financial statements on historical cost basis. An entity should disclose (i) the gross and net book values of fixed assets at beginning and end of an accounting period showing additions, disposals, acquisitions and other movements, (ii) expenditure incurred on account of fixed assets in the course of construction or acquisition, (iii) revalued amounts substituted for historical costs of fixed assets with the method applied in computing the revalued amount.

This standard does not deal with accounting for the following items to which special considerations apply:

- Forests, plantations and similar regenerative natural resources.
- Wasting assets including mineral rights, expenditure on the exploration for and extraction of minerals, oil, natural gas and similar non regenerative resources.
- Expenditure on real estate development and
- Biological assets i.e., living animals or plants

2. Machines Spares

Whether to capitalise a machinery spare or not will depend on the facts and circumstances of each case. However, the machinery spares of the following types should be capitalised being of the nature of capital spares/insurance spares:

- Machinery spares which are specific to a particular item of fixed asset, i.e., they can be used only in connection with a particular item of the fixed asset and their use is expected to be irregular.
- Machinery spares of the nature of capital spares/insurance spares should be capitalised separately at

the time of their purchase whether procured at the time of purchase of the fixed asset concerned or subsequently. The total cost of such capital spares/insurance spares should be allocated on a systematic basis over a period not exceeding the useful life of the principal item, i.e., the fixed asset to which they relate.

- When the related fixed asset is either discarded or sold, the written down value less disposal value, if any, of the capital spares/insurance spares should be written off.
- The stand by equipment is a separate fixed asset in its own right and should be depreciated like any other fixed asset.

3. Components of Cost

Gross book value of a fixed asset is its historical cost or other amount substituted for historical cost in the books of account or financial statements. When this amount is shown net of accumulated depreciation, it is termed as net book value. The cost of an item of fixed asset comprises

- (1) Its purchase price, including import duties and other non refundable taxes or levies
- (2) Any directly attributable cost of bringing the asset to its working condition for its intended use;
- (3) The initial estimate of the costs of dismantling and removing the asset and restoring the site on which it is located, the obligation for which the enterprise incurred either when the item was acquired, or as a consequence of having used the asset during a particular period for purposes other than to produce inventories during that period.

Any trade discounts and rebates are deducted in arriving at the purchase price. The cost of a fixed asset may undergo changes subsequent to its acquisition or construction on account of exchange fluctuations, price adjustments and changes in duties or similar factors.

4. Self-constructed Fixed Assets

The cost of a self constructed asset is determined using the same principles as for an acquired asset.

The Standard states that if an enterprise makes similar assets for sale in the normal course of business, the cost of the asset is usually the same as the cost of constructing the asset for sale, in accordance with the principles of AS 2 Valuation of Inventories.

Administration and other general overhead costs are not a component of the cost of tangible fixed asset because they cannot be directly attributed to the acquisition of the asset or bringing the asset to its working condition.

5. Non-monetary Consideration

When a fixed asset is acquired in exchange for another asset, its cost is usually determined by reference to the fair market value of the consideration given. It may be appropriate to consider also

the fair market value of the asset acquired if this is more clearly evident. When a fixed asset is acquired in exchange for shares or other securities in the enterprise, it is usually recorded at its fair market value, or the fair market value of the securities issued, whichever is more clearly evident.

6. Improvements and Repairs

Any expenditure that increase the future benefits from the existing asset beyond its previously assessed standard of performance is included in the gross book value, e.g., an increase in capacity. A computer with 20GB hard disk crashed and replaced with a 80GB hard disk, will be capitalised and added to the cost of the computer.

7. Revaluation

When a tangible fixed asset is revalued, the entire class of tangible fixed assets to which that asset belongs is required to be revalued. Assets within a class of tangible fixed assets are revalued simultaneously to avoid selective revaluation of assets and the reporting of amounts in the financial statements that are a mixture of costs and valuations at different dates. This is intended to prevent the distortions caused by selective use of revaluation, so as to take credit for gains without acknowledging falls in the value of similar assets.

The revalued amounts of fixed assets are presented in financial statements either by restating both the gross book value and accumulated depreciation so as to give a net book value equal to the net revalued amount or by restating the net book value by adding therein the net increase on account of revaluation. It is not appropriate for the revaluation of a class of assets to result in the net book value of that class being greater than the recoverable amount of the assets of that class. An increase in net book value arising on revaluation of fixed assets is normally credited directly to owner's interests under the heading of revaluation reserves and is regarded as not available for distribution. Journal entry is as follow:

Fixed Asset Account	Dr.
To Revaluation Reserve Account	

A decrease in net book value arising on revaluation of fixed assets is charged to profit and loss statement except that, to the extent that such a decrease is considered to be related to a previous increase on revaluation that is included in revaluation reserve.

8. Retirements and Disposals (Derecognition)

The carrying amount of a tangible fixed asset should be derecognised:

- on disposal; or
- when no future economic benefits are expected from its use or disposal

Items of fixed assets that have been retired from active use and are held for disposal are stated at the lower of their net book value and net realisable value and are shown separately in the financial statements. Any expected loss is recognised immediately

in the profit and loss statement. On disposal of a previously revalued item of fixed asset, the difference between net disposal proceeds and the net book value is normally charged or credited to the profit and loss statement except that, to the extent such a loss is related to an increase which was previously recorded as a credit to revaluation reserve and which has not been subsequently reversed or utilised, it is charged directly to that account. The amount standing in revaluation reserve following the retirement or disposal of an asset which relates to that asset may be transferred to general reserve.

9. Hire Purchases

In the case of fixed assets acquired on hire purchase terms, although legal ownership does not vest in the enterprise, such assets are recorded at their cash value, which, if not readily available, is calculated by assuming an appropriate rate of interest. They are shown in the balance sheet with an appropriate narration to indicate that the enterprise does not have full ownership thereof.

10. Disclosure

- (i) Gross and net book values of fixed assets at the beginning and end of an accounting period showing additions, disposals, acquisitions and other movements;
- (ii) Expenditure incurred on account of fixed assets in the course of construction or acquisition; and
- (iii) Revalued amounts substituted for historical costs of fixed assets, the method adopted to compute the revalued amounts, the nature of any indices used, the year of any appraisal made, and whether an external valuer was involved, in case where fixed assets are stated at revalued amounts.

IMPAIRMENT OF ASSETS

When firms systematically depreciate assets, it is possible that for some reason the asset will decline in value such that its recoverable value is less than its book value (cost minus accumulated depreciation).

The Institute of Chartered Accountants of India has made it mandatory for a entities to account for impairment of assets. The Institute has brought about such requirement *vide* its Accounting Standard 28 (AS 28). With effect from 1.4.2005 the Accounting Standard has become applicable to all enterprises notwithstanding its status on a stock exchange or its turnover.

The Accounting Standard requires an enterprise to do the following:

- Assess at each balance sheet date if any indications exist that an asset may be impaired.

Such indications could be a significant decline in market value; adverse changes in the technological, market, economic or legal environment; increase in rate of return on investment or even technological obsolescence.

- Identify and recognize the impaired assets

Where any such indications exist, the management must identify if the asset has been rendered impaired. *An asset is impaired when its carrying amount is higher than both its value in use and its net selling price.* Value in use is calculated as the present value of estimated future cash flows expected to arise from the continuing use of an asset and from its disposal at the end of its useful life. Net selling price is the amount obtainable from the sale of an asset in an arm's length transaction.

- Measure the impairment loss

An impairment loss is measured as the amount by which the asset's carrying amount exceeds the higher of the value in use and the net selling price of that asset.

- Account for or recognize the impairment loss in its books.

An impairment loss on a revalued asset is recognized as an expense in the statement of profit and loss. However, an impairment loss on a revalued asset is recognized directly against any revaluation surplus for the asset to the extent that the impairment loss does not exceed the amount held in the revaluation surplus for that same asset. After the recognition of an impairment loss, the depreciation (amortization) charge for the asset should be adjusted in future periods to allocate the asset's revised carrying amount, less its residual value (if any), on a systematic basis over its remaining useful life.

Thus AS 28 entails an extensive procedure of identifying impaired assets and undertaking their valuation.

While, theoretically, firms may recognize impairment charges at any time, the type of events and circumstances leading to an impairment review suggest that companies are more likely to recognize impairment charges when they are having financial difficulties and may be incurring losses. As a result, care needs to be taken to assure that impairments are not recorded prematurely as a means to improve future performance. In some cases, companies experiencing an economic downturn may seek to find all sources of losses and bundle them in order to improve future earnings. This is called a *big bath*. The impact: reporting a high return on investment is easier in future years because the asset basis is lower.

Corporate Insight

Vedanta writes down ₹ 20k cr on oil biz

India Inc's Biggest Write-Off Results In Record Quarterly Loss Of \$3Bn

In the biggest write-down in India's corporate history, Sesa Sterlite, which was renamed as Vedanta last week, has been hit hard by failing crude prices as it booked nearly ₹ 20,000 crore (\$3 billion) as "goodwill impairment charges" related to its oil and gas business. The write-down resulted in the company posting the biggest quarterly loss in the country's corporate history. Vedanta reported a consolidated net loss of ₹ 19,228 crore (about \$3 billion) for the January-March quarter as against a profit of ₹ 1,621 crore in the corresponding quarter last year.

An impairment refers to an erosion in the value of an asset, including an intangible asset like goodwill. This means Cairn India, which Vedanta acquired for \$9.1 billion in 2011, is now valued at around \$6 billion as the company reported exceptional items of ₹ 19,956 crore for the quarter ended March 31, 2015, Vedanta said in its earnings report. Vedanta, the Indian-listed subsidiary of London-listed Vedanta Resources Plc owns 58.9% in Cairn India.

It may be recalled that Tata Steel in May 2013 had announced a goodwill impairment charge of \$1.6 billion on account of loss of value at its European steel business under Corus and other overseas assets due to a slump in demand in overseas markets, the biggest write-off then.

"This is a one time non-cash charge. The impairment will be reflected as a write-down in goodwill and will have no bearing on operational cash flows in coming quarters," Vedanta Resources CEO Tom Albanese told TOI. The companies that bought assets at higher valuations at the peak of the economy are now forced to write down the value of their investments in such assets. BP in last two years, has written down the value of its 30% stake in the KG basin block acquired from RIL for \$7.2 billion by over \$1 billion. State-owned ONGC also had to write down the value of its investments in Imperial Energy by \$500 million that it acquired for \$2.1 billion in 2008.

Source: *The Times of India* (Times Business), New Delhi, April 30, 2015, p. 21.

Ind AS 36, Impairment of Assets

The Ministry of Corporate Affairs has gazetted Indian Accounting Standards in February, 2015 with a view to adopt IFRSs for certain classes of companies. Ind AS 36 titled Impairment of Assets issued in February 2015 contains the following provisions on impairment of assets.

1. Objective

The objective of this Standard is to prescribe the procedures that an entity applies to ensure that its assets are carried at no more than their recoverable amount. An asset is carried at more than its recoverable amount if its carrying amount exceeds the amount to be recovered through use or sale of the asset. If this is the case, the asset is described as impaired and the Standard requires the entity to recognise an impairment loss. The Standard

also specifies when an entity should reverse an impairment loss and prescribes disclosures.

2. Scope

This Standard shall be applied in accounting for the impairment of all assets other than:

- (a) inventories (see Ind AS 2, *Inventories*);
- (b) contract assets and assets arising from costs to obtain or fulfill a contract that are recognised in accordance with Ind AS 115, *Revenue from Contracts with Customers*;
- (c) deferred tax assets (see Ind AS 12, *Income Taxes*);
- (d) assets arising from employee benefits (see Ind AS 19, *Employee Benefits*);
- (e) financial assets that are within the scope of Ind AS 109, *Financial Instruments*;
- (f) biological assets related to agricultural activity within the scope of Ind AS 41 *Agriculture* that are measured at fair value less costs to sell;
- (g) deferred acquisition costs, and intangible assets, arising from an insurer's contractual rights under insurance contracts within the scope of Ind AS 104, *Insurance Contracts*; and
- (h) non-current assets (or disposal groups) classified as held for sale in accordance with Ind AS 105, *Non-current Assets Held for Sale and Discontinued Operations*.

3. Measuring recoverable amount

(i) It is not always necessary to determine both an asset's fair value less costs of disposal and its value in use. If either of these amounts exceeds the asset's carrying amount, the asset is not impaired and it is not necessary to estimate the other amount.

(ii) It may be possible to measure fair value less costs of disposal, even if there is not a quoted price in an active market for an identical asset. However, sometimes it will not be possible to measure fair value less costs of disposal because there is no basis for making a reliable estimate of the price at which an orderly transaction to sell the asset would take place between market participants at the measurement date under current market conditions. In this case, the entity may use the asset's value in use as its recoverable amount.

(iii) If there is no reason to believe that an asset's value in use materially exceeds its fair value less costs of disposal, the asset's fair value less costs of disposal may be used as its recoverable amount. This will often be the case for an asset that is held for disposal. This is because the value in use of an asset held for disposal will consist mainly of the net disposal proceeds, as the future cash flows from continuing use of the asset until its disposal are likely to be negligible.

(iv) Recoverable amount is determined for an individual asset, unless the asset does not generate cash inflows that are largely independent of those from other assets or groups of assets. If this is the case, recoverable amount is determined, for the cash-generating unit to which the asset belongs:

- (a) the asset's fair value less costs of disposal is higher than its carrying amount; or
- (b) the asset's value in use can be estimated to be close to its fair value less costs of disposal and fair value less costs of disposal can be measured.

(v) In some cases, estimates, averages and computational short cuts may provide reasonable approximations of the detailed computations illustrated in this Standard for determining fair value less costs of disposal or value in use.

4. Fair value less costs of disposal

(i) Costs of disposal, other than those that have been recognised as liabilities, are deducted in measuring fair value less costs of disposal. Examples of such costs are legal costs, stamp duty and similar transaction taxes, costs of removing the asset, and direct incremental costs to bring an asset into condition for its sale. However, termination benefits (as defined in Ind AS 19) and costs associated with reducing or reorganising a business following the disposal of an asset are not direct incremental costs to dispose of the asset.

(ii) Sometimes, the disposal of an asset would require the buyer to assume a liability and only a single fair value less costs of disposal is available for both the asset and the liability.

5. Value in use

(i) The following elements shall be reflected in the calculation of an asset's value in use:

- (a) an estimate of the future cash flows the entity expects to derive from the asset;
- (b) expectations about possible variations in the amount or timing of those future cash flows;
- (c) the time value of money, represented by the current market risk-free rate of interest;
- (d) the price for bearing the uncertainty inherent in the asset; and
- (e) other factors, such as illiquidity, that market participants would reflect in pricing the future cash flows the entity expects to derive from the asset.

(ii) Estimating the value in use of an asset involves the following, steps:

- (a) estimating the future cash inflows and outflows to be derived from continuing use of the asset and from its ultimate disposal; and
- (b) applying the appropriate discount rate to those future cash flows.

6. Composition of estimates of future cash flows

(i) Estimates of future cash flows shall include:

- (a) projections of cash inflows from the continuing use of the asset;
- (b) projections of cash outflows that are necessarily incurred to generate the cash inflows from continuing use of the asset (including cash outflows to prepare the asset for use) and can be directly attributed, or allocated on a reasonable and consistent basis, to the asset; and
- (c) net cash flows, if any, to be received (or paid) for the disposal of the asset at the end of its useful life.

(ii) Estimates of future cash flows shall not include:

- (a) cash inflows or outflows from financing activities; or
- (b) income tax receipts or payments.

(iii) The estimate of net cash flows to be received (or paid) for the disposal of an asset at the end of its useful life shall be the amount that an entity expects to obtain from the disposal of the asset in an arm's length transaction between knowledgeable, willing parties, after deducting the estimated costs of disposal.

7. Foreign currency future cash flows

Future cash flows are estimated in the currency in which they will be generated and then discounted using a discount rate appropriate for that currency. An entity translates the present value using the spot exchange rate at the date of the value in use calculation.

8. Discount rate

The discount rate (rates) shall be a pre-tax rate (rates) that reflect(s) current market assessments of.

- (a) the time value of money; and
- (b) the risks specific to the asset for which the future cash flow estimates have not been adjusted.

9. Recognising and measuring an impairment loss

(i) If, and only if, the recoverable amount of an asset is less than its carrying amount, the carrying amount of the asset shall be reduced to its recoverable amount. That reduction is an impairment loss.

(ii) An impairment loss shall be recognised immediately in profit or loss, unless the asset is carried at revalued amount in accordance with another Standard (for example, in accordance with the revaluation model in Ind AS 16). Any impairment loss of a revalued asset shall be treated as a revaluation decrease in accordance with that other Standard.

(iii) When the amount estimated for an impairment loss is greater than the carrying amount of the asset to which it relates, an entity shall recognise a liability if, and only if, that is required by another Standard.

(iv) After the recognition of an impairment loss, the depreciation (amortisation) charge for the asset shall be adjusted

in future periods to allocate the asset's revised carrying amount, less its residual value (if any), on a systematic basis over its remaining useful life.

10. Cash-generating units and goodwill

Identifying the cash-generating unit to which an asset belongs

(i) If there is any indication that an asset may be impaired, recoverable amount shall be estimated for the individual asset. If it is not possible to estimate the recoverable amount of the individual asset, an entity shall determine the recoverable amount of the cash-generating unit to which the asset belongs (the asset's cash-generating unit).

(ii) An asset's cash-generating unit is the smallest group of assets that includes the asset and generates cash inflows that are largely independent of the cash inflows from other assets or groups of assets. Identification of an asset's cash-generating unit involves judgement. If recoverable amount cannot be determined for an individual asset, an entity identifies the lowest aggregation of assets that generate largely independent cash inflows.

(iii) If an active market exists for the output produced by an asset or group of assets, that asset or group of assets shall be identified as a cash-generating unit, even if some or all of the output is used internally. If the cash inflows generated by any asset or cash-generating unit are affected by internal transfer pricing, an entity shall use management's best estimate of future price(s) that could be achieved in arm's length transactions in estimating:

- (a) the future cash inflows used to determine the asset's or cash-generating unit's value in use; and
- (b) the future cash outflows used to determine the value in use of any other assets or cash-generating units that are affected by the internal transfer pricing.

(iv) Cash-generating units shall be identified consistently from period to period for the same asset or types of assets, unless a change is justified.

Recoverable amount and carrying amount of a cash-generating unit

(v) The carrying amount of a cash-generating unit shall be determined on a basis consistent with the way the recoverable amount of the cash-generating unit is determined.

11. Goodwill

Allocating goodwill to cash-generating units

(i) For the purpose of impairment testing, goodwill acquired in a business combination shall, from the acquisition date, be allocated to each of the acquirer's cash-generating units, or groups of cash-generating units, that is expected to benefit from the synergies of the combination, irrespective of whether other assets or liabilities of the acquire are assigned to those units or groups of units.

(ii) If goodwill has been allocated to a cash-generating unit and the entity disposes of an operation within that unit, the goodwill associated with the operation disposed of shall be:

- (a) included in the carrying amount of the operation when determining the gain or loss on disposal; and
- (b) measured on the basis of the relative values of the operation disposed of and the portion of the cash-generating unit retained, unless the entity can demonstrate that some other method better reflects the goodwill associated with the operation disposed of.

12. Corporate assets

(i) Corporate assets include group or divisional assets such as the building of a headquarters or a division of the entity, EDP equipment or a research centre. The structure of an entity determines whether an asset meets this Standard's definition of corporate assets for a particular cash-generating unit. The distinctive characteristics of corporate assets are that they do not generate cash inflows independently of other assets or groups of assets and their carrying amount cannot be fully attributed to the cash-generating unit under review.

(ii) Because corporate assets do not generate separate cash inflows, the recoverable amount of an individual corporate asset cannot be determined unless management has decided to dispose of the asset. As a consequence, if there is an indication that a corporate asset may be impaired, recoverable amount is determined for the cash-generating unit or group of cash-generating units to which the corporate asset belongs, and is compared with the carrying amount of this cash-generating unit or group of cash-generating units. Any impairment loss is recognised.

(iii) In testing a cash-generating unit for impairment, an entity shall identify all the corporate assets that relate to the cash-generating unit under review. If a portion of the carrying amount of a corporate asset:

- (a) can be allocated on a reasonable and consistent basis to that unit, the entity shall compare the carrying amount of the unit, including the portion of the carrying amount of the corporate asset allocated to the unit, with its recoverable amount. Any impairment loss shall be recognised.
- (b) cannot be allocated on a reasonable and consistent basis to that unit, the entity shall:
 - (i) compare the carrying amount of the unit, excluding the corporate asset, with its recoverable amount and recognise any impairment loss;
 - (ii) identify the smallest group of cash-generating units that includes the, cash-generating unit under review and to which a portion of the carrying amount of the corporate asset can be allocated on a reasonable and consistent basis; and
 - (iii) compare the carrying amount of that group of cash-generating units; including the portion of the

carrying amount of the corporate asset allocated to that group of units, with the recoverable amount of the group of units. Any impairment loss shall be recognised.

13. Impairment loss for a cash-generating unit

An impairment loss shall be recognised for a cash-generating unit (the smallest group of cash-generating units to which goodwill or a corporate asset has been allocated) if, and only if, the recoverable amount of the unit (group of units) is less than the carrying amount of the unit (group of units). The impairment loss shall be allocated to reduce the carrying amount of the assets of the unit (group of units) in the following order:

- (a) first, to reduce the carrying amount of any goodwill allocated to the cash-generating unit (group of units); and
- (b) then, to the other assets of the unit (group of units) pro rata on the basis of the carrying amount of each asset in the unit (group of units).

These reductions in carrying amounts shall be treated as impairment losses on individual assets.

14. Reversing an impairment loss

(i) An entity shall assess at the end of each reporting period whether there is any indication that an impairment loss recognised in prior periods for an asset other than goodwill may no longer exist or may have decreased. If any such indication exists, the entity shall estimate the recoverable amount of that asset.

(ii) If there is an indication that an impairment loss recognised for an asset other than goodwill may no longer exist or may have decreased, this may indicate that the remaining useful life, the depreciation (amortisation) method or the residual value may need to be reviewed and adjusted in accordance with the Indian Accounting Standard applicable to the asset, even if no impairment loss is reversed for the asset.

(iii) A reversal of an impairment loss reflects an increase in the estimated service potential of an asset, either from use or from sale, since the date when an entity last recognised an impairment loss for that asset.

15. Reversing an impairment loss for an individual asset

(i) The increased carrying amount of an asset other than goodwill attributable to a reversal of an impairment loss shall not exceed the carrying amount that would have been determined (net of amortisation or depreciation) had no impairment loss been recognised for the asset in prior years.

(ii) A reversal of an impairment loss for an asset other than goodwill shall be recognised immediately in profit or loss, unless the asset is carried at revalued amount in accordance with another Indian Accounting Standard (for example, the revaluation model in Ind AS 16). Any reversal of an impairment loss of a

revalued asset shall be treated as a revaluation increase in accordance with that other Indian Accounting Standard.

(iii) A reversal of an impairment loss on a revalued asset is recognised in other comprehensive income and increases the revaluation-surplus for that asset. However, to the extent that an impairment loss on the 'Same revalued asset was previously recognised in profit or loss, a reversal of that impairment loss is also recognised in profit or loss.

(iv) After a reversal of an impairment loss is recognised, the depreciation (amortisation) charge for the asset shall be adjusted in future periods to allocate the asset's revised carrying amount, less its residual value (if any), on a systematic basis over its remaining useful life.

16. Reversing an impairment loss for a cash-generating unit

A reversal of an impairment loss for a cash-generating unit shall be allocated to the assets of the unit, except for goodwill, *pro rata* with the carrying amounts of those assets. These increases in carrying amounts shall be treated as reversals of impairment losses for individual assets and recognised.

17. Reversing an impairment loss for goodwill

(i) An impairment loss recognised for goodwill shall not be reversed in a subsequent period.

(ii) Ind AS 38, Intangible Assets, prohibits the recognition of internally generated goodwill. Any increase in the recoverable amount of goodwill in the periods following the recognition of an impairment loss for that goodwill is likely to be an increase in internally generated goodwill, rather than a reversal of the impairment loss recognised for the acquired goodwill.

18. Disclosure

(i) An entity shall disclose the following for each class of assets:

- (a) the amount of impairment losses recognised in profit or loss during the period and the line item(s) of the statement of profit and loss in which those impairment losses are included.
- (b) the amount of reversals of impairment losses recognised in profit or loss during the period and the line item(s) of the statement of profit and loss in which those impairment losses are reversed.
- (c) the amount of impairment losses on revalued assets recognised in other comprehensive income during the period.
- (d) the amount of reversals of impairment losses on revalued assets recognised in other comprehensive income during the period.

(ii) An entity that reports segment information in accordance with Ind AS 108, shall disclose the following for each reportable segment:

- (a) the amount of impairment losses recognised in profit or loss and in other comprehensive income during the period.
- (b) the amount of reversals of impairment losses recognised in profit or loss and in other comprehensive income during the period.

(iii) An entity shall disclose the following for an individual asset (including goodwill) or a cash-generating unit, for which an impairment loss has been recognised or reversed during the period:

- (a) the events and circumstances that led to the recognition or reversal of the impairment loss.
- (b) the amount of the impairment loss recognised or reversed.
- (c) for an individual asset:
 - (i) the nature of the asset; and
 - (ii) if the entity reports segment information in accordance with Ind AS 108, the reportable segment to which the asset belongs.

(d) for a cash-generating unit:

- (i) a description of the cash-generating unit (such as whether it is a product line, a plant, a business operation, a geographical area, or a reportable segment as defined in Ind AS 108);
- (ii) the amount of the impairment loss recognised or reversed by class of assets and, if the entity reports segment information in accordance with Ind AS 108, by reportable segment; and
- (iii) if the aggregation of assets for identifying the cash-generating unit has changed since the previous estimate of the cash-generating unit's recoverable amount (if any), a description of the current and former way of aggregating assets and the reasons for changing the way the cash-generating unit is identified.

(e) the recoverable amount of the asset (cash-generating unit) and whether the recoverable amount of the asset (cash-generating unit) is its fair value less costs of disposal or its value in use.

(f) if the recoverable amount is fair value less costs of disposal, the entity shall disclose the following information:

- (i) the level of the fair value hierarchy (see Ind AS 113) within which the fair value measurement of the asset (cash-generating unit) is categorised in its entirety (without taking into account whether the 'costs of disposal' are observable);
- (ii) for fair value measurements categorised within Level 2 and Level 3 of the fair value hierarchy, a description of the valuation technique(s) used to

measure fair value less costs of disposal. If there has been a change in valuation technique, the entity shall disclose that change and the reason(s) for making it; and

(iii) for fair value measurements categorised within Level 2 and Level 3 of the fair value hierarchy, each key assumption on which management has based its determination of fair value less costs of disposal. Key assumptions are those to which the asset's (cash-generating unit's) recoverable amount is most sensitive. The entity shall also disclose the discount rate(s) used in the current measurement and previous measurement if fair value less costs of disposal is measured using a present value technique.

(g) if recoverable amount is value in use, the discount rate(s) used in the current estimate and previous estimate (if any) of value in use.

RULES ON ASSET IMPAIRMENTS IN U.S.A.

SFAS No. 121 (FASB, USA, SFAS No. 121, 1995) addresses the question of impairment of assets. SFAS 121 requires that long-lived tangible and intangible assets be reviewed for impairment when economic events suggest that a firm may not recover the carrying amount of an asset. The review for recoverability requires that the firm estimate the expected future cash flows from the use of the asset. If the sum of the expected future cash flows (without discounting or interest) is less than the carrying value, then an impairment charge must be recognized. The impairment loss should be an amount needed to reduce the asset to its fair value.

Concerning the question of what level of aggregation should be employed in recognizing impairment, the FASB stated that assets should be "grouped at the lowest level for which there are identifiable cash flows that are largely independent of the cash flows of other groups of assets." In some circumstances in which cash flows are not specific to particular assets and a major identifiable segment of the firm is being disposed of within a year of the measurement date, APB Opinion No. 30 governs and the asset is carried at lower of carrying amount or net realizable value, but this changed in SFAS No. 144.

If the impairment test for recognition applies to fixed assets acquired in a business combination and goodwill was recognized when the acquisition occurred, goodwill is assigned to the assets on a *pro rata* basis using fair values of all of the assets in the purchase. If a write down is necessary, eliminate goodwill first.

There are two issues of verifiability underlying this standard. The first, concerns estimating the future cash flows attributable to the asset; the second, involves estimating the fair value of the asset. Concerning the former, the FASB desired the "best estimate" of future cash flows. This measurement can be either a single modal, most likely outcome of expected future cash flows, or an expected-value approach weighing the probabilities of possible

outcomes.” The Board appeared to view this as not unlike a capital budgeting type of decision in which future cash flows are estimated. Concerning fair values of assets, several possible sources can be utilized, such as industry-published list prices or quotations from online database services for similar assets. If quoted fair values are not available, they can be estimated by discounting the future cash flows at an appropriate rate, taking into account the risk factors inherent in each situation. The standard maintains an optimistic tone relative to verifiability when discussing these two measurements.

SFAS No. 144 brought refinements to SFAS No. 121 but did not change the basic measurement rules. In the case where several assets constitute a productive unit but the assets have different lives, then the undiscounted cash flow analysis is done in accordance with the principal asset: The principal asset is the most significant asset in terms of its cash flow generating capacity. If an impairment results, it is allocated proportionately in accordance with the carrying values of the individual assets constituting the group.

Assets in discontinued segments were previously covered by APB Opinion No. 30. The presentation of the assets constituting these operations net of tax effects and below the continuing operations is still covered by APB Opinion No. 30. However, APB Opinion No. 30 is superseded by SFAS No. 144 in terms of the valuation of these assets. Assets are no longer to be valued at their net realizable value with anticipation of further possible losses from operations from the statement date to the disposition date being deducted from the carrying value. Assets are now to be valued in accordance with the criteria developed in SFAS No. 121 with the refinements added by SFAS No. 144.

In computing the carrying value of impaired assets, proportionate goodwill was assigned and deducted in accordance with SFAS No. 121. Since SFAS No. 142 converted goodwill into a non-amortizable asset subject to its own impairment rules, goodwill is no longer assigned to individual assets. The one exception is if the assets themselves constitute a reportable segment or component that gave rise to goodwill when acquired.

IAS 36: IMPAIRMENT OF ASSETS

The following are the main provisions of IAS 36, Impairment of Assets.

1. Objective

The objective of this Standard is to prescribe the procedures that an entity applies to ensure that its assets are carried at no more than their recoverable amount. An asset is carried at more than its recoverable amount if its carrying amount exceeds the amount to be recovered through use or sale of the asset. If this is the case, the asset is described as impaired and the Standard requires the entity to recognise an impairment loss.

2. Identifying an asset that may be impaired

An entity shall assess at the end of each reporting period whether there is any indication that an asset may be impaired. If

any such indication exists, the entity shall estimate the recoverable amount of the asset.

3. Measuring recoverable amount

The recoverable amount of an asset or a cash-generating unit is the higher of its fair value less costs to sell and its value in use.

It is not always necessary to determine both an asset's fair value less costs to sell and its value in use. If either of these amounts exceeds the asset's carrying amount, the asset is not impaired and it is not necessary to estimate the other amount.

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Costs of disposal are incremental costs directly attributable to the disposal of an asset or cash--generating unit, excluding finance costs and income tax expense.

Value in use is the present value of the future cash flows expected to be derived from an asset or cash-generating unit.

4. Recognising and measuring an impairment loss

If, and only if, the recoverable amount of an asset is less than its carrying amount, the carrying amount of the asset shall be reduced to its recoverable amount. That reduction is an impairment loss.

An impairment loss shall be recognised immediately in profit or loss, unless the asset is carried at revalued amount in accordance with another Standard (for example, in accordance with the revaluation model in IAS 16 *Property, Plant and Equipment*). Any impairment loss of a revalued asset shall be treated as a revaluation decrease in accordance with that other Standard.

An impairment loss shall be recognised for a cash-generating unit (the smallest group of cash-generating units to which goodwill or a corporate asset has been allocated) if, and only if, the recoverable amount of the unit (group of units) is less than the carrying amount of the unit (group of units). The impairment loss shall be allocated to reduce the carrying amount of the assets of the unit (group of units) in the following order:

- (a) first, to reduce the carrying amount of any goodwill allocated to the cash-generating unit (group of units); and
- (b) then, to the other assets of the unit (group of units) pro rata on the basis of the carrying amount of each asset in the unit (group of units),

However, an entity shall not reduce the carrying amount of an asset below the highest of:

- (a) its fair value less costs to sell (if determinable);
- (b) its value in use (if determinable); and
- (c) zero.

The amount of the impairment loss that would otherwise have been allocated to the asset shall be allocated pro rata to the other assets of the unit (group of units).

5. Reversing an impairment loss

An entity shall assess at the end of each reporting period whether there is any indication that an impairment loss recognised in prior periods for an asset other than goodwill may no longer exist or may have decreased.

If any such indication exists, the entity shall estimate the recoverable amount of that asset.

An impairment loss recognised in prior periods for an asset other than goodwill shall be reversed if, and only if, there has been a change in the estimates used to determine the asset's recoverable amount since the last impairment loss was recognised. A reversal of an impairment loss for a cash-generating unit shall be allocated to the assets of the unit, except for goodwill, pro rata with the carrying amounts of those assets. The increased carrying amount of an asset other than goodwill attributable to a reversal of an impairment loss shall not exceed the carrying amount that would have been determined (net of amortisation or depreciation) had no impairment loss been recognised for the asset in prior years.

A reversal of an impairment loss for an asset other than goodwill shall be recognised immediately in profit or loss, unless the asset is carried at revalued amount in accordance with another IFRS (for example, the revaluation model in *IAS 16 Property, Plant and Equipment*). Any reversal of an impairment loss of a revalued asset shall be treated as a revaluation increase in accordance with that other IFRS.

An impairment loss recognised for goodwill shall not be reversed in a subsequent period.

LEASES

A company wishing to obtain the use of an asset can either purchase the asset or lease the asset.

A lease is a contract between the owner of an asset — the lessor — and another party seeking use of the asset — the lessee. Through the lease, the lessor grants the right to use the asset to the lessee. The right to use the asset can be for a long period, such as 20 years, or a much shorter period, such as a month. In exchange for the right to use the asset, the lessee makes periodic lease payments to the lessor. A lease, then, is a form of financing to the lessee provided by the lessor that enables the lessee to obtain the use of the leased asset.

Advantages of Leasing

There are several advantages to leasing an asset compared to purchasing it. Leases can provide less costly financing; they usually require little, if any, down payment and often are at lower fixed interest rates than those incurred if the asset was purchased. This financing advantage is the result of the lessor having advantages over the lessee and/or another lender. The lessor may be in a better position to take advantage of tax benefits of

ownership, such as depreciation and interest. The lessor may be better able to value and bear the risks associated with ownership, such as obsolescence, residual value, and disposition of asset. The lessor may enjoy economies of scale for servicing assets. As a result of these advantages, the lessor may offer attractive lease terms and leasing the asset may be less costly for the lessee than owning the asset. Further, the negotiated lease contract may contain less-restrictive provisions than other forms of borrowing.

Companies also use certain types of leases because of perceived financial reporting and tax advantages. Although they provide a form of financing, certain types of leases are not shown as debt on the balance sheet. The items leased under these types of leases also do not appear as assets on the balance sheet. Therefore, no interest expense or depreciation expense is included in the income statement. In addition, in some countries — including the United States — because financial reporting rules differ from tax regulations, a company may own an asset for tax purposes (and thus obtain deductions for depreciation expense for tax purposes) while not reflecting the ownership in its financial statements. A lease that is structured to provide a company with the tax benefits of ownership while not requiring the asset to be reflected on the company's financial statements is known as a synthetic lease.

Finance (or Capital) Leases versus Operating Leases

There are two main classifications of leases: **finance (or capital)** and **operating leases**. Finance lease is known as capital lease in US GAAP terminology. The economic substance of a finance (or capital) lease is very different from an operating lease, as are the implications of each for the financial statements for the lessee and lessor. In substance, a finance (capital) lease is equivalent to the purchase of some asset (lease to own) by the buyer (lessee) that is directly financed by the seller (lessor). An operating lease is an agreement allowing the lessee to use some asset for a period of time, essentially a rental.

Under IFRS, the classification of a lease as a finance lease or an operating lease depends on the transfer of the risks and rewards incidental to ownership of the leased asset. If substantially all the risks and rewards are transferred to the lessee, the lease is classified as a finance lease and the lessee reports a leased asset and lease obligation on its balance sheet. Otherwise, the lease is reported as an operating lease, in which case the lessee reports neither an asset nor a liability; the lessee reports only the lease expense. Similarly, if the lessor transfers substantially all the risks and rewards incidental to legal ownership, the lease is reported as a finance lease and the lessor reports a lease receivable on its balance sheet and removes the leased asset from its balance sheet. Otherwise, the lease is reported as an operating lease, and the lessor keeps the leased asset on its balance sheet. Examples of situations that would normally lead to a lease being classified as a finance lease include the following:

- The lease transfers ownership of the asset to the lessee by the end of the lease term.

- The lessee has the option to purchase the asset at a price that is expected to be sufficiently lower than the fair value at the date the option becomes exercisable for it to be reasonably certain, at the inception of the lease, that the option will be exercised.
- The lease term is for the major part of the economic life of the asset, even if the title is not transferred.
- At the inception of the lease, the present value of the minimum lease payments amounts to at least substantially all of the fair value of the leased asset.
- The leased assets are of such a specialised nature that only the lessee can use them without major modifications.

Although accounting for leases under U.S. GAAP is guided by a similar principle of the transfer of benefits and risks, U.S. GAAP is more prescriptive in its criteria for classifying capital and operating leases. Four criteria are specified to identify when a lease is a capital lease:

1. Ownership of the leased asset transfers to the lessee at the end of the lease.
2. The lease contains an option for the lessee to purchase the leased asset cheaply (bargain purchase option).
3. The lease term is 75 per cent or more of the useful life of the leased asset.
4. The present value of lease payments is 90 per cent or more of the fair value of the leased asset.

Only one of these criteria has to be met for the lease to be considered a capital lease by the lessee. On the lessor side, satisfying at least one of these four criteria plus meeting revenue recognition requirements (that is, being reasonably assured of cash collection and having performed substantially under the lease) determine a capital lease. If none of the four criteria are met or if the revenue recognition requirement is not met, the lessor reports the lease as an operating lease.

Accounting and Reporting by the Lessee

Because a finance lease is economically similar to borrowing money and buying an asset, a company that enters into a finance lease as the lessee reports an asset (leased asset) and related debt (lease payable) on its balance sheet. The initial value of both the leased asset and lease payable is the lower of the present value of future lease payments and the fair value of the leased asset; in many cases, these will be equal. On the income statement, the company reports interest expense on the debt, and if the asset acquired is depreciable, the company reports depreciation expense.

Because an operating lease is economically similar to renting an asset, a company that enters into an operating lease as the lessee records a lease expense on its income statement during the period it uses the asset. No asset or liability is recorded on its balance sheet. The main accounting differences for a lessee between a finance lease and an operating lease, then, are that reported assets and debt are higher and expenses are generally higher in the early years under a finance lease. Because of the

higher reported debt and expenses under a finance lease, lessees often prefer operating leases to finance leases. (Although classifying a lease as an operating lease can make reported profitability ratios and debt-to-equity ratios appear better, financial analysts are aware of this impact and typically adjust the reported numbers accordingly.)

On the lessee's statement of cash flows, for an operating lease, the full lease payment is shown as an operating cash outflow. For a finance lease, only the portion of the lease payment relating to interest expense reduces operating cash flow; the portion of the lease payment that reduces the lease liability appears as a cash outflow in the financing section.

A company reporting a lease as an operating lease will typically show higher profits in early years, higher return measures in early years, and a stronger solvency position than an identical company reporting an identical lease as a finance lease. However, the company reporting the lease as a finance lease will show higher operating cash flows because the portion of the lease payment that reduces the carrying amount of the lease liability will lie reflected as a financing cash outflow rather than an operating cash outflow. The interest expense portion of the lease payment on the statement of cash flows can be treated as operating or financing cash outflow under IFRS and is treated as an operating cash outflow under U.S. GAAP.

The explicit standards in the United States that determine when a company should report a capital lease versus an operating lease make it easier for a company to structure a lease so that it is reported as an operating lease. The company structures the lease so that none of the four capital lease identifying criteria is met. Similar to debt disclosures, however, lease disclosures show payments under both capital and operating leases for the next five years and afterward. These disclosures can help to estimate the extent of a company's off-balance-sheet lease financing through operating leases.

As required by IFRS, the balance sheet presents finance lease obligations in the line items labeled "Debt." Additionally, IFRS require certain disclosures to be made in the notes; the layout of disclosure notes on debt varies across companies.

Accounting and Reporting by the Lessor

Similar to accounting and reporting on the lessee side, the lessor also must determine whether a lease is classified as operating or finance. Under IFRS, the determination of a finance lease on the lessor's side mirrors that of the lessee's. That is, in a finance lease the lessor transfers substantially all the risks and rewards incidental to legal ownership. Under U.S. GAAP, the lessor determines whether a lease is a capital or operating lease using the same four identifying criteria as a lessee, plus the additional revenue recognition criteria. That is, the lessor must be reasonably assured of cash collection and has performed substantially under the lease. From the lessor's perspective, U.S. GAAP distinguishes between types of capital leases. There are two main types of capital leases from a lessor's perspective: (1) direct financing leases, and (2) sales-type leases.

Under IFRS and U.S. GAAP, if a lessor enters into an operating lease, the lessor records any lease revenue when earned. The lessor also continues to report the leased asset on the balance sheet and the asset's associated depreciation expense on the income statement.

Under IFRS, if a lessor enters into a finance lease, the lessor reports a receivable at an amount equal to the net investment in the lease (the present value of the minimum lease payments receivable and any estimated un-guaranteed residual value accruing to the lessor). The leased asset is de-recognised; assets are reduced by the carrying amount of the leased asset. Initial direct costs incurred by a lessor, other than a manufacturer or dealer lessor, are added to the receivable and reduce the amount of income recognised over the lease term. The lease payment is treated as repayment of principal (reduces lease receivable) and finance income. The recognition of finance income should reflect a constant periodic rate of return on the lessor's net investment in the lease.

For lessors that are manufacturers or dealers, the initial direct costs are treated as an expense when the selling profit is recognised; typically, selling profit is recognised at the beginning of the lease term. Sales revenue equals the lower of the fair value of the asset or the present value of the minimum lease payments. The cost of sale is the carrying amount of the leased asset less the present value of the estimated unguaranteed residual value.

Under U.S. GAAP, a direct financing lease results when the present value of lease payments (and thus the amount recorded as a lease receivable) equals the carrying value of the leased asset. Because there is no "profit" on the asset itself, the lessor is essentially providing financing to the lessee and the revenues earned by the lessor are financing in nature (*i.e.*, interest revenue). If, however, the present value of lease payments (and thus the amount recorded as a lease receivable) exceeds the carrying amount of the leased asset, the lease is treated as a sales-type lease.

Both types of capital leases have similar effects on the balance sheet: The lessor reports a lease receivable based on the present value of future lease payments and derecognises the leased asset. The carrying value of the leased asset relative to the present value of lease payments distinguishes a direct financing lease from a sales-type lease. A direct financing lease is reported when the present value of lease payment is equal to the value of the leased asset to the lessor. When the present value of lease payments is greater than the value of the leased asset, the lease is a sales-type lease. The income statement effect will thus differ based on the type of lease.

In a direct financing lease, the lessor exchanges a lease receivable for the leased asset, no longer reporting the leased asset on its books. The lessor's revenue is derived from interest on the lease receivable. In a sales-type lease, the lessor "sells" the asset to the lessee and also provides financing on the sale. Therefore, in a sales-type lease, a lessor reports revenue from the sale, cost of goods sold (*i.e.*, the carrying amount of the asset leased), profit on the sale, and interest revenue earned from

financing the sale. The lessor will show a profit on the transaction in the year of inception and interest revenue over the life of the lease.

When a lessor enters into a sales-type lease (a lease agreement where the present value of the future lease payments is greater than the value of the leased asset to the lessor), it will show a profit on the transaction in the year of lease inception and interest revenue over the life of the lease.

Exhibit 1 summarizes the financial statement impact of operating and financing leases on the lessee and lessor.

ILLUSTRATION

Problem 1

Vidarva Chemical Ltd. purchased a machinery from Madras Machine Manufacturing Ltd. (MMM Ltd.) on 30.9.2016. Quoted price was ₹ 162 lakhs. MMM Ltd. offers 1% trade discount. Sales tax on quoted price is 5%. Vidarva Chemical Ltd. spent ₹ 42,000 for transportation and ₹ 30,000 for architect's fees. They borrowed money from ICICI ₹ 150 lakhs for acquisition of the assets @ 20% p.a. Also they spent ₹ 18,000 for material in relation to trial run. Wages and overheads incurred during trial run were ₹ 12,000 and ₹ 8,000 respectively. The machinery was ready for use on 15.11.2016. It was put to use on 15.4.2017. Find out the original cost. Also suggest the accounting treatment for the cost incurred in the interval between the date the machine was ready for commercial production and the date at which commercial production actually begins.

Solution

(1) Determination of the original cost of the machine

	₹ in lakhs	₹ in lakhs
Quoted price	162.00	
Less: 1% Trade discount	<u>(1.62)</u>	160.38
Add: Sales tax	8.10	
Transportation	0.42	
Architect's fees	0.30	
Financing cost	3.75	<u>12.57</u>
@ 20% on 150 lakhs for 1.5 months i.e. (30.09.2016 to 15.11.2016)		<u>172.95</u>
Expenditure for start-up:		
Material	0.18	
Wages	0.12	
Overhead	<u>0.08</u>	<u>0.38</u>
		<u>173.33</u>

(2) Cost incurred in the interval

Financing cost @ 20% on 150 lakhs for 15.11.2016 – 15.4.2017 = 12.50 will be charged to statement of profit and loss as per AS 16 'Borrowing Costs'.

Exhibit 1: Summary of Financial Statement Impact of Operating and Financing Leases on the Lessee and Lessor

	Balance Sheet	Income Statement	Statement of Cash Flows
Lessee			
<i>Operating Lease</i>	No effect	Reports rent expense	Rent payment is an operating cash outflow
<i>Finance Lease under IFRS (capital lease under U.S. GAAP)</i>	Recognises leased asset and lease liability	Reports depreciation expense on leased asset Reports interest expense on lease liability	Reduction of lease liability is a financing cash outflow Interest portion of lease payment is either an operating or financing cash outflow under IFRS and an operating cash outflow under U.S. GAAP
Lessor			
<i>Operating Lease</i>	Retains asset on balance sheet	Reports rent income Reports depreciation expense on leased asset	Rent payment received are an operating cash inflow
<i>Finance Lease^a</i> When present value of lease payments equals the carrying amount of the leased asset (called a direct financing lease in U.S. GAAP)	Removes asset from balance sheet Recognises lease receivable	Reports interest revenue on lease receivable	Interest portion of lease payment received is either an operating or investing cash inflow under IFRS and an operating cash outflow under U.S. GAAP Receipt of lease principal is an investing cash inflow ^b
When present value of lease payments exceeds the carrying amount of the leased asset (called a sales-type lease in U.S. GAAP)	Removes asset Recognises lease receivable	Reports profit on sale Reports interest revenue on lease receivable	Interest portion of lease payment received is either an operating or investing cash inflow under IFRS and an operating cash outflow under U.S. GAAP Receipt of lease principal is an investing cash inflow ^b

^a U.S. GAAP distinguishes between a direct financing lease and a sales-type lease, but IFRS does not. The accounting is the same for IFRS and U.S. GAAP despite this additional classification under U.S. GAAP.

^b If providing leases is part of a company's normal business activity, the cash flows related to the leases are classified as operating cash.

Problem 2

Fine Ltd. acquired a machine on 1st April, 2009 for ₹ 14 crore that had an estimated useful life of 7 years. The machine is depreciated on straight line basis and does not carry any residual value. On 1st April, 2013, the carrying value of the machine was reassessed at ₹ 10.20 crore and the surplus arising out of the revaluation being credited to revaluation reserve. For the year ended 31st March, 2015, conditions indicating an impairment of the machine existed and the amount recoverable ascertained to be only ₹ 140 lakhs.

You are requested to calculate the loss on impairment of the machine and show how this loss is to be treated in the books of Fine Ltd.

Fine Ltd. had followed the policy of writing down the revaluation surplus by the increased charge of depreciation resulting from the revaluation.

(CA Final, Nov., 2015)

Solution**Statement showing Impairment Loss**

	(₹ in crores)
Cost of the machine as on 1st April 2009	14.00
Depreciation for 4 years i.e., 2009-10 to 2012-13 $= \frac{\text{Rs. 14 crores}}{7 \text{ years}} \times 4 \text{ years}$	(8.00)
Carrying amount as on 31.03.2013	6.00
Add: Upward Revaluation (credited to Revaluation Reserve account)	4.20
Carrying amount of the machine as on 1st April 2013 (revalued)	10.20
Less: Depreciation for 2 years i.e., 2013-14 & 2014-15 $\left[\frac{10.20 \text{ crores}}{3 \text{ years}} \times 2 \text{ years} \right]$	(6.80)
Carrying amount as on 31.03.2015	3.40
Less: Recoverable amount	(1.40)
Impairment loss	2.00
Less: Balance in revaluation reserve as on 31.03.2015: Balance in revaluation reserve as on 31.03.2013	4.20
Less: Enhanced depreciation met from revaluation reserve 2013-14 & 2014-15 $= [(3.40 - 2.00) \times 2 \text{ years}]$	(2.80)
Impairment loss set off against revaluation reserve balance as per AS 28 "Impairment of Assets"	(1.40)
Impairment Loss to be debited to Profit and Loss account	0.60

Problem 3

Ergo Industries Ltd. gives the following estimates of cash flows relating to fixed asset on 31-12-2016. The discount rate is 15%.

Year	Cash Flow (Rs. in lakhs)
2017	4,000
2018	6,000
2019	6,000
2020	8,000
2021	4,000
Residual value at the end of 2021	= ₹ 1,000 lakhs
Fixed Asset purchased on 1-1-2014	= ₹ 40,000 lakhs
Useful life	= 8 years
Net selling price on 31.12.2016	= ₹ 20,000 lakhs

Calculate on 31.12.2016

- Carrying amount at the end of 2016
- Value in use on 31.12.2016
- Recoverable amount on 31.12.2016
- Impairment loss to be recognized for the year ended 31.12.2016
- Revised carrying amount
- Depreciation charge for 2017

Solution**Calculation of value in use**

Year	Cash Flow	Discount as per 15%	Discounted cash flow
2017	4,000	0.870	3,480
2018	6,000	0.756	4,536
2019	6,000	0.658	3,948
2020	8,000	0.572	4,576
2021	4,000	0.497	1,988
2021	(residual) 1,000	0.497	497
			19,025

- Calculation of carrying amount:
Original cost = ₹ 40,000 lakhs
Depreciation for 3 years
$$= [(40,000 - 1,000) \times 3/8] ₹ 14,625 \text{ lakhs}$$

Carrying amount on 31.12.2016
$$= [40,000 - 14,625] = ₹ 25,375 \text{ lakhs}$$
- Value in use = ₹ 19,025 lakhs
Net Selling Price = ₹ 20,000 lakhs
Recoverable amount = higher of value in use and net selling price i.e. ₹ 20,000 lakhs.
- Recoverable amount = ₹ 20,000 lakhs
- Impairment Loss = ₹ (25,375 - 20,000) = ₹ 5,375 lakhs
- Revised carrying amount = ₹ (25,375 - 5,375) = ₹ 20,000 lakhs

(f) Depreciation charge for 2017

$$= (20,000 - 1000)/5 = ₹ 3,800 \text{ lakhs}$$

Problem 4

Global Ltd. has initiated a lease for three years in respect of an equipment costing ₹ 1,50,000 with expected useful life of 4 years. The asset would revert to Global Limited under the lease agreement. The other information available in respect of lease agreement is:

- The unguaranteed residual value of the equipment after the expiry of the lease term is estimated at ₹ 20,000.
- The implicit rate of interest is 10%.
- The annual payments have been determined in such a way that the present value of the lease payment plus the residual value is equal to the cost of asset.

Ascertain in the hands of Global Ltd.

- The annual lease payment.
- The unearned finance income.
- The segregation of finance income, and also,
- Show how necessary items will appear in its profit and loss account and balance sheet for the various years.

Solution

(i) Calculation of Annual Lease Payment*

	₹
Cost of the equipment	1,50,000
Unguaranteed Residual Value	20,000
PV of residual value for 3 years @ 10% (₹ 20,000 × 0.751)	15,020
Fair value to be recovered from Lease Payment (₹ 1,50,000 – ₹ 15,020)	1,34,980
PV Factor for 3 years @ 10%	2.487
Annual Lease Payment (₹ 1,34,980 / PV Factor for 3 years @ 10% i.e. 2.487)	54,275

(ii) Unearned Financial Income

	₹
Total lease payments [₹ 54,275 × 3]	1,62,825
Add: Residual value	20,000
Gross Investments	1,82,825
Less: Present value of Investments (₹ 1,34,980 + ₹ 15,020)	1,50,000
Unearned Financial Income	32,825

(iii) Segregation of Finance Income

Year	Lease Rentals	Finance Charges @ 10% on outstanding amount of the year	Repayment	Outstanding Amount
₹	₹	₹	₹	₹
0	—	—	—	1,50,000
I	54,275	15,000	39,275	1,10,725
II	54,275	11,073	43,202	67,523
III	74,275**	6,752	67,523	—
	1,82,825	32,825	1,50,000	

* Annual lease payments are considered to be made at the end of each accounting year.

** ₹ 74,275 include unguaranteed residual value of equipment amounting ₹ 20,000.

(iv) Profit and Loss Account (Relevant Extracts)

Credit side	₹
I Year By Finance Income	15,000
II year By Finance Income	11,073
III year By Finance Income	6,752

Balance Sheet (Relevant Extracts)

Assets side	₹	₹
I year Lease Receivable	1,50,000	
Less: Amount Received	39,275	1,10,725
II year Lease Receivable	1,10,725	
Less: Received	(43,202)	67,523
III year: Lease Amount Receivable	67,523	
Less: Amount received	(47,523)	
Residual value	(20,000)	NIL

Notes to Balance Sheet

Year I	₹
Minimum Lease Payments (54,275 + 54,275)	1,08,550
Residual Value	20,000
	1,28,550
Unearned Finance Income (11,073 + 6,752)	(17,825)
Lease Receivables	1,10,725
Classification:	
Not later than 1 year	43,202
Later than 1 year but not more than 5 years	67,523
Total	1,10,725
Year II:	
Minimum Lease Payments	54,275
Residual Value (Estimated)	20,000
	74,275

Unearned Finance Income	(6,752)
Lease Receivables (not later than 1 year)	67,523
Year III:	
Lease Receivables (including residual value)	67,523
Amount Received	<u>67,523</u>
	<u>NIL</u>

REFERENCES

1. Accounting Principles Board, Statement No. 4, *Basic Concepts and Accounting Principles Underlying Financial Statements of Business Enterprises*, New York: AICPA, 1970, pp. 49-50.
2. Financial Accounting Standards Board, *Elements of Financial Statements*, Concept No. 6, Stamford, FASB, Dec. 1985, para 26.
3. The Institute of Chartered Accountants of India, *Guidance Note on Terms Used in Financial Statements*, New Delhi: ICAI, September 1983, p. 8.
4. Yuji Ijiri, *Foundations of Accounting Measurement*, Englewood Cliffs: Prentice Hall, 1967, p. 70.
5. Eldon S. Hendriksen, *Accounting Theory*, Homewood: Richard D. Irwin, 1984, p. 256.
6. Eldon S. Hendriksen, *Ibid.*, p. 257.
7. Yuji Ijiri, *Theory of Accounting Measurement*, *Ibid.*, p.86.
8. Yuji Ijiri, *Ibid.*, p. 87.
9. Yuji Ijiri, *Ibid.*, p.88.
10. American Accounting Association, *Committee on Concepts and Standards*, 1965.
11. Yuji Ijiri, *Theory of Accounting Measurement*, Florida: American Accounting Association, 1975, p. 85
12. Ahmed Riahi Belkaoui, *Accounting Theory*, Thomson Learning, 2000, p. 404-405.
13. A.C. Littleton, "Factors Limiting Accounting", *Accounting Review* (July 1970), pp. 476-480.
14. Yuji Ijiri, *Theory of Accounting Measurement*, *Ibid.*, p. 96.
15. Eldon S. Hendriksen, *Accounting Theory*, *Ibid.*, pp. 268-269.
16. Eldon S. Hendriksen, *Ibid.*, p. 282.

QUESTIONS

1. Define the term 'assets.' What are the main features of assets.
2. "Assets are probable future economic benefits obtained or controlled by a particular entity as a result of past transactions or events." Explain this statement.
3. Explain the meaning of the term 'valuation.' What are the objectives associated with valuation of assets.
4. What are different asset valuation and income determination models? Which model is most appropriate in present accounting environment? Why?
(M.Com., Delhi, 2009, 2010, 2013,)
5. "Different asset valuation models yield different financial statements with different meaning and relevance to its users." Evaluate this statement.
6. "...inso far as accountability remains the key function of accounting, it is inconceivable that historical cost will be

replaced by another valuation method in the future, although it may be supplemented by other methods." (Yuji Ijiri, *Theory of Accounting Measurement*, 1975).

Do you agree with the above statement. Give reasons.

7. Give arguments in favour of historical cost as a method of asset valuation and income determination.
8. "Though each of alternative asset valuation methods can be rationalised and justified under some condition., there is no convincing arguments that one is better than the others in every situation." Explain this statement critically.
9. Discuss the guidelines mentioned in AS-10 Accounting for Fixed Assets issued by the Institute of Chartered Accountants of India.
10. What do you mean by the term 'current assets.' Give some examples of current assets in financial accounting.
11. Mention the various asset valuation and income determination models. Which one would you recommend for adoption by business enterprises in India in the present economic situation? Give reasons.
(M.Com., Delhi, 1985, 2008)
12. Why do companies in India resort to revaluation of fixed assets for reporting purposes? Does it influence income measurement? Would you suggest some regulatory measure in this regard?
(M.Com., Delhi, 1994)
13. State the different bases of valuation of assets, both current and noncurrent. Which base, in your view, is most suitable in the period of rising prices?
(M.Com., Delhi, 1992)
14. "Historical Cost as a basis of accounting for assets has been severely criticised in accounting discipline". Why is it so? What defence can you build for historical cost as the basis of asset valuation? Explain clearly.
(M.Com., Delhi, 1991, 2011)
15. "Income determination depends upon the concept of valuation of assets applied." Explain.
(M.Com., Delhi, 1990)
16. Discuss different methods of current value accounting to approximate current value of assets. (M.Com., Delhi, 1995)
16. Why companies resort to revaluation of fixed assets for financial reporting purposes? Does it influence income measurement? In what ways can revaluation reserve be utilised by a company.
(M.Com., Delhi, 1997, 2000)
17. What are financial assets? How are such assets measured?
18. Define impairment of assets, What assets are subject to impairment as per Ind AS 36. Impairment of Assets?
19. Explain the criteria for identifying an asset that may be impaired.
20. What is recoverable amount? How is it measured as per Ind AS 36?
21. What is fair value as per Ind AS 36?
22. How are future cash flows estimated as per Ind AS 36?
23. Explain the provisions of Ind AS 36 on recognizing and measuring an impairment loss.
24. What is a cash-generating unit?
25. How is goodwill allocated to cash-generating units?
26. What is the concept of corporate assets as per Ind AS 36?
27. What are the provisions regarding reversing an impairment loss?

28. Write notes on:
 - (a) Reversing an impairment loss for an individual asset.
 - (b) Reversing an impairment loss for a cash generating unit.
29. Discuss disclosure rules on impairment of asset as per Ind AS 36.
30. What are leases? What are its advantages?
31. Distinguish between finance (capital) lease and operating lease.
32. How is accounting and reporting of leases in done by lessee?
33. How is accounting and reporting of leases is done by the lessor?
34. Discuss the financial impact of operating and financing leases on the lessee and lessor.
35. How are finance leases and operating leases presented in the financial statements of lessee and lessors?

MULTIPLE CHOICE QUESTIONS

Section 'A'

Select the correct answer for the following multiple choice questions:

1. Which of the following is an essential characteristic of an asset?
 - (a) The claim to an asset's benefits are legally enforceable.
 - (b) An asset is tangible.
 - (c) An asset is obtained at a cost.
 - (d) An asset provides future benefits.
2. On December 31, 2009, Brooks Co. decided to end operations and dispose of its assets within three months. At December 31, 2009, the net realizable value of the equipment was below historical cost. What is the appropriate measurement basis for equipment included in Books' December 31, 2009 balance sheet?
 - (a) Historical cost.
 - (b) Current reproduction cost.
 - (c) Net realizable value.
 - (d) Current replacement cost.

Ans. (d)

3. During 2009, King Company made the following expenditures relating to its plant building:

	₹
Continuing and frequent repairs	40,000
Repainted the plant building	10,000
Major improvements to the electrical wiring system	32,000
Partial replacement of roof tiles	14,000

How much should be charged to repair and maintenance expense in 2009?

- (a) ₹ 96,000
- (b) ₹ 82,000
- (c) ₹ 64,000
- (d) ₹ 54,000

Ans. (c)

4. On June 18, 2009, Dell Printing Co. incurred the following costs for one of its printing presses:

	₹
Purchase of collating and stapling attachment	84,000
Installation of attachment	36,000
Replacement parts for over-haul of press	26,000
Labour and overhead in connection with overhaul	14,000

The overhaul resulted in a significant increase in production. Neither the attachment nor the overhaul increased the estimated useful life of the press. What amount of the above costs should be capitalized?

- (a) ₹ 0
- (b) ₹ 84,000
- (c) ₹ 1,20,000
- (d) ₹ 1,60,000

Ans. (d)

5. A building suffered uninsured fire damage. The damaged portion of the building was refurbished with higher quality materials. The cost and related accumulated depreciation of the damaged portion are identifiable. To account for these events, the owner should
 - (a) Reduce accumulated depreciation equal to the cost of refurbishing.
 - (b) Record a loss in the current period equal to the sum of the cost of refurbishing and the carrying amount of the damaged portion of the building.
 - (c) Capitalize the cost of refurbishing and record a loss in the current period equal to the carrying amount of the damaged portion of the building.
 - (d) Capitalize the cost of refurbishing by adding the cost to the carrying amount of the building.

Ans. (c)

6. Derby Co. incurred costs to modify its building and to rearrange its production line. As a result, an overall reduction in production costs is expected. However, the modifications did not increase the building's market value, and the rearrangement did not extend the production line's life. Should the building modification costs and the production line rearrangement costs be capitalized?

	Building modification costs	Production line rearrangement costs
(a)	Yes	No
(b)	Yes	Yes
(c)	No	No
(d)	No	Yes

Ans. (b)

7. Which method of recording uncollectible accounts expense is consistent with accrual accounting?

	Allowance	Direct write-off
(a)	Yes	Yes
(b)	Yes	No
(c)	No	Yes
(d)	No	No

Ans. (b)

8. Which of the following statements concerning patents is correct?
 - (a) Legal costs incurred to successfully defend an internally developed patent should be capitalized and amortized over the patent's remaining economic life.
 - (b) Legal fees and other direct costs incurred in registering a patent should be capitalized and amortized on a straightline basis over a fiveyear period.
 - (c) Research and development contract services purchased from others and used to develop a patented manufacturing process should be capitalized and amortized over the patent's economic life.
 - (d) Research and development costs incurred to develop a patented item should be capitalized and amortized on a straightline basis over seventeen years.
9. Accrued expenses (accrued liabilities) are:
 - (a) expenses that have been paid
 - (b) created when another liability is reduced
 - (c) expenses that have been reported on the income statement but not yet paid.
10. The initial measurement of goodwill is most likely affected by:
 - (a) an acquisition's purchase price.
 - (b) the acquired company's book value.
 - (c) the fair value of the acquirer's assets and liabilities.
11. Defining total asset turnover as revenue divided by average total assets, all else equal, impairment write-downs of long-lived assets owned by a company will most likely result in an increase for that company in:
 - (a) the debt-to-equity ratio but not the total asset turnover.
 - (b) the total asset turnover but not the debt-to-equity ratio.
 - (c) both the debt-to-equity ratio and the total asset turnover.
12. For financial assets classified as trading securities, how are unrealized gains and losses reflected in shareholders' equity?
 - (a) They are not recognized.
 - (b) They flow through income into retained earnings.
 - (c) They are a component of accumulated other comprehensive income.
13. For financial assets classified as available for sale, how are unrealized gains and losses reflected in shareholders' equity?
 - (a) They are not recognized.
 - (b) They flow through retained earnings.
 - (c) They are a component of accumulated other comprehensive income.
14. For financial assets classified as held to maturity, how are unrealized gains and losses reflected in shareholders' equity?
 - (a) They are not recognized.
 - (b) They flow through retained earnings.
 - (c) They are a component of accumulated other comprehensive income.
15. The item "retained earnings" is a component of:
 - (a) assets
 - (b) liabilities
 - (c) shareholders' equity.
16. Which of the following would an analyst *most likely* be able to determine from a common-size analysis of a company's balance sheet over several periods?
 - (a) An increase or decrease in sales.
 - (b) An increase or decrease in financial leverage.
 - (c) A more efficient or less efficient use of assets.
17. An investor concerned whether a company can meet its near-term obligations is most likely to calculate the:
 - (a) current ratio.
 - (b) return on total capital.
 - (c) financial level-age ratio.
18. The most stringent test of a company's liquidity is its:
 - (a) cash ratio
 - (b) quick ratio
 - (c) current ratio.

Ans. (a)

Section 'B'

1. Resources controlled by a company as a result of past. events are:
 - (a) equity
 - (b) assets
 - (c) liabilities.
2. Equity equals:
 - (a) Assets – Liabilities
 - (b) Liabilities – Assets
 - (c) Assets + Liabilities.
3. Distinguishing between current and non-current items on the balance sheet and presenting a subtotal for current assets and liabilities is referred to as:
 - (a) a classified balance sheet
 - (b) an unclassified balance sheet
 - (c) a liquidity-based balance sheet.
4. All of the following are current assets except:
 - (a) cash
 - (b) goodwill
 - (c) inventories.
5. Debt due within one year is considered:
 - (a) current
 - (b) preferred
 - (c) convertible.
6. Money received from customers for products to be delivered in the future is recorded as:
 - (a) revenue and an asset
 - (b) an asset and a liability
 - (c) revenue and a liability.
7. The carrying value of inventories reflects:
 - (a) their historical cost
 - (b) their current value
 - (c) the lower of historical cost or net realizable value.
8. When a company pays its rent in advance, its balance sheet will reflect a reduction in:
 - (a) assets and liabilities
 - (b) assets and shareholders' equity
 - (c) one category of assets and an increase in another.

19. An investor worried about a company's long-term solvency would *most likely* examine its:
- (a) current ratio
 - (b) return on equity
 - (c) Debt-to-equity ratio.

ANSWER

Section "B"

1. B is correct. Assets are resources controlled by a company as a result of past events.
2. A is correct. $\text{Assets} = \text{Liabilities} + \text{Equity}$ and, therefore, $\text{Assets} - \text{liabilities} = \text{Equity}$.
3. A is correct. A classified balance sheet is one that classifies assets and liabilities as current or non-current and provides a subtotal for current assets and current liabilities. A liquidity-based balance sheet broadly presents assets and liabilities in order of liquidity.
4. B is correct. Goodwill is a long-term asset, and the others are all current assets.
5. A is correct. Current liabilities are those liabilities, including debt, due within one year. Preferred refers to a class of share. Convertible refers to a feature of bonds (or preferred share) allowing the holder to convert the instrument into common share.
6. B is correct. The cash received from customers represents an asset. The obligation to provide a product in the future is a liability, called "unearned income" or "unearned revenue." As the product is delivered, revenue will be recognized and the liability will be reduced.
7. C is correct. Under IFRS, inventories are carried at historical cost, unless net realizable value of the inventory is less. Under U.S. GAAP, inventories are carried at the lower of cost or market.
8. C is correct. Paying rent in advance will reduce cash and increase prepaid expenses, both of which are assets.
9. C is correct. Accrued liabilities are expenses that have been reported on a company's income statement but have not yet been paid.
10. A is correct. Initially, goodwill is measured as the difference between the purchase price paid for an acquisition and the fair value of the acquired, not acquiring, company's net assets (identifiable assets less liabilities).
11. C is correct. Impairment write-downs reduce equity in the denominator of the debt-to-equity ratio but do not affect debt, so the debt-to-equity ratio is expected to increase. Impairment write-downs reduce total assets but do not affect revenue. Thus, total asset turnover is expected to increase.
12. B is correct. For financial assets classified as trading securities, unrealized gains and losses are reported on the income statement and flow to shareholders' equity as part of retained earnings.
13. C is correct. For financial assets classified as available for sale, unrealized gains and losses are not recorded on the income statement and instead are part of other comprehensive income. Accumulated other comprehensive income is a component of shareholders' equity.
14. A is correct. Financial assets classified as held to maturity are measured at amortised cost. Gains and losses are recognized only when realized.
15. C is correct. The item "retained earnings" is a component of shareholders' equity.
16. B is correct. Common-size analysis provides information about composition of the balance sheet and changes over time. As a result, it can provide information about an increase or decrease in a company's financial leverage.
17. A is correct. The current ratio provides a comparison of assets that can be turned into cash relatively quickly and liabilities that must be paid within one year. The other ratios are more suited to longer term concerns.
18. A is correct. The cash ratio determines how much of a company's near-term obligations can be settled with existing amounts of cash and marketable securities.
19. C is correct. The debt-to-equity ratio, a solvency ratio, is an indicator of financial risk.



Liabilities and Equity

NATURE OF LIABILITIES

Liabilities may be defined as currently existing obligations which a business enterprise intends to meet at some time in future. Such obligations arise from legal or managerial considerations and impose restriction on the use of assets by the enterprise for its own purposes. Liabilities are obligations resulting from past transactions that require the firm to pay money, provide goods, or perform services in the future. The existence of a past transaction is an important element in the definition of liabilities. For example, if a buyer gives a purchase commitment to a seller, this is only an agreement between a buyer and seller to enter into a future transaction. The performance of the seller that will create the obligation on the part of the buyer is, at this point, a future transaction. Therefore, such a purchase commitment is not a liability. Accounting Principles Board of USA defines liabilities as “economic obligations of an enterprise that are recognised and measured in conformity with generally accepted accounting principles. Liabilities also include certain deferred credits that are not obligations but that are recognised and measured in conformity with generally accepted accounting principles”.¹ Financial Accounting Standards Board defines liabilities as follows:

“Liabilities are probable future sacrifices of economic benefits arising from present obligations of a particular entity to transfer assets or provide services to other entities in the future as a result of past transactions or services.”²

According to Institute of Chartered Accountants of India, liability is “the financial obligation of an enterprise other than owners’ funds”.³

Liabilities possess the following characteristics:

(1) Occurrence of a past transaction or event: The obligations must arise out of some past transaction or event. A liability is not a liability of an enterprise until something happens to make it a liability of that enterprise. The kinds of transactions and other events and circumstances that result in liabilities are the following: Acquisition of goods and services, impositions by law or governmental units, and acts by an enterprise that obligate it to pay or otherwise sacrifice assets to settle its voluntary nonreciprocal transfers to owners and others. In contrast, the act of budgeting the purchase of a machine and budgeting the payments required to obtain it results neither in acquiring an asset nor in incurring a liability. No transaction or event has occurred that gives the enterprise access to or control of future economic benefit or obligates it to transfer assets or provide service to another entity.

Many agreements specify or imply how a resulting obligation is incurred. For example, borrowing agreements specify interest rates, periods involved and timing of payments, rental agreements specify rental and periods to which they apply. The occurrence of the specified event or events results in a liability.

Transactions or events that result in liabilities imposed by law or governmental units also are often specified or inherent in the nature of the statute or regulation involved. For example, taxes are commonly assessed for calendar or fiscal years, fines and penalties stem from infraction of the law or failure to comply with provisions of law or regulations, damages result from selling defective products:

(2) Required future sacrifice of assets: The essence of a liability is a duty or requirement to sacrifice assets in the future. A liability requires an enterprise to transfer assets, provide services or otherwise expend assets to satisfy a responsibility it has incurred or that has been imposed on it.

Most liabilities presently included in financial statements qualify as liabilities because they require an enterprise to sacrifice assets in future. Thus, accounts and bills payable, wages and salary payable, long term debt, interest and dividends payable, and similar requirements to pay cash apparently qualify as liabilities.

(3) Obligations of a particular enterprise: Liabilities are in relation to specific enterprises and a required future sacrifice of assets is a liability of the particular enterprise that must make the sacrifice. Most obligations that underlie liabilities stem from contracts and other agreements that are enforceable by courts or from governmental actions that they have the force of law, and the fact of an enterprise’s obligation is so evident that it is often taken for granted.

(4) Liabilities and proceeds: An enterprise commonly receives cash, goods or services by incurring liabilities and that which is received is often called proceeds, especially if cash is received. Receipt of proceeds may be evidence that an enterprise has incurred one or more liabilities, but it is not conclusive evidence. Proceeds may be received from cash sales or by issuing ownership shares—that is, from revenues or other sales of assets or from investment by owners—and enterprises may incur liabilities without receiving proceeds, for example, by imposition of taxes. The essence of a liability is a legal, equitable or constructive obligation to sacrifice economic benefits in the future rather than whether proceeds were received by incurring it. Proceeds themselves are not liabilities.

(5) Discontinuance of liability: A liability once incurred by an enterprise remains a liability until it is satisfied in another transaction or other event or circumstances affecting the

enterprise. Most liabilities are satisfied by cash payments. Others are satisfied by the enterprise's transferring assets or providing services to other entities, and some of those—for example, liabilities to provide magazines under a prepaid subscription agreement—involve performance to earn revenues. Liabilities are also sometimes eliminated for forgiveness, compromise or changed circumstances.

(6) Capital and dividend: Capital invested by the owner or shareholders in an enterprise is not regarded as an external liability in financial accounting. But shareholders have a right at law to the payment of a dividend once it has been declared. As a result, unpaid or unclaimed dividends, are shown as current liabilities. It is the practice to show proposed dividends as current liabilities also, since such proposed dividends are usually final dividends for the year which must be approved at the annual general meeting before which the accounts for the year must be laid.

MEASUREMENT OF LIABILITIES

Liabilities are measured in conformity with the cost principle. When an obligation is created initially, the amount of liability is equivalent to the current market value of the resources received when the transaction occurs. In most cases, liabilities are measured, recorded and reported at their principal amounts. In other words, liabilities should be measured and shown in the balance sheet at the money amount, necessary to satisfy an obligation. Interest included in the face amount of accounts payable is deducted from the face amount when reporting the liability in the balance sheet.

If liabilities are not valued at cost, they can be valued at the fair market value of goods or services to be delivered. For example, an automobile dealer who sells a car with a one year warranty must provide parts and services during the year. The obligation is definite because the sale of the car has occurred, but the amount must be estimated.

In historical accounting, liabilities appear on the balance sheet as the present value of payments to be made in future. It is significant to observe that liabilities appear at the amount payable because the difference between the amount ultimately payable and its present value is immaterial. It is only as the maturity date of liabilities is longer that there can be difference between historical or cost value (value as per the contract creating the obligation) and present value of future payment.

Liabilities may be valued (i) at their historic value in accordance with accounting conventions, that is, at the value attached to the contractual basis by which they were created. (ii) at their discounted net values in accordance with the manner of valuing assets, generally recognised in economics.

While accounting conventions dictate that the valuation of liabilities should be based on the sum which is payable, it is accounting practice to make a distinction between current and long term liabilities. As regards current liabilities, there is little difference between the discounted net value and the contractual

value of liabilities. In this connection, current liabilities are defined as those which will mature during the course of the accounting period. The gap between the two methods of valuation is significant as regards long term liabilities. Long-term liabilities are valued on the basis of their historical value, that is, by reference to the contract from which they originated, and hence during periods of inflation or where the interest payable is less than the current market rate of interest, the accounting valuation will certainly be overstated by comparison with the discounted net value.

Valuation and recognition of liabilities is necessary for income determination and capital maintenance and ascertainment of a business enterprise's financial position. Failure to record a liability in an accounting period means that expenses have not been fully recorded. Thus, it leads to an understatement of expenses and an overstatement of income. Liabilities should be recorded, as stated earlier, when an obligation occurs. When there is a transaction that creates obligation for the company to make future payments, a liability arises and is recognised as when goods are bought on credit. However, current liabilities often are not represented by a direct transaction. This is the reason that some unrecorded liabilities are recorded at the end of accounting period through adjusting entries such as salaries, wages and interest payable. Other liabilities that can only be estimated, should also be recognised by adjusting entries such as taxes payable. In fact, the requirement for an accurate measure of the financial position and financial structure should determine the basis for liability valuation. Their valuation should be consistent with the valuation of assets and expenses. The need for consistency arises from the objectives of liability valuation, which are similar to those of asset valuation. Probably the most important of these objectives is the desire to record expenses and financial losses in the process of measuring income. However, the valuation of liabilities should also help investors and creditors in understanding the financial position.

The valuation of liabilities is part of the process of measuring both capital and income, and is important to such problems as capital maintenance and the ascertainment of a firm's financial position. According to Barton⁴, "the requirements for an accurate measure of the financial position and financial structure should determine the basis for liability valuation. Their valuation should be consistent with the valuation of assets and expenses." The need for consistency arises from the objectives of liability valuation, which are similar to those of asset valuation. Probably the most important of these objectives is the desire to record expenses and financial losses in the process of measuring income. However, the valuation of liabilities should also assist investors and creditors in understanding the financial position.

CLASSIFICATION OF LIABILITIES

Liabilities are generally classified as follows:

- (1) Current Liabilities
- (2) Long-term Liabilities

CURRENT LIABILITIES

Concept: Current liabilities are those that will be paid from among the assets listed as current assets. Current liabilities are debtor obligations payable within one year of the balance sheet date. However, if a firm's operating cycle exceeds a year, current liabilities are those payable within the next cycle. The Committee on Accounting Procedure of the AICPA defined current liabilities as follows:

"The term current liabilities is used principally to designate obligations whose liquidation is reasonably expected to require the use of existing resources properly classifiable as current assets, or the creation of other current liabilities."

Current liabilities tend to be fairly permanent in the aggregate, but they differ from long term liabilities in several ways. The main distinctive features are: (1) they require frequent attention regarding the refinancing of specific liabilities; (2) they provide frequent opportunities to shift from one source of funds to another; and (3) they permit management to vary continually the total funds from short term sources.

One of the major differences between the definition of current assets and the definition of current liabilities is that the current portion of long term debt is reclassified each year as a current liability, and the current portion of fixed assets is not. The reason for this difference is found in the conventional emphasis on liquidity and the effect on cash and cash flows; the current portion of long term debt will require current cash or cash becoming available, but the current depreciations is only indirectly related to any obligations or cash flows during the current period.

Classification of Current Liabilities

Current liabilities can be divided into two main groups based on the means by which their values are determined. These groups include (A) Liabilities with specific values usually determined from contracts and (B) Liabilities whose values must be estimated. Some liabilities falling under these two categories are being discussed here.

(1) Accounts Payable: Trade accounts payable are debts owed to trade creditors. They normally arise from the purchase of goods or services. Particular care must be exercised at the end of the accounting year to ensure that all trade payables arising from the purchase of goods and services are recorded. Accounts payable to trade creditors may be recorded either at the gross invoice price or at the net invoice price (*i.e.*, less cash discounts). Showing the invoice at gross is the more common practice, primarily because it is more expedient. If this method is followed and cash discounts are material in amount, the discounts available on unpaid accounts should be recognised at the end of the period and subtracted from the liability account. The balancing entry reduces inventories or purchases. On the other hand, if the accounts payable to trade creditors are recorded at the net amount, any discounts not to be taken must be added back to the amount payable on the balance sheet date. The balancing entry should be

made to a loss accounting, because such lapsed discounts involve very high interest rates and indicate poor financial management.

(2) Bills (Notes) Payable: Although bills payable may arise from the same sources as trade accounts payable, they are evidenced by negotiable instruments and therefore should be reported separately. The maturity date of these bills may extend from a few days to year and they may be either interest bearing or noninterest bearing. It is normally customary to record trade bills at their face value and to accrue interest on the interest bearing notes, using a separate Interest Payable Account. Interest is sometimes subtracted from the face value of a bill when funds are borrowed from a bank or financial institution. This is called discounting the note, and the discount is the difference between the face value of the bills payable and proceeds from the loan.

(3) Interest Payable: Interest payable is typically the result of an accrual and is recorded at the end of each accounting period. Interest payable on different types of items is usually reported as a single item. In the absence of significant legal differences in the nature or status of the interest, the amounts can be combined. Interest in default on bonds is an example of an item sufficiently important to warrant separate reporting. Interest payable on noncurrent liabilities such as long term debt should be listed as current liability, because the interest is payable within the next operating cycle.

(4) Wages and Salary Payable: A liability for unpaid wages and salaries is credited when employees are paid at fixed intervals that do not coincide with the balance sheet date. Unclaimed wages that have not been paid to employees because of failure to claim their earnings should be included in salaries and wages payable.

(5) Current Portion of Long-term Debt: Current liabilities usually include that portion of long term debt which becomes payable within the next year.

(6) Advance from Customers: Money received in advance from customers create a liability for the future delivery of goods or services. The advances are initially recorded as liabilities and are then transferred from liability account to revenue account when the goods or services are delivered. Advance receipts from customers for the performance of services or for future delivery of goods are current liabilities only if the performance or delivery is to be completed within the time period included in the definition of current liabilities. Advance collections on ticket sales would be considered current liabilities, whereas deposits received in two years would be a noncurrent liability. In some cases, customer deposits may not be listed as current liabilities because their return is not normally contemplated within the time period used to define current liabilities.

Current and Non-Current Distinctions

The classification of items as current and noncurrent in practice is largely based on convention rather than on any one concept. The conventional definitions of current assets and current liabilities are assumed to provide some information to financial statements users, but they are far from adequate in meeting the

desired objectives. These inadequacies can be summarised as follows:

(1) One of the main objectives of the classification is to present information useful to creditors. However, it is far from adequate in serving this purpose. Creditors are primarily interested in the ability of the firm to meet its debts as they mature. This ability depends primarily on the outcome of projected operations; the pairing of current liabilities with current assets assumes that the latter will be available for payment of the former.

(2) Creditors are also interested in the solvency of the firm—the probability of obtaining repayment in case the firm is liquidated. It is contended that special statements should be prepared for this purpose. Such a statement should show the expected sources of cash in liquidation and the special restrictions regarding the use of particular assets or resources of cash. In the conventional balance sheet, the pairing of current assets with current liabilities leads to the false assumption that, in liquidation, the short term creditors have necessarily some priority over the current assets and that only the excess is available to long-term creditors.

(3) As a device for describing the operations of the firm, the classification is also defective. Such assets as interest receivable do not arise from the same type of operations as accounts receivable and inventories, but they are all grouped together as current assets. Among the current liabilities, dividends payable does not arise from the same type of operations as accounts payable, and from an operational point of view, the current portion of term debt is not dissimilar to the remainder of the long-term debt.

(4) The current asset and current liability classifications do not help in description of the accounting process or in the description of valuation procedures.

International Accounting Standards Committee has listed the following limitations of current and non-current distinction:

(1) The current and non-current distinction is generally believed to provide an identification of a relatively liquid portion of an enterprise's total capital that constitutes a margin or buffer for meeting obligations within the ordinary operating cycle of an enterprise. However, as long as a business is going concern, it must, for example, continuously replace the inventory that it realizes with new inventory in order to carry on its operations. Also current assets may include inventories that are not expected to be realized in the near future. On the other hand, many enterprises finance their operations with bank loans that are stated to be payable on demand and are hence classified as current liabilities. Yet, the demand feature may be primarily a form of protection for the lender and the expectation of both borrower and lender in the loan will remain outstanding for some considerable period of time.

(2) Many regard an excess of current assets over current liabilities as providing some indication of the financial well-being of an enterprise, while an excess of current liabilities over current assets is regarded an indication of financial problems. It is not

appropriate to draw such conclusions without considering the nature of the operations of the enterprise and the individual components of its current assets and current liabilities.

(3) The segregation of assets and liabilities between current and noncurrent is usually not considered appropriate in the financial statements of enterprises with indeterminate or very long operating cycles.

(4) Thus, while many believe that the identification of current assets and liabilities is a useful tool in financial analysis, others believe that the limitations of the distinction make it of little use or even misleading in many circumstances. Imposition of a general requirement to identify current assets and liabilities in financial statements might impede further consideration of these questions. Accordingly, this statement is intended only to harmonize practices followed by enterprises that choose to identify current assets and liabilities in their financial statements.

LONG-TERM LIABILITIES

Long-term liabilities are those liabilities that are not due during the next year or during the normal operating cycle. That is, long-term liabilities become due after one year and are the liabilities which are not classified as current liabilities. Long-term liabilities are often incurred when assets are purchased, large amounts are borrowed for replacement, expansion purposes etc. Examples of long-term liabilities are debentures and bonds, mortgages, long-term notes payable, other long-term obligations. A borrowing company while borrowing or incurring a long-term liability mortgages its assets to the lender (*e.g.*, bondholders and debentureholder) as a security for the liability. A long-term liability supported by a mortgage is a secured debt. An unsecured debt is one for which the creditor relies primarily on the integrity and general power of the borrower.

CONTINGENT LIABILITIES

A contingent liability is not a legal or effective liability; rather it is a potential future liability. The amount of a contingent liability may be known or estimated. Contingent liabilities are those which will arise in the future only on the occurrence of a specified event. Although they are based on past contractual obligations, they are conditional rather than certain liabilities. Thus, guarantee given by the firm are contingent liabilities rather than current liabilities. If a holding company has guaranteed the overdraft of one of its subsidiary companies, the guarantee is payable only in the event of the subsidiary company being unable to repay the overdraft. Contingent liabilities are not formally recorded in the accounts system, but appear as footnotes to the balance sheet.

OWNER'S EQUITY

Equity is a residual claim—a claim to the assets remaining after the debts to creditors have been discharged. Equity is the residual interest in the assets of an entity that remains after deducting its liabilities. In other words, ownership equity is the excess of total assets over total liabilities. It represents the book value of the owners' interest in the business enterprise.

The terms owners' equity, proprietorship, capital and net worth are used interchangeably. However, the term net worth is not considered good terminology because it gives an impression of value or current worth whereas most assets are not recorded in the balance sheets at current value or worth but at original cost.

Differences exist in accounting for the owners' equity among a sole proprietorship, partnership and company form of organisation. In a sole proprietorship, a single capital account is needed as the owner is one, to record additional capital given by the proprietor, net profit, net losses, withdrawals by the proprietor. Similarly, in partnership, capital and drawings accounts are maintained for each partner separately. In company form of organisation, accounting for the owners' (shareholders) equity is somewhat more complex than for other types of business organisations. Accounting for a company equity focuses on the distinction between capital contributed by shareholders and retained earning.

Characteristics of Equity

Financial Accounting Standards Board (FASB)⁵ has listed the following characteristics of equity:

(1) Equity in a business enterprise stems from ownership rights. It involves a relation between an enterprise and its owners as owners rather than as employees, suppliers, customers, lenders or in some other nonowner role. Since it ranks after liabilities as a claim to or interest in the assets of the enterprise, it is a residual interest: (a) equity is the same as net assets, the difference between the enterprise's assets and its liabilities and (b) equity is enhanced or burdened by increases and decreases in net assets from sources other than investments by owners and distributions to owners. Owners' equity is the interest that, perhaps in varying degrees, bears the ultimate risk of enterprise failure and reaps the ultimate rewards of enterprise success.

(2) Equity represents the source of distributions by an enterprise to its owners, whether in the form of cash dividends or other distributions of assets. Owners' and others' expectations about distributions to owners may affect the market prices of an enterprise's equity securities, thereby indirectly affecting owner's compensation for providing equity or risk capital to the enterprise. Thus, the essential characteristics of equity centre on the conditions for transferring enterprise assets to owners. Equity—an excess of assets over liabilities—is a necessary but not sufficient condition. Generally, an enterprise is not obligated to transfer assets to owners except in the event of the enterprise's liquidation unless the enterprise formally acts to distribute assets to owners, for example, by declaring a dividend. In this way, owners' equity has no maturity date.

Owners may sell their interest in an enterprise to others and thus may be able to obtain a return of part or all their investments and perhaps a return on investments through a securities market, but those transactions do not normally affect the equity of an enterprise or its assets or liabilities.

(3) An enterprise may have several types of equity (e.g., equity shares, preference share) with different degrees of risk stemming from different rights to participate in distributions of enterprise assets or different priorities of claims on enterprise assets in the event of liquidation. That is, some classes of owners may bear relatively more of the risks of an enterprise's unprofitability or may benefit relatively more from its profitability (or both) than other classes of owners.

(4) Owners equity is originally created by owners' investments in an enterprise and may from time to time be augmented by additional investments by owners. Equity is reduced by distributions by the enterprise to owners. However the distinguishing characteristics of owners' equity is that it inevitably decreases if the enterprise is unprofitable and inevitably increases if the enterprise is profitable, reflecting the fact that owners bear the ultimate risks of and reap the ultimate rewards from the enterprise's operations and the effects of other events and circumstances that affect it. Ultimately, owners' equity is the interest in enterprise assets that remain after liabilities are satisfied, and in that sense it is a residual.

Equity and Liabilities

Assets are probable future economic benefits owned or controlled by the enterprise. Liabilities and equity are mutually exclusive claims to or interest in the enterprise's assets by entities other than the enterprise. In a business enterprise, equity or the ownership interest is a residual interest, remaining after liabilities are deducted from assets and depending significantly on the profitability of the enterprise. Distributions to owners are discretionary, depending on its effect on owners after considering the needs of the enterprise and restrictions imposed by law, regulations, or agreement.

An enterprise is generally not obligated to transfer assets to owners except in the event of the enterprise's liquidations. In contrast, liabilities once incurred, involve nondiscretionary future sacrifices of assets that must be satisfied on demand, at a specified or determinable date, or on occurrence of a specified event, and they take precedence over ownership interest.

Although the line between equity and liabilities is clear in concept, it may be obscured in practice. Often several kinds of securities issued by business enterprises seem to have characteristics of both liabilities and equity in varying degrees or because the names given to some securities may not accurately describe their essential characteristics. For example, convertible debt have both liability and residual interest characteristics, which may create problems in accounting for them. Preference share also often has both debt and equity characteristics and some preference shares may effectively have maturity amounts and dates at which they must be redeemed for cash.

TRANSACTIONS AND EVENTS THAT CHANGE EQUITY

The transactions and events that influence or do not influence equity have been displayed in the Exhibit 7.1. In this Exhibit class B shows the sources of changes in equity and distinguishes them from each other and from other transactions, events and circumstances affecting an enterprise during a period (classes A and C). The possible sources of changes in equity can be (1) Comprehensive income (2) all changes in equity from transfers between the enterprise and its owners. Further, comprehensive income is the result of revenues and expenses, gains and losses. The changes in equity due to transfers between the enterprise and its owners may be in the form of investments by owners and distribution to owners. In the Exhibit class C includes no changes in assets or liabilities. Class A includes all changes in assets and liabilities not accompanied by changes in equity such as exchange of assets for assets, exchange of liabilities for liabilities, acquisitions of assets by incurring liabilities, settlement of liabilities by transferring assets. It means all transactions and events do not affect owners' equity. The items covered in Class A, B and C of the Exhibit can be listed as follows:

(A) All changes in assets and liabilities not accompanied by changes in equity. This class comprises four kinds of exchange transactions that are common in most business enterprises.

- (1) Exchange of assets for assets, for example, purchase of assets for cash or barter exchanges.

- (2) Exchange of liabilities for liabilities, for example, issues of notes payable to settle accounts payable or refundings of bonds payable by issuing new bonds to holders that surrender outstanding bonds.
- (3) Acquisition of assets by incurring liabilities, for example, purchase of assets on account, borrowings, or receipts of cash advances for goods or services to be provided in the future.
- (4) Settlements of liabilities by transferring assets, for example, repayments of borrowings, payments to suppliers on account, payments of accrued wages or salaries or repairs (or payment for repairs) required by warranties.

(B) All changes in assets or liabilities accompanied by changes in equity. This class comprises:

1. Comprehensive income whose components are:
 - (a) Revenues
 - (b) Gains
 - (c) Expenses
 - (d) Losses
2. All changes in equity from transfers between the enterprises and its owners. This comprises:
 - (a) Investments by owners in the enterprise.
 - (b) Distributions by the enterprise to owners.

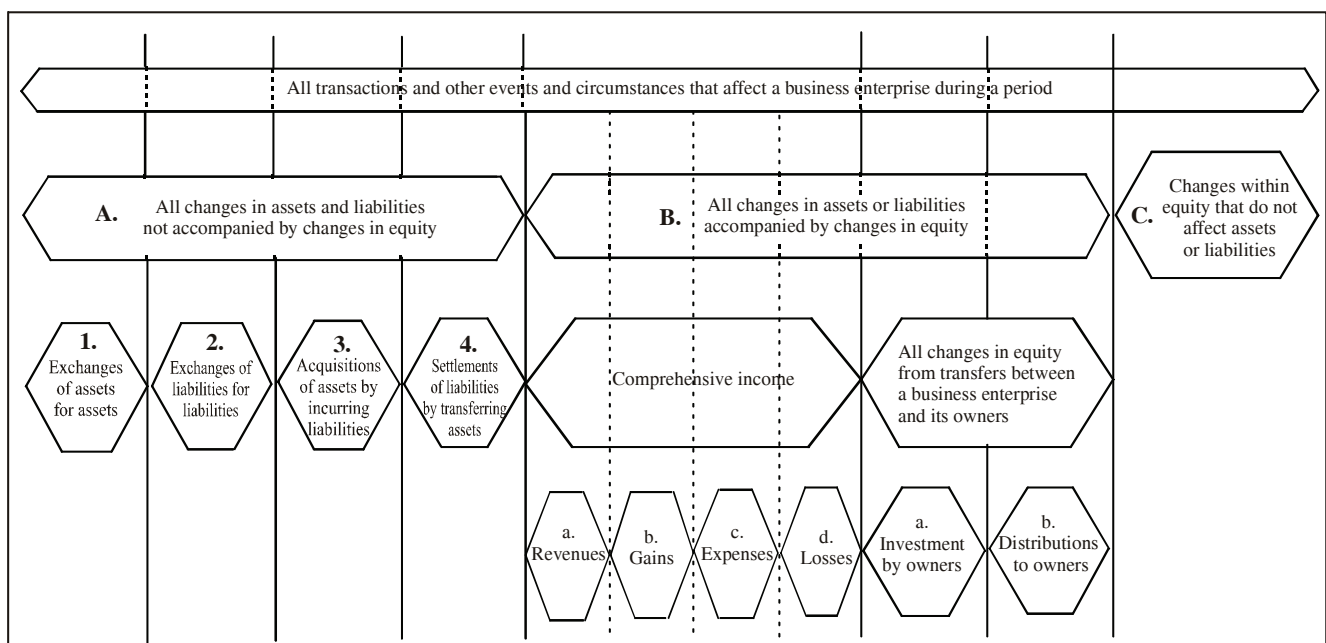


Exhibit 7 : Transactions and Events Having Influence on Equity

Source: SFAC No. 6, Elements of Financial Statements, FASB, 1985, p. 20

(C) Changes within equity that do not affect assets or liabilities, for example, share dividends, conversion of preferred shares into common shares and some share recapitalisation. This class contains only changes within equity and does not affect the definition of equity or its amount.

THEORIES OF EQUITY

A business enterprise has assets and liabilities which can be defined and measured independently of each other. However, this is not true with ownership equities (also commonly known as proprietorship or shareholders equities in a company). The ownership equities as presented in the balance sheet represent either the current market value or the subjective value of the enterprise to the owners. The total amount presented in the statements is a result of the methods employed in measuring the specific assets and liabilities and from traditional structural accounting procedures. Since the total value of the firm to its owners cannot be measured from the valuation of specific assets and liabilities, the reported amount of equity cannot represent the current value of the rights of the owners. Instead of looking at specific rights to future benefits, as with assets, or at specific obligations of the enterprise, as with liabilities, the proprietorship or shareholders equity looks at the aggregate resources from the view of ownership rights, equities, or restrictions, depending upon the equity concept employed.

The different concepts (theories) of equity are as follows:

- (1) Proprietary Theory
- (2) Entity Theory
- (3) Fund Theory
- (4) Residual Equity Theory
- (5) Enterprise Theory
- (6) Commander Theory

1. Proprietary Theory

Under the proprietary theory, the entity is the agent, representative, or arrangement through which the individual entrepreneurs or shareholders operate. In this theory, the viewpoint of the owners group is the center of interest and it is reflected in the way that accounting records are kept and the financial statements are prepared. The primary objective of the proprietary theory is the determination and analysis of the proprietor's net worth. Accordingly, the accounting equation is viewed as:

$$\text{Assets} - \text{Liabilities} = \text{Proprietor's Equity}$$

In other words, the proprietor owns the assets and liabilities. If the liabilities may be considered negative assets, the proprietary theory may be said to be asset centered and, consequently, balancesheet oriented. Assets are valued and balance sheets are prepared in order to measure the changes in the proprietary interest or wealth. Revenues and expenses are as increases or decreases, respectively, in proprietorship not resulting from proprietary investments or capital withdrawals by the proprietor. Thus, net

income is an increase in the proprietor's wealth to be added to capital. Losses, interest on debt, and corporate income taxes are expenses, while dividends are withdrawals of capital.

The proprietary theory has some influence of financial accounting techniques and accounting treatment of items. For example, 'net income' of a company, which is arrived at after treating interest and income taxes as expense, represents "net income to equity share holders" rather than to all providers of capital. Similarly, terms such as "earnings per share", "Book value per share," and "dividend per share" indicate a proprietary emphasis.

The proprietary theory has two classifications depending upon who is considered to be included in the proprietary group. In the first type, only the common shareholders are part of the proprietor group, and preferred shareholders are excluded. Thus, preferred dividends are deducted when calculating the earnings of the proprietor (equity shareholders). This narrow form of the proprietary theory is identical to the "residual equity" concept in which the net income is extended to deduct preferred dividends and arrive at net income to the residual equity on which will be based the computation of earnings per share. In the second form of the proprietary theory, both the common capital and preferred capital are included in the proprietor's equity. Under this wider view, the focus of attention becomes the shareholders' equity section in the balance sheet and the amount to be credited to all shareholders in the income statement.

2. Entity Theory

In entity theory, the entity (business enterprises) is viewed as having separate and distinct existence from those who provided capital to it. Simply stated, the business unit rather than the proprietor is the center of accounting interest. It owns the resources of the enterprises and is liable to both, the claims of the owners and the claims of the creditors. Accordingly, the accounting equation is:

$$\text{Asset} = \text{Equities}$$

or

$$\text{Assets} = \text{Liabilities} + \text{Shareholders' Equity}$$

Assets are rights accruing to the entity, while equities represent sources of the assets, consisting of liabilities and the shareholders' equity. Both the creditors and the shareholders are equity holders, although they have different rights with respect to income, risk, control and liquidation. Thus, income earned is the property of the entity until distributed as dividends to the shareholders. Because the business unit is held responsible for meeting the claims of the equity holders, the entity theory is said to be income centered and consequently, income statement oriented. Accountability to the equity holders is accomplished by measuring the operating and financial performance of the firm. Accordingly, income is an increase in the shareholders' equity after the claims of other equity holders are met—for example, interest on longterm debt and income taxes. The increase in

shareholders equity is considered income to the shareholders only if a dividend is declared. Similarly, undistributed profits remain the property of the entity because they represent the “company’s proprietary equity in itself.” It should be noted that strict adherence to the entity theory would dictate that interest on debt and income taxes be considered distributions of income rather than expenses. The general belief and interpretation of the entity theory, however, is that interest and income taxes are expenses.

The entity theory is most applicable to the corporate form of business enterprise, which is separate and distinct from its owners. The impact of the entity theory may be found in some of the accounting techniques and terminology used in practice. First, the entity theory favours the adoption of LIFO inventory valuation rather than FIFO because LIFO achieves a better income determination. Because of its better inventory valuation on the balance sheet, FIFO may be considered a better technique under the proprietary theory. Second, the common definition of revenue as product of an enterprise and expenses as goods and services consumed to obtain this revenue is consistent with the entity theory’s preoccupation with an index of performance and accountability to equity holders. Third, the preparation of consolidated statements and the recognition of a class of minority interest as additional equity holders is also consistent with the entity theory. Finally, both the entity theory, with its emphasis on proper determination of income to equity holders, and the proprietary theory, with its emphasis on proper asset valuation, may be perceived to favour the adoption of current values or valuation bases other than historical costs.⁶

The main difference between the proprietary and entity theories, with respect to profit, is that changes in the monetary values of assets and liabilities are included in the determination of profit under the proprietary model and excluded under the entity model.

Proponents of the proprietary view (‘financial capital’), who also believe in current cost accounting, assert that changes in the values of assets and liabilities are holding gains and losses.

Advocates of the entity view (‘physical capital’), however, argue that increases in the price of items that a firm must have to continue in business are not an element of profit, but a ‘capital maintenance adjustment’ to be placed directly in equity. This amount is that which is necessary for replacing, the assets.

The following example illustrates the two approaches.

Example

Suppose we have a small firm whose business is to buy and sell one printing press per year. Assume that in Year 1 the owners purchase a printing press for ₹ 70,000 and sell it for ₹ 1,00,000 making a ₹ 30,000 cash profit. During Year 1, the replacement cost of the printing press increases to ₹ 80,000.

If they calculate profit on an historical cost basis, they will show a ₹ 30,000 profit (₹ 1,00,000 – ₹ 70,000). If they withdraw the profit, the ₹ 70,000 remaining in the firm is not sufficient for them to continue in business in Year 2. They need ₹ 80,000 to maintain their ability to buy another printing press.

The two approaches are illustrated in table below.

Comparison of the proprietary and entity views

Proprietary view		Entity view	
Sales revenue	₹ 1,00,000	Sales revenue	₹ 1,00,000
Current cost of sales	80,000	Current cost of sales	80,000
Operating profit	20,000	Profit	20,000
Holding gain	10,000		
Profit	30,000	Capital maintenance adjustment	10,000

Financial capital supporters (advocates of the ‘proprietary view’) regard profit of the business as being the amount that can be distributed without reducing capital to less than the amount of money invested at the start of the period, ₹ 30,000.

Advocates of the physical capital view (‘entity view’ approach) see profit as ₹ 20,000 and the ₹ 10,000 resulting from the increase in cost as a capital maintenance adjustment. This adjustment enables the owners to maintain the same ‘physical’ position they were in before, which is to be capable of buying and selling one printing press. Under this view, if the profit of ₹ 20,000 is withdrawn, there is ₹ 80,000 left for the business to continue.

3. Fund Theory

The fund theory emphasizes neither the proprietor nor the entity but a group of assets and related obligations and restrictions governing the use of the assets called a “fund.” A fund is simply a group of assets and related obligations devoted to a particular purpose which may or may not be that of generating income. Thus, the fund theory views the business unit as consisting of economic resources (funds) and related obligations and restrictions in the use of these resources. The accounting equation is viewed as:

$$\text{Assets} = \text{Restriction of Assets}$$

Under the fund theory, the balance sheet is considered an “inventory statement” of assets and those restrictions applicable to the assets. The arrangement of the information and the valuation methods vary depending on the purpose for which the statement is used. For example, a balance sheet for credit purposes is different from one presented to shareholders.

Income represents an increase in assets in the fund that are completely free of equity restrictions other than the final restriction imposed by the residual equity. Other transactions may increase total assets, but there is always a concurrent restriction created. For instance, the sale of debentures generates new assets, but it also produces a restriction on the total of the assets due to the future payment of the principal and interest. The receipt of an unrestricted gift is income. However, if it is restricted for use as an investment where the principal must be maintained indefinitely, then it is not income. The interest or dividends on the investment, however, is unrestricted and is therefore revenue for the fund.

Expenses represent the release of services for designated purposes specified in the objective of the fund. This definition embraces the notion of 'cost of producing income', but is meant to be broader and applicable to not-for-profit organisations as well.

The accounting unit is defined in terms of assets and the uses to which these assets are committed. Liabilities represent a series of legal and economic restrictions on the use of the assets. The fund theory is therefore asset centered in the sense that it places primary focus on the administration and appropriate use of asset. Neither the balance sheet nor the financial statement is the primary objective of financial reporting but the statement of sources and uses of funds is most important. This statement measures the operations of the firm in terms of sources and dispositions of funds.

The fund theory is useful primarily to government and nonprofit organizations. Hospitals, universities, cities and governmental units, for example, are engaged in multifaceted operations that use separate several funds. For such organisations, the information about sources and uses of funds is very useful as compared to financial statement information.

4. Residual Equity Theory

The residual equity theory is a concept somewhere between the proprietary theory and the entity theory. In this view, the equation becomes: $\text{Assets} - \text{Specific equities} = \text{Residual equity}$. The specific equities include the claims of creditors and the equities of preferred shareholders. However, in certain cases where losses have been large or in bankruptcy proceedings, the equity of the common shareholders may disappear and the preferred shareholders or the bondholders may become the residual equity holders.

The objectives of the residual equity approach is to provide better information to equity shareholders for making investment decision. In a company with indefinite continuity, the current value of equity share is dependent primarily upon the expectations of future dividends. Future dividends, in turn, are dependent upon the expectations of total receipts less specific contractual obligations, payments to specific equity holders, and requirements for reinvestments. Trends in investment values can also be measured, in part, by looking at trends in the value of the residual equity measured on the basis of current values. The income statement and statement of retained earnings should show the income available to the residual equity holders after all prior claims are met, including the dividends to preferred shareholders. The equity of the common shareholders in the balance sheet should be presented separately from the equities of preferred shareholders and other specific equity holders. The funds statement should also show the funds available to the firm for the payment of common dividends and other purposes.

5. Enterprise Theory

The enterprise theory views the enterprise as a social institution where decisions are made that affect a number of interested parties: shareholders, employees, creditors, Customers, various government agencies and the public. The enterprise concept is broader than that of the entity concept, because the former sees the firm as having a role to play in society, whereas the entity theory views the firm as an isolated body seeking to make a profit.

Management today does not consider itself simply as the representative of the shareholders, but as the guardian of the company, responsible for its survival and growth. As such, managers perform a mediating function among the various interested parties. Although shareholders have legal rights as owners, from the point of view of the company their rights are subsidiary to the organisation and its survival. Those who receive an income from their contact with the company, namely shareholders, creditors, employees and the government, have an important stake in the wellbeing of the company. The company therefore has a responsibility towards them, not just the shareholders. This responsibility is directly linked to the company's function of using monetary, human and material resources in its production and distribution process and rewarding those who provide the resources. This view is consistent with the triple bottom-line concept adopted by a number of large public organisations. The focus is on the social, economic and environmental impact of the firm, which attracts a wide variety of stakeholders. As a social institution, the large company should be evaluated in terms of its responsibility as mentioned above, which relates to its output, because this is its contribution to society. It is argued that a value added approach to profits best reveals this contribution. The idea is to determine the value created by the firm in a given period.

The enterprise theory of the firm is a broader concept than the equity theory, but less well defined in its scope and application. In the entity theory, the firm is considered to be a separate economic unit operated primarily for the benefit of the equity holders, whereas in the enterprise theory the company is a social institution operated for the benefit of many interested groups. In the broadest form these groups include, in addition to the shareholders and creditors, the employees, customers, the government as a taxing authority and as a regulatory agency, and the general public. Thus the broad form of the enterprise theory may be thought of as a social theory of accounting.

The enterprise theory concept is largely applicable to large companies which should consider the effect of its actions on various groups and on society as a whole. From an accounting point of view, this means that the responsibility of proper reporting extends not only to shareholders and creditors, but also to many other groups and to the general public. The most relevant concept of income in this broad social responsibility concept of the enterprise is the value added concept. The total value added by the enterprise is the market value of the goods and services

produced by the firm less the value of the goods and services acquired by transfer from other firms. Thus, value added income includes all payments to shareholders in the form of dividends, interest to creditors, wages and salaries to employees, taxes to governmental units, and earnings retained in the business. The total value added concept also includes depreciation, but this is a gross product concept rather than a net income concept.

The position of retained earnings in the enterprise theory is similar to its position in the entity concept. It either represents part of the equity of the residual equity holders or it represents undistributed equity—the equity of the company in itself. In entity theory there is considerable merit in the former position; but in the enterprise theory the earnings reinvested do not necessarily benefit only the residual equity holders. Capital employed to maintain market position, to improve productivity, or to promote general expansion may not necessarily benefit only the shareholders. In fact, it is possible that the shareholders may not be benefited at all if future dividends are not increased.⁷

6. Commander Theory

Louis Goldberg was uncomfortable with artificial concepts such as “funds” and “entities.”⁸ As a result, he proposed the *commander theory*. *Commander* is really a synonym for *management*, and Goldberg was very much concerned with the fact that management needs information so that it can carry out its control and planning functions on behalf of owners.

Hence, commander theory might really be viewed as being applicable to managerial accounting rather than financial accounting but the manager in his or her fiduciary role must apply the commander view to the investor.

According to the commander theory, we should direct our attention to the function of control, which can only be exercised by people. The unit of experience and the point of view taken should be of a person, or group of persons, who have the power to deploy resources. A person who has such power — *i.e.*, who has command over resources — is designated a ‘commander’ by Goldberg. The commander notion enables us to arrive at realistic interpretations of purposes and functions of accounting without using artificial abstractions, such as the entity or fund.

A sole proprietor is a commander. The proprietary theory emphasises the ownership aspect, but what is overlooked is that proprietors have control of the resources of their firms. It is the proprietors’ ability to command those resources that generates profit. Ownership has to do with a legal relationship, but control is an economic function. Undue emphasis is placed on the proprietor as owner rather than as manager (commander) according to supporters of the commander theory.

In a large company, shareholders are part owners of the company, but have no command over its resources. Command, however, exists over their own resources and therefore they are commanders also. Command over the resources of the company is in the hands of a hierarchy of commanders. Every manager has

more or less limited control over some resources, with one or a few of them having general command over all of the resources.

As Goldberg sees it, accounting functions are carried out for and on behalf of commanders. Financial statements are reports by commanders to commanders. Accounting records are kept, financial statements are prepared and reports are analysed by people on behalf of people for the benefit of people. Accounting procedures are undertaken from the point of view of the top commander of the firm, rather than the owner or entity or fund.

If the balance sheet is prepared by and on behalf of the commander of the company, then it is a statement that shows the sources from which the commander has received resources and the applications of these resources. The balance sheet is seen as a statement of stewardship rather than of ownership; it is a statement of accountability. It is a report showing the resources entrusted to the commander that the commander controls but does not necessarily own. The resources are handled by people, namely, the chief executive officer and his or her team; they are provided by people, namely creditors and shareholders; and they are used to purchase things from people or satisfy the claims of people.

The income statement is an explanation of the results of activities in a given period initiated by the commander and his or her team. The results are from the commander’s point of view. They explain in some detail, but in summary form, what types of expenditure have been incurred and the subsequent result.

The commander theory has not had a direct effect on accounting practice until recently. However, since the implications of both the proprietary and entity theories, which on first view appear to be contradictory, exist side by side in practice today, the notion of economic control, which is emphasised by the commander theory, could be the basis for synthesising and rationalising the simultaneous use of procedures related to the proprietary and entity theories. The notion of ‘control’ has recently become paramount in determining the nature of ‘assets’ and in determining which entities’ accounts should be included in consolidated accounts (IAS 27). As such, the commander theory has achieved some support and influenced current accounting practices. However, the notion of ‘control’ refers to control by the entity rather than by the ‘commanders’. Thus, the commander, entity and proprietary theories appear to have all influenced current accounting practices.

In conclusion, it can be said that the different equity theories (approaches) are found to be relevant under different circumstances of organization, economic relationships, and accounting objectives. Therefore, accounting theory and practice should take an eclectic approach to these theories. All help to explain and understand accounting theory and to develop logical patterns for the extension of theory. However, care must be taken to apply the most logical equity theory in each case and to use a single theory consistently in the similar situations. It is not inconsistent to apply the proprietary concept to a small single proprietorship, the entity concept to a medium size concern and

the enterprise theory to a very large company. Hendriksen⁹ observes:

“Each of the several equity theories interprets the economic position of the enterprise in a different way and thus presents a different emphasis on the method of disclosure of the interest of the several equity holders or interested groups. They also lead to different concepts of income or different methods of disclosing the equity interests in the income of the enterprise. There is also some evidence that the proprietary concept requires an emphasis on current valuations of assets, the entity and funds theories are neutral with respect to asset valuation, and the enterprise theory emphasizes the need for a market output valuation concept. However, the associated valuation method and the associated concept of income are primarily the result of the way several concepts have been developed. The problem of valuation and the most relevant concept of income are basically independent of equity theory selected. The main questions raised by the several equity concepts are related to these questions.

- (1) Who are the beneficiaries of net income?
- (2) How should the equity relationships be shown in the financial statements?

These questions are closely related to the objectives of accounting.”

REFERENCES

1. Accounting Principles Board, Statement No. 4, *Basic Concepts and Accounting Principles Underlying Financial Statements of Business Enterprises*, New York: AICPA, 1970, p. 50.
2. Financial Accounting Standards Board, Concept No. 6, *Elements of Financial Statements*, Stamford: FASB, December 1985, para 35.
3. The Institute of Chartered Accounts of India, *Guidance Note on Terms Used in Financial Statements*, New Delhi: ICAI, Sept. 1983. p. 19.
4. A.D. Barton, *The Anatomy of Accounting*, University of Queensland Press, 1975.
5. Financial Accounting Standards Board, Concept No. 6, *Elements of Financial Statements*, Stamford: FASB, December 1985, paras 60-63.
6. Ahmed Belkaoui, *Accounting Theory*, Thomson Learning, 2000, p. 168.
7. Eldon S. Hendriksen, *Accounting Theory*, Irwin, 1984, p. 459.
8. Louis Goldberg, *An Enquiry into the Nature of Accounting*, American Accounting Association, Sarasota, 1965, p. 149.
9. Eldon S. Hendriksen, *Ibid*, p. 461.

QUESTIONS

1. Define liabilities. Mention important characteristics of liabilities.
2. “Liabilities are probable future sacrifice of economic benefits arising from present obligations of a particular entity to transfer assets or provide services to other entities in the future as a result of past transactions or services.” Comment on this statement.
3. Distinguish between ‘liabilities’ and ‘proceeds.’
4. Which method(s) would you adopt for the valuation of liabilities? Give reasons.
5. Explain the meaning of the term ‘current liabilities.’ Describe some items accepted as ‘current liabilities’ in financial accounting.
6. “In accounting, current and noncurrent distinction is followed, but yet they are not adequate.” In the light of this statement, explain implications associated with present practice of defining current assets and current liabilities.
7. What is ownership equities? What are its characteristics?
8. Distinguish between equity and liabilities.
9. Give your views in brief regarding the provision for converting external equities into internal equities by the business enterprises at times of the issuance of debentures. Answer with reference to India. (M.Com., Delhi, 1985)
10. Explain the ‘Enterprise Theory’ of Accounting. (M.Com., Delhi, 1991)
11. What are the features of ownership equity? Explain the different theories of equity. (M.Com., Delhi, 1996)



Depreciation Accounting and Policy

The chapter 6 has discussed different types of long-term or long-lived asset and some issues relating to these assets. This chapter discusses the accounting problems related to the use of these assets whose benefits to a firm extend over many accounting periods, especially the issue of depreciation accounting.

Before taking up depreciation, it should be understood that the costs relating to the use of long-term assets should be properly calculated and matched against the revenue earned (these use cost have helped in generating) so that periodic net income can be determined. These use costs or expense or periodic write off are known by different names for different category of assets as shown below:

<i>Types of Long-term Assets</i>	<i>Term of expense or write-off or use costs</i>
1. Tangible assets:	
(i) Land	None
(ii) Plant, building, equipment tools, furniture, fixtures, vehicles.	Depreciation
(iii) Natural resources such as oil, timber, coal, mineral deposits.	Depletion
2. Intangible assets such as patent, copyrights, trademarks, goodwill	Amortisation

Among the above assets, land is a tangible asset that has an indefinite or unlimited useful life. Therefore, it is not subject to depreciation or periodic write off to expenses.

Depletion is the name of expenses or write off in the case of natural resources. Depletion refers to the systematic and rational allocation of the acquisition cost of natural resources to future periods in which the use of those natural resources contributes to revenue. Natural resources are exhausted or used up through mining, cutting, pumping etc.

The term amortisation is used in case of intangible assets. Amortisation refers to the systematic and rational allocation of the acquisition cost of intangible assets to future periods in which the benefits contribute to revenue. It is the periodic write off to expenses of the intangible asset's cost over its expected useful life.

The term depreciation refers to periodic allocation of the acquisition cost of tangible long-term asset over its useful life. Depreciation has been discussed in detail later.

ACCOUNTING PROBLEMS IN LONG-TERM ASSETS

Basically, there are two problems relating to accounting of long-term assets. First, what is the original acquisition cost of a

particular long-term asset. Second, how should the amount of expense or period write off be determined and allocated against yearly revenue to reflect the asset's consumption. The other related issues are how should subsequent expenditures such as repairs, maintenance and additions be treated, how should disposal of long-term assets be recorded. These accounting problems are graphically presented in Figure 8.1.

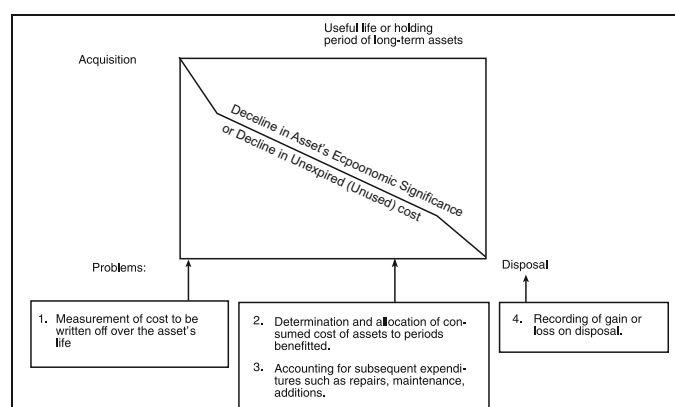


Fig. 8.1: Accounting Problems of Long-term Assets

For accounting purposes, the acquisition cost of a long-term asset having a limited useful life indicates the prepaid cost of a bundle of future services or benefits that will help earn future revenues. Acquisition cost of long-term assets are like inventories and prepaid expenses. Acquisition cost includes all expenditures necessary to get the long-term assets in place and ready for use.

Cost of a long-term asset is easy to determine when the asset is purchased for cash. In this case, cost of asset is equal to cash paid for the asset plus expenditures for freight, insurance while in transit, sales tax, special foundations, installation and other necessary costs. When a second hand asset is purchased, the initial costs of getting it ready for use, such as expenditures for new parts, repairs and painting are added to the cost of assets.

Some costs associated with the acquisition of an asset are not added to the cost of asset, if they are found not necessary to get the asset ready for use and therefore, do not increase asset's usefulness. Expenditures resulting from carelessness or errors in installing the asset, from vandalism or from other unusual occurrences do not increase the usefulness of the assets and should be treated as expenses.

If a debt is incurred for the purchase of the asset, the interest charges are not the cost of the asset but are the cost of borrowing money to purchase the asset. They are, therefore, an expense for the period. But interest incurred during the construction period of an asset are treated as part of the cost of an asset.

The cost of land includes not only the negotiated price but also other expenditures such as broker's commissions, title fees, surveying fees, Lawyer's fees, accrued taxes paid by the purchaser, assessment for local improvements such as streets and sewage systems, cost of draining, clearing, levelling, and grading. Any salvage recorded from the old building will be deducted from the cost of the land.

Improvements to land such as parking lots, private side walks, driveways, fences are not added to the cost of land but to a separate account, Land Improvement Account. These expenditures are depreciated over the estimated lives of the improvements.

When an existing or old building or used machinery is purchased, its cost includes the purchase price plus all repair, renovation and other expenses incurred by the purchaser prior to use of asset. Ordinary repair costs incurred after the asset is placed in use are normal operating expenses when incurred.

When a business constructs its own buildings, the cost includes all reasonable and necessary expenditures such as those for materials, labour, some related overhead and indirect costs, architects' fees, insurance during construction, interest on construction loans during the period of construction, lawyer's fees. If outside contractors are used in the construction, the net contract price plus other expenditures necessary to put the building in usable condition are included.

Sometimes, basket purchases (also known as group purchases, package purchases) of assets are made by the purchaser wherein two or more types of long-term assets are acquired in a single transaction and for a single lumpsum. In basket or package purchases, cost of each asset acquired must be measured and recorded separately. For example, assume that a purchaser has purchased land and the building situated on the land for a lumpsum payments of ₹ 8,50,000. The total purchase price can be divided between these two assets on the basis of relative market or appraisal values, as shown below.

<i>Asset</i>	<i>Estimated Market value</i> (₹)	<i>Per cent of total</i> %	<i>Allocation of Purchase Price</i> (₹)	<i>Estimated useful life</i>
Land	1,00,000	10	85,000	Indefinite
Building	9,00,000	90	7,65,000	30 yrs.
	10,00,000	100	8,50,000	

When a long-term asset is purchased and a noncash consideration is included in part or in full payment for it, the cash equivalent cost is measured as any cash paid plus current market value of the noncash consideration given. Alternatively, if the market value of the noncash consideration given cannot be determined, the current market value of the asset purchased is used for measurement purposes.

As a general rule, long-term assets are recorded at cost due to the basic criterion of objectivity. However, there could be some exceptions to this rule of cost basis. For example, if an asset acquires an asset by donation or pays substantially less than the market value of the asset, the asset is recorded at its fair market value. Similarly, if the value of land increases sharply after its acquisition due to some abnormal factors such as discovery of mineral deposits or oil, the amount originally recorded as the cost of land may be increased to reflect current value of the land.

NATURE OF DEPRECIATION

As stated earlier, depreciation is a term applicable in case of plant, building, equipment, furniture, fixtures, vehicles, tools. These longterm or fixed assets have a limited useful life, that is, they will provide service to the entity (in the form of helping in the generation of revenue) over a limited number of future accounting periods. Depreciation implies allocating the cost of a tangible fixed or long-term asset over its useful life. Depreciation makes a part of the cost of asset chargeable as an expense in

profit and loss account of the accounting periods in which the asset has helped in earning revenue. Thus, allocating the capitalised cost of an asset into expense for different accounting periods is known as depreciation.

The Institute of Chartered Accountants of India defines depreciation as follows:

“Depreciation is a measure of the wearing out, consumption or other loss of value of depreciable asset arising from use, effluxion of time or obsolescence through technology and market changes. Depreciation is allocated so as to charge a fair proportion of the depreciable amount in each accounting period during the expected useful life of the asset. Depreciation includes amortisation of assets whose useful life is predetermined.”¹

SSAP 12 of U.K. also defines the depreciation in the same manner.

“Depreciation is the measure of the wearing out, consumption or other loss of value of a fixed asset whether arising from use, effluxion of time or obsolescence through technology and market changes.”²

International Accounting Standards Committee (now IASB) defines this term as follows:

“Depreciation is the allocation of the depreciable amount of an asset over its estimated useful life. Depreciation for the accounting period is charged to income either directly or indirectly.”³

Depreciation accounting is based on matching concept wherein an attempt is made to match a part of acquisition cost of an asset (shown as depreciation expense) with the revenue generated by the use of such asset. To determine the amount of depreciation, three items are needed (i) actual acquisition cost (ii) estimated net residual value and (iii) estimated useful life. Of these three items, two are estimates, residual value and useful life. Due to this, it can be said that the amount of depreciation recorded in an accounting period is only an estimate. To take an example, assume an asset was purchased for ₹ 1,00,000 and it has a life of 10 years. At the end of 10 years, the asset can be sold for ₹ 10,000. It means that decline in value of ₹ 90,000 (₹ 1,00,000 – ₹ 10,000) is an expense of generating the revenue realised during the ten year periods that the asset was used. Therefore, in order to determine correct net income figure, ₹ 90,000 of expense shall be allocated to these periods and matched against the revenue. Failure to do so would overstate income for these periods. Depreciation expense for each accounting year can be determined as following:

Acquisition cost	₹	1,00,000	
Less: Salvage or residual value	₹	10,000	
Amount to be depreciated over useful life	₹	90,000	
Estimated useful life	₹ 90,000	10 years	
Annual depreciation expense	10 years	=	₹ 9,000

It should be understood that depreciation accounting becomes necessary due to the asset except land losing its economic utility, significance or potential. Many factors cause decline in the utility of the asset for the business such as wear and tear, passage of time, obsolescence, technological change etc.

CAUSES OF DEPRECIATION

Depreciation occurs due to decline in the service potential of an asset and the decline in the service potential makes the assets to have only a limited useful life. Unless the asset should eventually be retired from its planned use, there is no cause for depreciation. For example, services provided by land do not decrease over time. Therefore, land is not depreciated and all costs are recovered when the land is sold.

There are many factors that cause decline in the service potential or economic utility of asset and hence become the causes of depreciation. However, the major causes are physical deterioration and obsolescence.

Physical deterioration of the assets results from use and physical factors such as normal wear and tear, chemical action such as rust, effects of wind and rain. To some extent, maintenance and repairs may partially check or offset wear and deterioration. Therefore, while estimating the useful life and salvage value of the asset, a given level of maintenance is assumed. However, this does not eliminate the need of depreciation.

Obsolescence is another important cause of depreciation. Obsolescence is nonphysical factor and means becoming out of date. With fast changing technology as well as fast changing

demands, machinery and even buildings often become obsolete before they wear out. Inventions may result in new processes that reduce the unit cost of production to the point where continued operation of old equipment is not economical. Firms replace computers that work as well as when they were purchased because new, smaller computers occupy less space and compute faster.

It should also be noted that replacing the asset is not essential to the existence of depreciation. Depreciation is the expiration or disappearance of service potential from the time the plant asset is put into use until the time it is retired from service. Whether or not the asset is replaced does not affect the amount or treatment of its depreciation.

Accountants rightly do not differentiate between physical deterioration and obsolescence and are not interested in identifying the specific causes of depreciation for determining the amount of depreciation. These and other causes are only helpful in estimating an asset's useful life in which the accountants are interested because the useful life of an asset is used to measure the amount of depreciation.

FACTORS THAT AFFECT THE COMPUTATION OF DEPRECIATION

The computation of depreciation for an accounting period is affected by the following factors:

(1) **Depreciable assets:** Depreciable assets are assets which:

- (i) are expected to be used during more than one accounting period; and
- (ii) have a limited useful life; and
- (iii) are held by an enterprise for use in the production or supply of goods and services, for rental to others, or for administrative purposes and not for the purpose of sale in the ordinary course of business.

(2) **Useful life:** Useful life is either

- (i) the period over which a depreciable asset is expected to be used by the enterprises; or
- (ii) the number of production or similar units expected to be obtained from the use of the asset by the enterprise.

The useful life of a depreciable asset is shorter than its physical life and is:

- (i) predetermined by legal or contractual limits, such as the expiry dates of related leases;
- (ii) directly governed by extraction or consumption;
- (iii) dependent on the extent of use and physical deterioration on account of wear and tear which again depends on operational factors, such as, the number of shifts for which the asset is to be used, repair and maintenance policy of the enterprise etc., and

- (iv) reduced by obsolescence arising from such factors as:
 - (a) technological changes;
 - (b) improvement in production methods;
 - (c) change in market demand for the product or service output of the asset; or
 - (d) legal or other restrictions.

Estimation of the useful life of a depreciable asset or a group of similar depreciable asset is a matter of judgement ordinarily based on experience with similar types of assets. For an asset using new technology or used in the production of a new product or in the provision of a new service with which there is little experience, estimation of the useful life is more difficult but is nevertheless required.

Since the estimated useful life of the asset is determined at the time of acquisition, it may become necessary to revise the estimate after a period of usage. According to AS-6, when the original estimated useful life is revised, the unamortised depreciable amount of the asset is charged to revenue over the revised remaining useful life. Another method to be adopted for taking into account the revised life of the asset is to recompute the aggregate depreciation charged to date on the basis of the revised useful life of the asset and to adjust the excess or short depreciation so determined in the accounting period of revision.

(3) Depreciable amount: Depreciable amount of a depreciable asset is its historical cost, or other amount substituted for historical cost in the financial statements, less the estimated residual value.

Historical cost of a depreciable asset represents its money outlay or its equivalent in connection with its acquisition, installation and commissioning as well as for additions to or improvement thereof. The historical cost of a depreciable asset may undergo subsequent changes arising as a result of increase or decrease in long-term liability on account of exchange fluctuations, price adjustments, change in duties or similar factors.

(4) Residual value: The residual value of an asset is often insignificant and can be ignored in the calculation of the depreciable amount. If the residual value is likely to be significant, it is estimated at the date of acquisition, or the date of any subsequent revaluation of the asset, on the basis of the realisable value prevailing at the date for similar assets which have reached the end of their useful lives and have operated under conditions similar to those in which the asset will be used. The gross residual value in all cases is reduced by the expected cost of disposal at the end of the useful life of the asset.

According to ICAI's AS-6 "any addition or extension to an existing asset which is of a capital nature and which becomes an integral part of the existing asset is depreciated over the remaining useful life of that asset. As a practical measure, however, depreciation is sometimes provided on such addition or extension at the rate which is applied to an existing asset. Any addition or extension which retains separate identity and is capable of being

used after the existing asset is disposed of, is depreciated independently on the basis of an estimate of its own useful life."

DEPRECIATION IS A PROCESS OF ALLOCATION, NOT OF VALUATION

The Statement that 'depreciation is a process of allocation, not of valuation' is found in the following definition of AICPA (USA):

"Depreciation accounting is a system of accounting which aims to distribute the cost ... of tangible capital assets, less salvage (if any) over the estimated useful life of the unit in a systematic and rational manner. It is a process of allocation, not of valuation."

This definition represents depreciation as an allocation of cost and is based on the following assumption:

- (i) Depreciation is that part of the cost of a fixed asset which is not recoverable when the asset is finally put out of use.
- (ii) Depreciation is related to the expected benefits derived from the asset and it is possible to measure the benefit.
- (iii) Depreciation accounting is not an attempt to measure the value of an asset at any point of time. But there is only an attempt to measure the value of the benefit the asset has provided during a given accounting period and that benefit is valued as portion of the cost of the asset. In other words, the balance sheet value of depreciable asset is that portion of the original cost which has not been allocated as a periodic expense in the process of income measurement.
- (iv) Depreciation accounting does not itself provide funds for the replacement of depreciable asset, but the charging of depreciation ensures the maintenance intact of the original money capital of the entity. Indeed, a provision for depreciation is not identified with cash or any other specific asset or assets.

Allocation Process

Allocation in accounting refers to the process of partitioning a set or an amount and the assignment of resulting subsets or amounts to separate periods of time or classifications. Depreciation accounting attempts to allocate in a rational and systematic manner the difference between acquisition cost and estimated salvage value over the estimated useful life of the asset. The main emphasis in depreciation accounting is on the computation of periodic charge to be allocated as an expense and to be matched with revenues reported in each period. Depreciation considers the original cost as deferred expenses and the original cost is charged against the profits of the various periods by allocating it over a given period in a systematic manner. Depreciation does not refer to physical deterioration of an asset or decrease in market value of an asset over time. If it is so, then it can be claimed that periodic repairs and sound maintenance policy may keep buildings and equipment in good running order or as good as new and thus

physical deterioration can be stopped or checked. However, every building or machine at sometime has to be discarded and replaced. The need for depreciation is not eliminated by repairs and depreciation does not depend on physical deterioration alone or no physical deterioration. Similarly, depreciation process is not affected by what happens to the price level in general or to the price of asset in particular. It is related to the income statement which shows the net income after accounting for depreciation. Depreciation is simply the allocation of the cost of a plant asset to the periods that benefit from the services of the asset.

The net income under allocation concept of depreciation would be overstated in times of rising prices. That is, the allocation concept does not consider the problem of asset replacement at a higher price in future. It is rightly argued that an additional reserve out of net profits can be provided for replacement of assets alongwith historical cost basis of providing depreciation. Alternatively, replacement cost can be made the basis of allocating the cost of an asset which would reflect current business situations and the net income would also be realistic. Whatever methods or adjustments are done, the allocation basis of determining depreciation is followed. However, when replacement cost is used in place of historical cost of asset, the objective of current revenue matching with current cost is also achieved.

Depreciation not a Valuation Process

Depreciation is not a process of valuation. The valuation concept considers depreciation as the decline in the value of the asset over a period of time. It requires the valuation of assets at two points of time and assuming decline in value, the amount of depreciation is determined as the difference between the value of asset at the beginning and the end of an accounting period. However, depreciation does not arise due to decline in value during that period, but rather from the process of ensuring a return of capital invested. If, in a given period, an asset increases in value, there will still be depreciation during that period.

A depreciation problem will exist whenever (1) funds are invested in services to be rendered by a plant asset, and (2) at some date in the future, the asset must be retired from service with a residual value less than its original cost.⁴

The valuation concept is related to the balance sheet which aims to reflect the values of different assets at a particular date or point in time.

The valuation concept implies that depreciation should reflect the decreases in value of the asset over a period of time. The term value means (1) market value (2) value to the owner. The valuation concept would provide a very unsatisfactory basis for distributing the depreciation charges. Decline in the value of asset with time is likely to be unequal and would make net income comparison difficult and unreliable. When the value of the new asset increases, it is not brought into accounting records because the increase in value may not be permanent and also no profits (due to increase in value of asset) should be taken into account

unless they are realised. Further, even if the market value of a plant or building increases, depreciation should be recorded as a result of allocation. Eventually, the building will wear out, the plant will lose its utility or become obsolete regardless of interim fluctuations in market value.

Under ideal conditions, *i.e.*, when prices are stable, all facts are clear, estimates are correct, the amount of depreciation under allocation process and valuation process are likely to be identical. In other words, after deducting the amount of depreciation under the allocation procedure from the cost of an asset at the beginning of the year, the resulting remaining cost of an asset will reflect the value of the asset at the balance sheet dates that one could obtain while following valuation process of determining depreciation. For example, assume the cost of an asset to be ₹ 1,00,000 with zero scrap value. If the useful life of the asset is 10 years, the amount of depreciation under allocation process will be ₹ 10,000 ($\text{₹ } 1,00,000 \div 10 \text{ years}$). Further, assume that price of this asset and prices in general are stable and the asset is available for purchase in the market. In this ideal situation, value of asset will decline because prices are stable and the asset will have wear and tear and will not maintain the same potential or utility when it was purchased. Since the useful life of the asset is 10 years, the value of asset should be zero at the end of 10 years. It means for each year, the amount of decline in value comes to ₹ 10,000 which is also the amount of depreciation under the allocation process.

However, the trouble is that practical conditions are far from ideal. It is difficult to determine depreciation on the changes in market value because a reliable objective and practical source for such data is rarely found. Any attempt to accomplish the objectives of allocation and valuation both simultaneously would be impossible and create confusion. The better approach, is, therefore, to ignore the valuation aspect and to concentrate on a satisfactory distribution of the cost of the asset.⁵

Cost allocation is a matching principle and the objective is to find a particular method that, more or less, coincides with the pattern of services or benefits provided by the asset to future periods of time. The Accounting Principle Board⁶ (USA) has said, "the allocation method used should appear reasonable to an unbiased observer and should be followed systematically."

DEPRECIATION METHODS

The different depreciation methods aim to allocate the cost of an asset to different accounting periods in a systematic and rational manner. However, the different methods tend to allocate different amount as the amount of depreciation. Broadly, depreciation methods can be divided into two categories:

- (1) Straight-line Method.
- (2) Accelerated Method.

(1) Straight-line Method

Under straight-line method, a constant amount is written off as depreciation every year over useful life of the asset. The straight line method is based on the assumption that depreciation depends only on the passage of time. The depreciation expense for each accounting period is computed by dividing the depreciable cost (Cost of the depreciating asset less its residual value) by the estimated useful life, as shown below:

$$\text{Annual depreciation} = \frac{\text{Original Cost} - \text{Salvage Value}}{\text{Period of useful life}}$$

To take an example, assume that cost of an asset is ₹ 1,00,000, salvage value ₹ 10,000, useful life 5 years. The amount of depreciation under straight line method will be ₹ 18,000 for each accounting year, as calculated below:

$$\begin{aligned} \text{Annual depreciation} &= \frac{\text{Cost} - \text{Salvage Value}}{\text{Useful life}} \\ &= \frac{\text{₹ } 1,00,000 - \text{₹ } 10,000}{5 \text{ years}} = \text{₹ } 18,000 \end{aligned}$$

The rate of depreciation under straight line method is the same in each year. In the above example it is 20%

$$\left[\frac{\text{₹ } 18,000}{\text{₹ } 90,000} \times 100 \text{ or } \frac{1 \text{ years}}{5 \text{ years}} \times 100 \right]$$

Using the above figures, the depreciation schedule for the five years period of the asset's life will be as follows:

**Depreciation Schedule
(Straight Line Method)**

	Cost ₹	Annual depreciation ₹	Accumulated depreciation ₹	Book Value or Carrying value of asset ₹
Date of purchase	1,00,000	—	—	1,00,000
End of first year	1,00,000	18,000	18,000	82,000
End of second year	1,00,000	18,000	36,000	64,000
End of third year	1,00,000	18,000	54,000	46,000
End of fourth year	1,00,000	18,000	72,000	28,000
End of fifth year	1,00,000	18,000	90,000	10,000

Depreciation expense is deducted from revenue in determining net income. Accumulated depreciation is deducted from the related asset account on the balance sheet to compute the asset's book value or carrying value. From the above depreciation schedule three things can be noticed (i) depreciation is the same each year, (ii) accumulated depreciation increases uniformly and (iii) book value or carrying value of asset decreases uniformly until it reaches the estimated residual value.

The straight line method is considered to be simple, logical, consistent and stable. It is suited to an asset with a relatively uniform periodic usage and a low obsolescence factor. It implies an approximately equal decline in the economic usefulness of asset each period. It is particularly useful in the case of capital intensive industries like, iron and steel because it enables a uniform rate of depreciation to be charged against profits and thus makes for cost and price calculations on a more uniform basis and keep these at lower levels.

(2) Accelerated Method

Under accelerated method of providing depreciation, larger amounts are written off in the earlier years of an asset's life and comparatively smaller amounts in the later years. This method is based on the assumption that revenue declines as an asset ages. A new asset is more productive than an old one since mechanical efficiency declines and maintenance cost rises with age. Better matching of revenue and expenses therefore requires larger

depreciation initially when an asset contributes more and smaller depreciation later when it contributes less. Accordingly depreciation charge declines year after year.

The following methods are known as accelerated methods of depreciation:

- Written down value method also known as diminishing balance method.
- Sum-of-the-years digit method.
- Double declining method.

Written Down Value Method (or Diminishing Balance Method)

In this method, the depreciation charge is calculated by multiplying the net book value of the asset (acquisition cost less accumulated depreciation) at the start of each period by a fixed rate. The estimated salvage value is not subtracted from the cost in making the depreciation calculation, as is the case with other depreciation methods. Because the net book value declines from period to period, the result is a declining periodic charge for depreciation throughout the life of the asset. Under this method, it is impossible to reduce asset value to zero because there is always some balance to reduce asset even further. When the asset is sold or retired or abandoned, the written down value appearing in books is written off as depreciation for the final period.

Under the declining balance method, as strictly applied, the fixed depreciation rate used is one that will charge the cost less salvage value of the asset over its service life. The formula for computing the rate is:

$$r = 1 \pm n \sqrt[n]{\frac{S}{C}}$$

In this formula, r = rate of depreciation
 n = number of years of asset's life
 s = salvage value
 c = cost of the asset

Remember, if the residual or scrap value of an asset is zero, the rate of depreciation cannot be determined using the above formula.

Sum-of-the-years-digits (SYD) Method

This method of depreciation charges large amounts of assets costs to expense in the early years of life and lesser amount in later years. To compute the depreciation, first list numerically the years of an asset's life and sum this arithmetical progression. Then use the highest number in the series as the numerator and the sum of the series as the denominator of a fraction that is multiplied by the cost (less salvage) of the asset. For each subsequent year, use the next lower number in the series; in this way the fraction decreases each year.

Example = Value of machinery ₹ 66,000
 Salvage value ₹ 3,000
 Life is 6 years
 Sum of the year's Digits (6 years) = $1 + 2 + 3 + 4 + 5 + 6 = 21$
 First year's Depreciation = $\frac{6}{21} \times (66,000 - 3,000)$
 = $\frac{6}{21} \times 63,000$
 = ₹ 18,000

Second Year's Depreciation = $\frac{5}{21} \times (66,000 - 3,000)$
 = ₹ 15,000
 Sixth year's Depreciation = $\frac{1}{21} \times (66,000 - 3,000)$
 = ₹ 3,000

The depreciation expenses on the income statement is higher in the early years than with straight line depreciation. On the other hand, the sixth year's depreciation by the straight line method still be ₹ 10,500.

The machinery would be shown on the balance sheet at the end of second year as follows:

Machinery	₹ 66,000
Less: Accumulated depreciation	₹ 33,000
	₹ 33,000

Note that a smaller asset balance is left with the SYD depreciation than with straight line. This smaller balance is caused by the writing off larger amount to expense these years. Both methods will arrive at a ₹ 3,000 balance (the salvage) at the end of the 6 years life.

Double Declining Method

This method is similar to the SYD method in charging larger amounts of depreciation to the early years of an asset's life. In this method, a constant rate is applied to the asset balance, that is, to the cost less accumulated depreciation. The rate that is usually used for new assets is twice the straight line rate under straight line method of depreciation. Using the previous example:

Straight line rate = $1/\text{No. of years} = 1/6$
 Declining Balance Rate = $1/6 \times 2 = 2/6 = 1/3$
 First Year's Depreciation = $66,000 \times 1/3 = ₹ 22,000$
 2nd Year's Depreciation = $1/3 \times (66,000 - 22,000)$
 = ₹ 14,666.70

Depreciation of entire 6 years.

Year	Cost (₹)	Rate	Depreciation Expenses (₹)	Asset Book value, end of year (₹)
1	66,000	1/3	22,000.0	44,000.0
2		1/3	14,666.7	29333.3
3		1/3	9777.8	19555.6
4		1/3	6518.5	13037.0
5		1/3	4345.7	8691.3
6		1/3	2897.1	5794.2

The following points should be noted:

- The assets book value will never reach zero.
- The rate is applied to the net asset balance at the end of previous year (this balance goes down each year and is a declining balance).
- No salvage is deducted as in other methods; the rate is applied to the original asset balance instead.

There are distinctive features of the declining balance method. In no other method is a constant rate applied to a declining balance. All other methods deduct salvage. But in the declining balance method a salvage value is, in effect, built into the method itself. This is so because a balance of undepreciated cost will always remain, no matter how often a rate is applied.

In this method (as per the above example) salvage value of ₹ 5,794.12 is automatically provided for. However, an asset should not be depreciated below its salvage value of ₹ 3,000.

DEGREE OF ACCELERATION IN DEPRECIATION METHODS

The degree of accelerations depends upon the method of providing depreciation, viz., straight line, diminishing balance or sum-of-the-year-digits method. The following table provides a comparative view of the pattern of write-off of the cost of an

asset under simple and accelerated methods, viz., written down value, straight line and sum-of-the-year-digits method.

Date:	Cost	₹ 1000
	W.D. Rate	20%
	Scrap Value	₹ 50
	Life	14 years

Corresponding straight-line rate 6.79%

Comparative Amounts of Depreciation

Number of Year	W.D.V. Annual Dep.	Straight-line Annual Dep.	Sum of the Years Digits Annual Dep.
1	200	67.9	126.7
2	160	67.9	117.6
3	128	67.9	108.6
4	102.4	67.9	99.5
5	81.0	67.9	90.5
6	65.5	67.9	81.4
7	52.4	67.9	72.4
8	42.0	67.9	63.3
9	33.6	67.9	54.3
10	26.8	67.9	45.2
11	21.5	67.9	36.2
12	17.2	67.9	27.1
13	13.7	67.9	18.1
14	50.0	67.3	9.1
	(Balance Figure)	(Balance Figure)	

If we compare the amount of depreciation in the above table, we find that written down value method contains the highest degree of acceleration out of the three methods mentioned here. If a company has the discretion to choose depreciation for tax purposes, then the choice will depend upon the financial objective of the company and its particular circumstances. If the objective is to charge lower depreciation in the initial years of an asset's life and report higher 'book profit', the company should adopt the straight-line method. A company may decide to follow sum-of-the-years-digits methods only when it wants to follow an accelerated method of depreciation having a lower degree of acceleration as compared to W.D.V. method.

The Figure 8.2 displays the difference between straight-line method and an accelerated method, say written down value method.

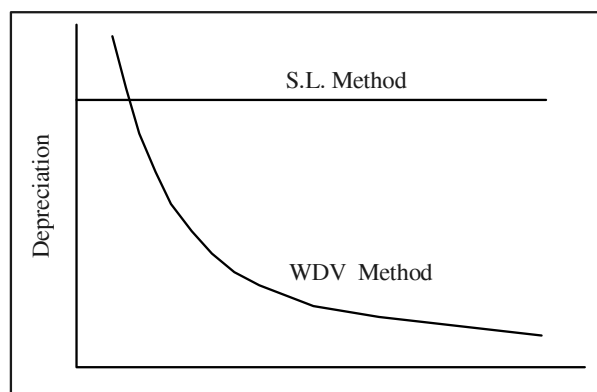


Fig. 8.2: Display of straight-line method and written down value method

AS-6 ON DEPRECIATION

The ICAI has issued (revised) accounting standard in August 1994 on depreciation and this has been made mandatory in respect of accounts for periods commencing on or after 141995. This standard deals with depreciation accounting and applies to all depreciable assets, except the following items to which special considerations apply:

- (i) forests, plantations and similar regenerative natural resources;

- (ii) wasting assets including expenditure on the exploration for and extraction of minerals, oils, natural gas and similar non-regenerative resources;
- (iii) expenditure on research and development;
- (iv) goodwill;
- (v) livestock.

This standard also does not apply to land unless it has a limited useful life for the enterprise. The provisions of AS-6 with regard to disclosure and accounting standard of depreciation are briefly as follows:

1. Disclosure

- (i) The depreciation methods used, the total depreciation for the period for each class of assets, the gross amount of each class of depreciable assets and the related accumulated depreciation are disclosed in the financial statement along with the disclosure of other accounting policies. The depreciation rates or the useful lives of the assets are disclosed only if they are different from the principal rates specified in the statute governing the enterprise.
- (ii) In case the depreciable assets are revalued, the provision for depreciation is based on the revalued amount on the estimate of the remaining useful life of such assets. In case the revaluation has a material effect on the amount of depreciation, the same is disclosed separately in the year in which revaluation is carried out.
- (iii) A change in the method of depreciation is treated as a change in an accounting policy and is disclosed accordingly.

2. Computation of Depreciation

- (i) The depreciable amount of a depreciable asset should be allocated on a systematic basis to each accounting period during the useful life of the asset.
- (ii) The depreciation method selected should be applied consistently from period to period. A change from one method of providing depreciation to another should be made only if the adoption of the new method is required by statute or for compliance with an accounting standard or if it is considered that the change would result in a more appropriate preparation or presentation of the financial statements of the enterprise. When such a change in the method of depreciation is made, depreciation should be recalculated in accordance with the new method from the date of the asset coming into use. The deficiency or surplus arising from retrospective recomputation of depreciation in accordance with the new method should be adjusted in the accounts in the year in which the method of depreciation is changed. In case the change in the method results in deficiency in depreciation in respect of past years, the deficiency should be charged in the statement of profit and loss. In case the change in the method results in surplus, the surplus should be credited to the statement of profit and loss. Such a change should be treated as a change in accounting policy and its effect should be quantified and disclosed.
- (iii) The useful life of a depreciable asset should be estimated after considering the following factors:
 - (i) expected physical wear and tear;
 - (ii) obsolescence;
 - (iii) legal or other limits on the use of the asset.
- (iv) The useful lives of major depreciable assets or classes of depreciable assets may be reviewed periodically. Where there is a revision of the estimated useful life of an asset, the unamortised depreciable amount should be charged over the revised remaining useful life.
- (v) Any addition or extension which becomes an integral part of the existing asset should be depreciated over the remaining useful life of that asset. The depreciation on such addition or extension may also be provided at the rate applied to the existing asset. Where an addition or extension retains a separate identity and is capable of being used after the existing asset is disposed of, depreciation should be provided independently on the basis of an estimate of its own useful life.
- (vi) Where the historical cost of a depreciable asset has undergone a change due to increase or decrease in long-term liability on account of exchange fluctuations, price adjustments, changes in duties or similar factors, the depreciation on the revised unamortised depreciable amount should be provided prospectively over the residual useful life of the asset.
- (vii) Where the depreciable asset are revalued, the provision for depreciation should be based on the revalued amount and on the estimate of the remaining useful lives of such assets. In case the revaluation has a material effect on the amount of depreciation, the same should be disclosed separately in the year in which revaluation is carried out.
- (viii) If any depreciable asset is disposed of, discarded, demolished or destroyed, the net surplus or deficiency, if material, should be disclosed separately.
- (ix) The following information should be disclosed in the financial statements:
 - (i) the historical cost or other amount substituted for historical cost of each class of depreciable assets;
 - (ii) total depreciation for the period for each class of assets; and
 - (iii) the related accumulated depreciation.

(x) The following information should also be disclosed in the financial statements along with the disclosure of other accounting policies:

- (i) depreciation methods used; and
- (ii) depreciation rates or the useful lives of the assets, if they are different from the principal rates specified in the statute governing the enterprise.

DISPOSAL OF FIXED ASSETS

A business enterprise may sell a fixed asset or trade in on the purchase of new plant and equipment if the asset is no longer useful in the business. In this case, depreciation must be recorded upto the disposal date; regardless of the manner of the asset's disposal. If the disposal date does not match with the closing date of an accounting period, depreciation should be recorded for a partial period (the period from the date depreciation was last recorded to the disposal date). Whenever sale of plant or any other fixed asset takes place, there are likely to be three possibilities:

- (i) Sale of the fixed asset for more than book value;
- (ii) Sale of the fixed asset for less than the book value;
- (iii) Sale of the fixed asset exactly equal to its book or carrying value.

In the first case, the sale proceeds exceed the carrying value of the asset and thus, gain (difference between the sale proceeds and carrying value) is recorded and added to net income of the period.

In the second case, since the sale proceeds are less than the carrying value, the loss will be recorded and deducted from the net income of the period.

In the third case, there is neither gain or loss.

Plant Asset Discarded—If a fixed asset lasts longer than its estimated useful life and as a result is fully depreciated, it should not continue to be depreciated. That is, no depreciation should be done beyond the point the carrying value of the asset equals its residual value. If the residual value is zero, the book value of a fully depreciated asset is zero until the asset is disposed of. If such an asset is discarded, no gain or loss results. If a fully depreciated asset is still used in the business, this fact should be supported by its cost and accumulated depreciation remaining in the asset account. If the asset is no longer used in the business, the cost and accumulated depreciation should be written off. Under all circumstances, the total accumulated depreciation should never exceed the total depreciable cost.

EVALUATION OF ACCELERATED METHODS

The use of accelerated methods of depreciation provide certain benefits and is useful to business enterprises in many respects. Some benefits which may occur to business entities are as follows:

(1) Cash Flow: In terms of cash flow, initial depreciation serves the purposes of an interest free loan to the tax payer in respect of the year of erection of building or installation of machinery and plant. Since it results in postponement of the tax liability of the assessee, the amount of tax saved in the initial years result in a net addition to cash flow, which is repaid through a higher tax liability during the later years.

Depreciation is an expense that does not use funds currently. In the preparation of changes in financial position, depreciation is added back to net income in calculating funds provided by operations. Because it is added back to net income, the funds from operations is often defined as net income plus depreciation. However, depreciation is not a source of fund. Funds from other operations come from revenues from customers, not by making accounting entries. In fact, depreciation expense results from an outflow of funds in an earlier period, that is only now being recognised as an operating expense. The following example explains the fact that depreciation does not produce funds. Assume a company has net income in 2009 of ₹ 20,000 resulting from revenues of ₹ 1,25,000, expenses other than depreciation of ₹ 95,000 and ₹ 10,000 of depreciation. Now assume the depreciation increases to ₹ 25,000 while other expenses and revenues are unchanged, net income is ₹ 5,000 (ignore income taxes in both examples). The following Exhibit 8.1 shows that changes in depreciation do not affect funds from operations, funds from operations would be the same ₹ 30,000 in both situations.

Depreciation does help determine cash flow, however, by its effect on the measurement of taxable income and thus tax expenses. The more rapid the rate of depreciation charges for tax purposes, the slower the rate of tax payment. For this reason, accelerating depreciation for tax purposes stimulates acquisition of depreciable assets and is viewed as significant in increasing the rate of capital formation. In India, depreciation provision as a source of funds for joint stock companies accounted for more than 50% of the funds utilised in gross fixed assets formation and thus it occupies an important role to play in the internal financing of industry. An increasing dependence on this source of finance would suggest lessening reliance of companies on the capital market.

(2) Tax Advantage: Many companies may adopt accelerated depreciation methods for tax return purposes because of the tax advantage that they entail. Higher depreciation charges mean lower income and lower taxes. If accelerated methods are used for tax purposes they do not have to be used for financial reporting purposes. Every rupee that can be justified as a deduction saves the company about 50% in tax money. Since the total tax deduction is limited to the total cost of the asset, the different depreciation methods merely shift the years in which the deduction is made. Insofar as the deduction is made in earlier years rather than later, this saves interest but more than that it put the tax payer into possession of funds at an earlier date and this increases his flexibility of financial management.

(3) Benefit to Growing Company: The postponement of the liability under accelerated depreciation may be very useful for a

Exhibit 8.1: Impact of Depreciation on Funds from Operations

<i>Income Statement</i>	₹	<i>Funds from Operations</i>	₹
(i) Depreciation ₹ 10,000			
Revenue	1,25,000	Net Income	20,000
Less: Expense except Dep.	95,000	Add: Expenses not using capital:	
	30,000	Depreciation	10,000
Depreciation Expenses	10,000	Total funds from operations	30,000
Net Income	20,000		
(ii) Depreciation ₹ 25,000			
Revenue	1,25,000	Net Income	5,000
Less: Expenses except Depreciation	95,000	Add: Expenses not using capital:	
	30,000	Depreciation	25,000
Depreciation Expenses	25,000		30,000
Net Income	5,000		

growing firm investing more and more in fixed capital and more so far a new firm which may take sometimes to stabilise its business. When a company is expanding, the higher depreciation charges will help in expansion and investment which are essentially needed for the company.

(4) Replacement of Assets: Accelerated depreciation may induce the tax payer to replace old machinery or equipment before the end of its useful life by new and improved model and also gain the tax advantage. But this would be just one of the considerations in deciding the proper time for replacement. Accelerated depreciation methods allow a business to recover more of the investments in a fixed asset in the first few years of the asset's life. This is an important factor in any situation in which there is a high rate of technological change. It is also important when inflation is a factor and depreciation is limited to the original cost of a long-term asset

Accelerated depreciation does provide an incentive to invest in fixed assets and it helps particularly a growing firm than a stationary or a declining one. As far as the form of accelerated depreciation is concerned, the diminishing balance or sum-of-the-years-digits method seems preferable to a straight line method particularly in respect of plant and machinery. Selective use of initial depreciation and at varying rates for investment in priority sectors is likely to serve a better purpose than its general use. In case of underdeveloped economies, initial depreciation has a special role to play for encouraging investment in backward region and also in small and medium sized enterprises.

FACTORS INFLUENCING THE SELECTION OF DEPRECIATION METHOD

Depreciation has a significant effect in determining the financial position and result of operations of an enterprise by calculating net income as well as deduction from taxable income.

The quantum of depreciation to be provided in an accounting period involves the exercise of judgement by management in the light of technical, commercial, accounting and legal requirements and accordingly may need periodical review. If it is considered that the original estimate of useful life of an asset requires any revision, the unamortised depreciable amount of the asset is charged to revenue over the revised remaining useful life. Alternatively, the aggregate depreciation charged to date is recomputed on the basis of the revised useful life and the excess or short depreciation so determined is adjusted in the accounting period of revision.

There are several methods of allocating depreciation over the useful life of the assets. Those most commonly employed in industrial and commercial enterprises are the straight line method and the reducing balance method. The management of a business selects the most appropriate method(s) based on various important factors, e.g., (i) type of asset, (ii) the nature of the use of such asset and (iii) circumstances prevailing in the business. A combination of more than one method is sometimes used. In respect of depreciable asset which do not have material value, depreciation is often allocated fully in the accounting period in which they are acquired.

The following factors influence the selection of a depreciation method:

(1) Legal Provisions: The statute governing an enterprise may be the basis for computation of the depreciation. In India, in the case of company, the Companies Act, 1956 provides that the provision of depreciation, unless permission to the contrary is obtained from the Central Government, should either be based on reducing balance method at the rate specified in the Income Tax Act/Rules or on the corresponding straight line depreciation rates which would write off 95% of the original cost over the specified period. Where the management's estimate of the useful life of an asset of the enterprise is shorter than that envisaged under the

provision of the relevant statute, the depreciation provision is appropriately computed by applying a higher rate. If the management's estimate of the useful life of the assets is longer than that envisaged under the statute, depreciation rate lower than that envisaged by statute can be applied only in accordance with the requirements of the statute.

For tax purpose, the asset would be written off as quickly as possible. Of course, a firm can deduct only the acquisition cost, less salvage value, from otherwise taxable income over the life of the asset. Earlier deductions are, however, worth more than later ones because a rupee of taxes saved today is worth more than a rupee of taxes saved tomorrow. That is, the goal of the firm in selecting a depreciation method for tax purpose should be to maximise the present value of the reductions in tax payments from claiming depreciation. When tax rates remain constant over time and there is a flat tax rate (for example, income is taxed at a 40% rate), this goal can usually be achieved by maximising the present value of the depreciation deductions from otherwise taxable income.

Depreciation is a tax-deductible expense. Therefore, any profit a business enterprise sets aside towards depreciation is free of tax. Those enterprises, who make huge profit and choose to pay a lot of tax, should wisely go for more depreciation rather than pay more tax. They can follow accelerated methods of depreciation, can seek ways of increasing the amount of depreciation and amortisation on their assets so as to salt away more tax-free funds.

(2) Financial Reporting: The goal in financial reporting for long-lived assets is to seek a statement of income that realistically measures the expiration of those assets. The only difficulty is that no one knows, in any satisfactory sense, just what portion of the service potential of a long-lived asset expires in any one period. All that can be said is that financial statements should report depreciation charges based on reasonable estimates of assets expiration so that the goal of fair presentation can more nearly be achieved. UK Accounting Standards SSAP 12 issued in December 1977 argues:

"The management of a business has a duty to allocate depreciation as fairly as possible to the periods expected to benefit from the use of the asset and should select the method regarded as most appropriate to the type of asset and its use in the business.

Provision for depreciation of fixed assets having a finite useful life should be made by allocating the cost (or revalued amount) less estimated residual values of the assets as fairly as possible to the periods expected to benefit from their use."

(3) Effect on Managerial Decision: The suitability of a depreciation method should not be argued only on the basis of correct portrayal of the objective facts but should also be decided in terms of their various managerial effects.

Depreciation and its financing effect take the less basic but still realistic approach that, regardless of any effect which depreciation may have upon the total revenue stream, the

recognition of depreciation either through the cost of product or as an element in administration and marketing expenses, does cut down the showing of net income available for dividends and thus restricts the outflow of cash. The actual tax saving argument is sometimes short sighted, but the saving of interest and the increased financial flexibility are actual and constitute the real pressure behind depreciation accounting. Business managers consider these points, but they have the added responsibility of protecting management against the possible distortions of reported cost and misleading incomes which these pressures might engender.

A depreciation method which would lead to unwise dividends, distributing cash which was later needed to replace the asset, would be a poor method. A depreciation method which matches the asset costs distributed period by period against the revenues produced by the asset, thus helping management to make correct judgements regarding operating efficiency, would be a good method.⁷

(4) Inflation: Depreciation is a process to account for decline in the value of assets and for this many methods such as straight line, different accelerated methods are available. In recent years, inflation has been a major consideration in selecting a method of depreciation. To take an example, suppose one bought a car for ₹ 5,00,000 five years ago and wrote-off ₹ 1,00,000 every year to account for depreciation using straight line method, expecting that a new car can be purchased after five years. However, five years later, it is found that the same car costs ₹ 10,00,000 whereas only ₹ 5,00,000 has been saved through depreciation.

Why a new car or new asset cannot be purchased with the accumulated amount of depreciation? The difficulty has been created by the inflation. In fact, inflation has eaten into the money saved through depreciation over the five years. This means that a business enterprise (or the owner of car) eats into the asset faster than the rate of depreciation as the cost of replacing the asset is increasing.

The accelerated methods of depreciation tend to write-off ₹ 5,00,000 (the price of car in the above example) over the five years. But higher amounts are written off in the beginning as depreciation, and hence, larger amounts are accumulated through depreciation which increases the 'replacement capability' of a business enterprise.

The problem created by inflation in depreciation accounting has contributed in the emergence of the concept of inflation accounting. In inflation accounting, an attempt is made to increase the depreciation amount in line with inflation so that enough money to replace the asset at its current inflated cost can be accumulated.

(5) Technology: Depreciation is vital because it decides the regenerating capacity of industry and enables enterprises to set aside an amount before submitting profits to taxation, for replacing machines. Realistically, the depreciation that enterprises are eligible for and capable of accumulating should cover the purchase price of assets, when the time comes for replacement.

But the critical question is, when exactly does the time for replacement come? Life of machine, is no longer an engineering concept. Many electronic companies had to write-off their assets in three years because new technologies came in and old machines overnight became scrap. Commercial life of machines is decided by technological progress. The arrival of new machines is not governed by the depreciation policies of government. Therefore, the shorter the period over which the enterprise is able to recover depreciation, the better its chances to adapt to the new technology and survive. In an industry which are exposed to rapid technological progress, a fixed depreciation rate is the surest way to force it into bankruptcy.

Accumulating depreciation enough for buying new technology does not depend merely on a rate of depreciation. Business enterprises should have profit to provide for depreciation resulting into adequate money for the replacement at the proper time. An industry in which profits are likely to be high in the initial years will have to provide more depreciation in those years than in the later years when the profit is likely to be low.

Technological progress as a dimension of depreciation has become more important than the engineering life of machines. A constant rate of depreciation may be followed when an enterprise is making profit at a constant rate. It is only when profit are fluctuating that the company in years of high profits will provide for higher depreciation. If it is not able to do that because of fixed rate of depreciation imposed by the government, it will be overtaxed. As a result, it will not be able to retain enough earnings after payment of tax and dividends to make up for its inability to provide normal depreciation in years of adversity. At the end of the useful life of machines, the company will not have the resource to invest in new machines. It will succumb to technological progress.

(6) Capital Maintenance: During inflation, depreciation, if based on historical cost of assets, helps a business firm to gather an amount equivalent to the historical cost of the asset less its salvage value. This treatment of depreciation facilitates in maintaining only the 'money capital' or financial capital of business enterprises. However, this results into matching between historical amount of depreciation and sales in current Rupees. The result is that reported net income is overstated and dividends is distributed from the net income which is not real but fictitious. This way of income measurement and maintaining only financial capital during inflation results into erosion of real capital of business enterprises.

However, if depreciation is provided on replacement or current value of assets, it gives matching between current cost (depreciation) and current revenues. This does not involve any hoarding income as is found when depreciation is determined on historical cost. Depreciation on current value of assets provides real operating income in the profit and loss account. This means that capital of business enterprise would be maintained in real terms. Valuation of fixed assets in terms of current cost reflects the current value of operating capability of business enterprises.

Illustrative Problem - Bannelos Enterprises, Inc., constructed a new plant at a cost of ₹ 20,00,000 at the beginning of 2009. The plant was estimated to have a useful life of 20 years with no salvage value at the end of the 20 years. The company expects earnings, before deducting depreciation on the plant and income taxes, of ₹ 50,00,000 each year. Income taxes are estimated at 40 per cent of income before taxes

Required:

- Compute depreciation for each of the next four years by both the straight-line method and the double-rate method.
- What tax advantage can be expected in each of the next four years by using double-rate depreciation for tax purposes instead of straight-line depreciation?
- What difference, if any, would it make in the situation if the company decides to adopt declining balance method instead of double rate method? (Assume salvage value of the plant to be equal to 5% of its original cost.)

(M.Com., Delhi)

Solution

(i) Depreciation in straight-line and double rate method

	Straight-line	Double Rate
Rate of depreciation	5%	10%
Depreciation - 1st year	₹ 10,00,000	₹ 20,00,000
IInd year	10,00,000	18,00,000
IIIrd year	10,00,000	16,20,000
IVth year	10,00,000	14,58,000

(ii) Tax Saving

Tax saved @ 40%
₹

Ist year= ₹ 20,00,000 – ₹ 10,00,000 = ₹ 10,00,000	4,00,000
IInd year= ₹ 18,00,000 – ₹ 10,00,000 = ₹ 8,00,000	3,20,000
IIIrd year= ₹ 16,20,000 – ₹ 10,00,000 = ₹ 6,20,000	2,48,000
IVth year= ₹ 14,58,000 – ₹ 10,00,000 = ₹ 4,58,000	1,83,200

(iii) First, compute diminishing balance rate using the following formula

$$1 - n \sqrt[n]{\frac{S}{C}}$$

$$1 - 20 \sqrt[20]{\frac{5}{100}} = 14\%$$

After this, one should find out the amount of depreciation @ 14% under diminishing balance method. Amounts of depreciation in this method can be compared with amounts of depreciation under double rate method as calculated above and 40% of these differences will be the amount of tax saved each year.

REFERENCES

1. The Institute of Chartered Accountants of India, AS-6, *Depreciation Accounting*, New Delhi: The Institute of Chartered Accountants of India, Nov. 1982, para 3.1.
2. The Institute of Chartered Accountants in England and Wales, SSAP 12, *Accounting for Depreciation*, London: ICAEW, Dec. 1977, para 15.
3. International Accounting Standards Committee. IAS 4, *Depreciation Accounting*, March 1976.
4. Sidney Davidson, *et al.*, *Financial Accounting*, The Dryden Press, 1988, p. 367.
5. Anderson, *Practical Controllershship*, Irwin, 1982.
6. APB Statement No. 4, *Basic Concepts and Accounting Principles Underlying Financial Statements of Business Enterprises*, 1970, para 159.
7. Anderson. *Practical Controllershship*.

QUESTIONS

1. "The value of the asset, not its cost, is the real measure of the amount depreciable." Comment on this statement.
(M.Com., Delhi, 1997)
2. What do you understand by the term 'accelerated depreciation'? What factors generally govern the choice of an accelerated depreciation method for financial reporting purposes?
(M.Com., Delhi, 2002)
3. "A single depreciation rate for all classes of assets would make the accounting concept of depreciation meaningless. Discuss the statement indicating the viability or otherwise of a single rate for accounting purposes and tax purposes.
(M.Com., Delhi, 2003)
4. Discuss the provisions given in AS-6 on Depreciation.
5. Explain the guidelines on disposal of fixed assets as provided in AS-6.
6. "Depreciation is a systematic allocation of cost or other value over the service life of an asset in systematic and rational pattern." Explain.
List the factors which should be the basis for selecting a method of providing depreciation on any specific asset or group of assets.
(M.Com., Delhi, 1985, 2007)
7. "Several methods of depreciation have been suggested and used from time to time that result in a decreasing depreciation charges over the expected life of an asset." Explain these methods. Also state the conditions which are claimed as justification for the declining charge methods.
(M.Com., Delhi, 1983)
8. "Low tax rates render depreciation policy impotent... whereas very generous depreciation allowances...make tax rate change ineffective to alter the cost of capital, and thereby, to influence investment plans in the economy." Comment.
In the light of the above, discuss the usefulness of accelerated depreciation to encourage investment in new machinery and equipment in a developing country like India.
(M.Com., Delhi, 1986)
9. "Depreciation is a process of allocation, not of valuation." Examine the statement critically.
10. "Replacing the asset is not essential to the existence of depreciation...Depreciation is the expiration or disappearance of service potential from the time an asset is put into use until the time it is retired from service." Explain this statement.
11. Mention the factors influencing the selection of a depreciation method.
12. Discuss the disclosure guidelines given in AS-6, 'Depreciation Accounting' about depreciation.
13. Why do companies prefer to follow different methods of depreciation for financial reporting and tax purposes? Should such practice be checked through legislation? Illustrate your answer with reference to the Indian context.
(M.Com., Delhi, 1987, 2000)
14. "Several methods of depreciation have been suggested and used from time to time that result in a decreasing depreciation charge over the expected life of an asset." Explain these methods.
State the conditions which are claimed as justification for the declining charge methods.
(M.Com., Delhi, 1991)
15. What do you understand by 'depreciation accounting'? Which policy of charging depreciation should be adopted by the management in the period of rising prices?
(M.Com., Delhi, 1990, 1993)
16. Critically evaluate the 'allocation process' and 'valuation process' of computing depreciation. Give suitable examples in support of you answer
(M.Com., Delhi, 1995)
17. "The value of the asset, not its cost, is the real measure of the amount depreciable." Comment on this statement.
(M.Com., Delhi, 1997)
18. Should a company be allowed to switch over from one method of depreciation to another for financial reporting purposes? What are the provisions of AS-6 in this regard? Should such change be allowed retrospectively?
(M.Com., Delhi, 1997)
19. Distinguish between 'Declining Balance' and 'Double Declining Balance' methods of depreciation. Which of these methods is recognized for financial reporting purposes in India?
(M.Com., Delhi, 1998)
20. Is a company allowed to change its method of depreciation for reporting purposes? If so, can't be made effective with retrospective effect. Explain briefly. (M.Com., Delhi, 1998)
21. Discuss the salient points of AS-6 Depreciation Accounting.
22. Explain the disclosure requirements as suggested in AS-6.

MULTIPLE CHOICE QUESTIONS

Select the correct answer for the following multiple choice questions:

1. Chain Hotel Corporation recently purchased Elgin Hotel and the land on which it is located with the plan to tear down the Elgin Hotel and build a new luxury hotel on the site. The cost of the Elgin Hotel should be—
(a) Depreciated over the period from acquisition to the date the Hotel is scheduled to be torn down.

- (b) Written off as an extraordinary loss in the year the Hotel is torn down.
- (c) Capitalised as part of the Cost of the land.
- (d) Capitalised as part of the cost of the new Hotel.

Ans. (c)

2. As generally used in accounting, what is depreciation?
- (a) It is a process of asset valuation for balance sheet purposes.
 - (b) It applies only to long-lived intangible assets.
 - (c) It is used to indicate a decline in market value of a long-lived asset.
 - (d) It is an accounting process which allocates long-lived asset cost to accounting periods.

Ans. (d)

3. Which of the following principles best describes the conceptual rationale for the methods of matching depreciation expense with revenue?
- (a) Allocating cause and effect.
 - (b) Systematic and rational allocation.
 - (c) Immediate recognition.
 - (d) Partial recognition.

Ans. (b)

4. Which of the following statements is the assumption on which straightline depreciation is based?
- (a) The operating efficiency of the asset decrease in later years.
 - (b) Service value declines as a function of time rather than use.
 - (c) Service value declines as a function of obsolescence rather than time.
 - (d) Physical wear and tear are more important than economic obsolescence.

Ans. (b)

5. A principal objection to the straightline method of depreciation is that it
- (a) Provides for the declining productivity of an aging asset.
 - (b) Ignores variations in the rate of asset use.
 - (c) Trends to result in a constant rate of return on a diminishing investment base.
 - (d) Gives smaller periodic write offs than decreasing charge methods.

Ans. (b)

6. The straightline method of depreciation is not appropriate for
- (a) A company that is neither expanding nor contracting its investments in equipment because it is replacing equipment as the equipment depreciates.
 - (b) Equipment on which maintenance and repairs increase substantially with age.
 - (c) Equipment with useful lives that are not affected by the amount of use.
 - (d) Equipment used consistently every period.

Ans. (b)

7. Which of the following reasons provides the best theoretical support for accelerated depreciation?

- (a) Assets are more efficient in early years and initially generate more revenue.
- (b) Expenses should be allocated in a manner that “smooths” earnings.
- (c) Repairs and maintenance costs will probably increase in later periods, so depreciation should decline.
- (d) Accelerated depreciation provides easier replacement because of the time value of money.

Ans. (a)

8. The Depreciation method that does not result in decreasing charges is
- (a) Double-declining balance.
 - (b) Fixed percentage-on-book-value.
 - (c) Sinking fund.
 - (d) Sum-of-the-years-digits.

Ans. (c).

9. In accordance with generally accounting principles, which of the following methods of amortisation is normally recommended for intangible assets?
- (a) Sum-of-the-years-digits.
 - (b) Straight-line.
 - (c) Units of production.
 - (d) Double-declining balance.

Ans. (b).

10. Significant accounting policies may not be
- (a) Selected on the basis of judgment.
 - (b) Selected from existing acceptable alternatives.
 - (c) Unusual or innovative in application.
 - (d) Omitted from financial statement disclosure on the basis of judgment.

Ans. (d).

11. A general description of the depreciation methods applicable to major classes of depreciable assets
- (a) is not a current practice in financial reporting.
 - (b) is not essential to a fair presentation of financial position.
 - (c) is needed in financial reporting when company policy differs from income tax policy.
 - (d) should be included in corporate financial statements or note thereto.

Ans. (d)

12. Which of the following would not be classified as a disclosure of accounting policies?
- (a) Basis of consolidation.
 - (b) Method of depreciation used.
 - (c) Proforma data relating to change in accounting method.
 - (d) Method of pricing inventories.

Ans. (c)

13. When a company changes from the straight-line method of depreciation for previously recorded assets to the double-declining balance method, which of the following should be reported?

	<i>Cumulative effects of change in accounting principle</i>	<i>Proforma effects of retroactive application</i>
(a)	No	No
(b)	No	Yes
(c)	Yes	Yes
(d)	Yes	No

Ans. (c)

14. On January 1, 2015, Flax Co. purchased a machine for ₹ 5,28,000 and depreciated it by the straight-line method using an estimated useful life of eight years with no salvage value. On January 1, 2018, Flax determined that the machine had a useful life of six years from the date of acquisition and will have a salvage value of ₹ 48,000. An accounting change was made in 2018 to reflect these additional data. The accumulated depreciation for this machine should have a balance at December 31, 2018 of
- (a) ₹ 2,92,000
(b) ₹ 3,08,000
(c) ₹ 3,20,000
(d) ₹ 3,52,000

Ans. (c)

15. On January 1, 2015, Compro Technology, purchased equipment having an estimated salvage value equal to 20% of its original cost at the end of a ten-year life. The equipment was sold on December 31, 2019, for 50% of its original cost. If the equipment's disposition resulted in a reported loss, which of the following depreciation methods did Compro use?
- (a) Double-declining balance.
(b) Sum-of-the-years' digits.
(c) Straight-line.
(d) Composite.

Ans. (c)

16. A depreciable asset has an estimated 15% salvage value. At the end of its estimated useful life, the accumulated depreciation would equal the original cost of the asset under which of the following depreciation methods?

	<i>Straight-line</i>	<i>Productive output</i>
(a)	Yes	No
(b)	Yes	Yes
(c)	No	Yes
(d)	No	No

Ans. (d)

17. In which of the following situations is the units-of-production method of depreciation most appropriate?
- (a) An asset's service potential declines with use.
(b) An asset's service potential declines with the passage of time.
(c) An asset is subject to rapid obsolescence.
(d) An asset incurs increasing repairs and maintenance with use.

Ans. (a)

18. A machine with a five-year estimated useful life and an estimated 10% salvage value was acquired on January 1, 2015. On December 31, 2018, accumulated depreciation, using the sum-of-the-years' digits method, would be

- (a) (Original cost less salvage value) multiplied by 1/15.
(b) (Original cost less salvage value) multiplied by 14/15.
(c) Original cost multiplied by 14/15.
(d) Original cost multiplied by 1/15.

Ans. (b)

19. ABC Co. uses the sum-of-the-years digits method to depreciate equipment purchased in January 2015 for ₹ 20,000. The estimated salvage value of the equipment is ₹ 2,000 and the estimated useful life is four years. What should ABC report as the asset's carrying amount as of December 31, 2017?

- (a) ₹ 1,800
(b) ₹ 2,000
(c) ₹ 3,800
(d) ₹ 4,500

Ans. (c)

20. Jindal Company takes a fully year's depreciation expense in the year of an asset's acquisition, and no depreciation expense in the year of disposition. Data relating to one of Jindal's depreciable assets at December 31, 2016, are as follows:

Acquisition year	2014
Cost	₹ 1,10,000
Residual value	20,000
Accumulated depreciation	72,000
Estimated useful life	5 years

Using the same depreciation method as used in 2014, 2015, and 2016, how much depreciation expense should Jindal record in 2018 for this asset?

- (a) ₹ 12,000
(b) ₹ 18,000
(c) ₹ 22,000
(d) ₹ 24,000

Ans. (a)

21. On January 2, 2015, Union Co. purchased a machine for ₹ 2,64,000 and depreciated it by the straight-line method using an estimated useful life of eight years with no salvage value. On January 2, 2018, Union determined that the machine had a useful life of six years from the date of acquisition and will have a salvage value of ₹ 24,000. An accounting change was made in 2018 to reflect the additional data. The accumulated depreciation for this machine should have a balance at December 31, 2018, of

- (a) ₹ 1,76,000
(b) ₹ 1,60,000
(c) ₹ 1,54,000
(d) ₹ 1,16,000

Ans. (b)



Inventory

MEANING OF INVENTORY

Inventory includes tangible property that (i) is held for sale in the normal course of business or (ii) will be used in producing goods or services for sale. Inventories are current assets and reported on the balance sheet and as current assets they can be used or converted into cash within one year or within the next operating cycle of the business, whichever is longer. The Institute of Chartered Accountants of India in its Accounting Standard No. 2 defines inventory as:

“Tangible property held (i) for the sale in the ordinary course of business or (ii) in the process of production for such sale, or (iii) for consumption in the production of goods or service for sale, including maintenance, supplies and consumables other than machinery spares.”

Inventories are kept by manufacturing firms and merchandising (retailing) firms. For merchandising firms, inventories are often the largest or most valuable current asset. The types of inventory usually held by these two kinds of enterprise are as follows:

(A) Manufacturing Enterprises

- (i) Finished goods inventory — Goods produced, completed and kept ready for sale.
- (ii) Work in process inventory — Goods in the process of being produced but not yet completed as finished goods. When completed, work in process inventory becomes finished goods inventory.
- (iii) Raw materials inventory — Items purchased or acquired for using in making finished goods. Such items are known as raw materials inventory until used. When raw materials are used, they become the part of the work in process inventory. (Work in process includes cost such as raw materials, direct labour and factory overhead).

(B) Merchandising Enterprises

In merchandising or retailing firms, inventory consists of goods (generally known as merchandise) held for resale in the normal course of business. The goods are acquired in a finished condition and are ready for sale without further processing.

NEED FOR INVENTORIES

Inventory is one of the major problems that accountants face today. It is difficult to value it in terms of cash. It is almost impossible to assess its value in terms of future profits. The basic reason for holding inventories is that it is physically impossible and economically impractical for each inventory item to arrive exactly where it is needed and exactly when it is needed. Adam and Ebert¹ have listed the following reasons for carrying inventories:

Level	Reason
Fundamental (Primary)	Physical impossibility of getting the right amount of stock at the exact time of need, Economical impracticability of getting the right amount of stock at exact time of need.
Secondary	Favourable return on investment. Buffer to reduce uncertainty. Decouple operations. Level or smooth production. Reduce material handling costs. Allow production of family of parts. Price changes (can be disadvantageous). Bulk purchases. Display to customers.

Inventory is not purchased as investment or to hold or to realise a gain from possession but rather to sell and realise a gain from resale. In fact, each purchase of saleable goods is in anticipation of the very next sale. Inventory should be considered as an investment and should compete for funds with other investments contemplated by the business firm. Inventory represents type of business insurance which assures the company that it will not have to close down due to shortages of saleable goods. Inventory is a variable cost insurance. That is the cost of this insurance will vary in the same direction as the value of sales. As the sales increase the company will find it necessary to maintain a larger and larger inventory to meet the expanded sale volume. The variable cost, the increased capital investment, necessary to maintain the continuing operations should not be deferred and charged against later revenues but rather should be charged against the current period of which it is a direct factor.

It is often claimed that, for seasonal industries, it is advisable to have adequate opening inventories. If attractive quantity discounts are available, a business enterprise may prefer to buy in excess of its current sales requirements and can build up additional inventories. Many firms — especially those that sell in seasonal markets — buy in excess of their needs when supply prices are favourable. They store the goods and can then maintain sales during a period of unfavourable supply prices. Walgenbach *et al.*² observe:

“Progressive firms take into account customer preferences, competitors’ merchandising patterns, and favourable market situations in determining inventory size and balance, but they must also consider the cost of carrying large inventories. Often, savings obtained by purchasing in large quantities or under favourable market conditions may be more than offset by increased carrying costs. Storage and handling costs for large inventories can increase substantially. In addition, the firm may suffer losses from inventory deterioration and obsolescence. Finally inventories tie up working capital that might be used more profitably elsewhere. These latter factors often cause merchandisers to contract inventory during recessionary periods.”

OBJECTIVES OF INVENTORY MEASUREMENT

The measurement of inventory has a significant effect on income determination and financial position of a business enterprise. The American Institute of Certified Public Accountants (USA) states:

“A major objective of accounting for inventories is the proper determination of income through the process of matching appropriate costs against revenues.”³

It is significant to observe that a direct relationship exists between cost of goods sold and closing inventory. Costs of goods sold is measured by deducting closing inventory from cost of goods available for sale. Because of these relationships, it may be said that the higher the cost of closing inventory, the lower the cost of goods sold will be and the higher the resulting net income. On the contrary, the lower the value of closing inventory, the higher the cost of goods sold and the lower the net income. Items which are not in the closing inventory are considered as sold and become the part of cost of goods sold. In this way, measurement of closing inventory influences the income statements (through influencing cost of goods, and net income) and balance sheet because inventory appears as current assets on the balance sheet. Also, closing inventory influences net income of not only the current period but it also influences the net income of the next accounting period because closing inventory of the current period becomes the opening inventory for the next period and thus becomes cost of goods sold.

Since closing inventory determines cost of goods sold, the most common objective of inventory measurement is the attempt to match costs with related revenues in order to compute net income within the traditional accounting structure. The relationship of inventories to the process of income measurement is similar to the common characteristics of prepaid expenses and plant and equipment. The expression matching costs against revenues means determining what portion of the cost of goods available for sale should be as cost of the period and deducted from the revenue of the current period and what portion should be carried (as inventory) to be matched against the revenue of the following period.

Other things remaining the same, *i.e.*, if all other items appearing on an income statement are constant and also income tax rates do not change, any change in the amount of closing inventory will bring similar change in the amount of reported net income. This is illustrated in the following data taken to explain this situation.

Effect of Inventory Value on Net Income (₹ in Lakhs)

Data	Amounts Situations			
	A	B	C	D
Sale	50	50	50	50
Opening inventory	6	6	6	6
Purchases	40	40	40	40
Goods available for sale	46	46	46	46
Closing inventory	8	10	12	14
Cost of goods sold	36	36	34	32
Net Income	12	14	16	18

In the above example, it can be noticed that in all four situations, (A, B, C, D) sale, opening inventory, purchases are identical. As the value of closing inventory changes among the four situations, net income also changes, to the extent the closing inventory increases or decreases. For instance, closing inventory increases by ₹ 2 lakhs from situation A to B, from B to C, C to D, so net income also goes up by ₹ 2 lakhs.

A second objective of inventory measurement is to state the fair value of inventory which appears as current assets on the balance sheet. This, alongwith other assets, reflect the value of assets to the firm and in turn, the financial position of a business enterprise.

Further, the value of inventory will help permit inventory and other users to predict the future cash flows of the firm. This can be accomplished from two points of view. First, the amount of inventory resources available will support the inflow of cash through their sale in the ordinary course of business. Second, the amount of inventory resources available will, under normal circumstances, have an effect on the amount of cash required during the subsequent period to acquire the merchandise that will be sold during the period.

INVENTORY COSTING METHODS

The pricing or costing of inventory is one of the most interesting and most widely debated problems in accounting. Generally, inventories are priced at their cost in conformity with the cost concept. According to AICPA (USA), “the primary basis of accounting for inventory is cost, which is the price paid or consideration given to acquire an asset. As applied to inventories, cost means, in principle, the sum of the applicable expenditures and charges directly or indirectly incurred in bringing an article to its existing condition and location”

The cost of inventory, as per the above definition and in practice as well, includes the following costs:

- (i) Invoice price less cash discounts;
- (ii) Freight or transportation, insurance including insurance in transit and;
- (iii) Applicable taxes and tariffs

Other costs such as those for purchasing, receiving and storage should theoretically be included in inventory cost. In practice, however, it is so difficult to allocate these costs to specific inventory items and also sometimes these costs are often not material in amount that they are in most cases considered expenses of the accounting period instead of an inventory cost.

Inventory costing is quite simple when acquisition prices remain constant. When prices of identical lot of purchases vary in the accounting period, it is difficult to say which price should be used to measure the closing inventory. Also, when identical items are bought and sold, it is often impossible to tell which items have been sold and which are still in inventory. For this reason, it is necessary to make assumption about the order in which items have been sold.

Two terms—goods flow and cost flow—are useful in considering the problems of pricing inventories under fluctuating prices. Goods flow refers to the actual physical movement of goods in the firm's operations. Cost flow is the real or assumed association of costs with goods either sold or in inventory. The assumed cost flow may or may not be the same as the actual goods flow. Though this statement or practice may appear strange, there is nothing wrong or illegal about this practice. Generally accepted accounting principles (GAAP) accept the use of an assumed cost flow that does not reflect the real physical movement of goods. In fact, the assumption about the cost flow is more important to goods flow as the former helps in determining net income which is the major objective of inventory valuation.

The following are generally accepted methods of inventory pricing, each based on a different assumption of cost flow:

- A. Cost Price Methods
 - 1. First-in, First-out (FIFO)
 - 2. Last-in, First-out (LIFO)
 - 3. Highest-in, First-out (HIFO)
 - 4. Base Stock Price
- B. Average Price Methods
 - 1. Simple average
 - 2. Weighted average
 - 3. Periodic simple average
 - 4. Periodic weighted average
 - 5. Moving simple average method
 - 6. Moving weighted average method
- C. Normal Price Methods
 - 1. Standard price

- 2. Inflated price
- 3. Replacement or market price
- D. Specific Identification Method

A. Cost Price Methods

First-in, First-out (FIFO)

The FIFO method follows the principle that materials received first are issued first. After the first lot or batch of materials purchased is exhausted, the next lot is taken up for supply. It does not suggest, however, that the same lot will be issued from stores. Sometimes, all materials are tagged with their arrival date and issued in date order especially with stocks that deteriorate. The inventory is priced at the latest costs.

Advantages

A good system of inventory management requires that oldest units should be sold or used first and inventory should consist of the latest purchases. This is found in the FIFO method of costing. Under the FIFO method, management has little or no control over the selection of units in order to influence recorded profits. Valuation of inventory and cost of goods manufactured are consistent and realistic. Besides, the FIFO method is easy to understand and operate.

Disadvantages

The objectives of matching current cost with current revenues is not achieved under the FIFO method. If the prices of materials are rising rapidly, the current production cost may be understated. If the sales price is fixed, then sales revenue may not produce enough income to cover the purchase of raw materials. The valuation of inventory in terms of current cost depends on the frequency of price changes and the stock turnover. In case stocks turnover rapidly, the inventory valuations will reflect current prices. There are other limitations under the FIFO method. FIFO costing is improper if many lots are purchased during the period at different prices. This method overstates profit especially with high inflation. It does not consider the cost of replacing used materials, a situation created by high inflation.

The FIFO method is suitable where (i) the size and cost of raw materials units are large, (ii) materials are easily identified as belonging to a particular purchased lot, and (iii) not more than two or three different receipts of the materials are on hand at one time.

Illustrative Problem 1. The following is a summary of the receipts and issue of materials in a factory during January.

January

- 1 Opening balance 500 units @ ₹ 25 per unit
- 3 Issue 70 units
- 4 Issue 100 units
- 8 Issue 80 units
- 13 Received from supplier 200 units @ ₹ 24.50 per unit

- 14 Returned to store 15 units @ ₹ 24 per unit
 16 Issue 180 units
 20 Received from supplier 240 units @ ₹ 24.75 per unit
 24 Issue 304 units
 25 Received from supplier 320 units @ ₹ 24.00 per unit

- 26 Issue 112 units
 27 Returned to store 12 units @ ₹ 24.50 per unit
 28 Received from supplier 100 units @ ₹ 25 per unit
 Work out on the basis of First-in, First-out. This revealed that on the 15th there was a shortage of five units and another on the 27th of eight units.

SOLUTION**Stores Ledger Account (FIFO)**

Date	Receipts			Issue			Stock		
	Qty.	Rate	Amt	Qty.	Rate	Amt	Qty.	Rate	Amt
Jan.									
1	—	—	—	—	—	—	500	25.00	12,500
3	—	—	—	70	25	1,750	430	—	10,750
4	—	—	—	100	25	2,500	330	—	8,250
8	—	—	—	80	25	2,000	250	—	6,250
13	200	24.50	4,900	—	—	—	250	25.00	6,250
	Refund						200	24.50	4,900
14	15	24.00	36	—	—	—	250	25.00	6,250
							200	24.50	4,900
							15	24.00	360
15	—	—	Shortage	5	25	125	245	25.00	6,125
							200	24.00	4,900
							15	24.00	360
16	—	—	—	180	25	4,500	65	25.00	1,625
							200	24.00	4,900
							15	24.50	360
20	240	24.75	5,940	—	—	—	65	25.00	1,625
							200	24.50	4,900
							15	24.00	360
							240	24.75	5,940
24	—	—	—	65	25.00	1,625			
				200	24.50	4,900			
				15	24.00	360			
				24	24.75	594	216	24.75	5,346
25	320	24.00	7,680	—	—	—	216	24.75	5,346
							320	24.50	7,680
26	—	—	—	112	24.75	2,772	104	24.75	2,574
							320	24.00	7,680
27	12	24.50	294	—	—	—	104	24.75	2,574
	—	—	—	—	—	—	320	24.00	7,680
							12	24.50	294
27	—	—	Shortage	8	24.75	198	96	24.75	12,376
							320	24.00	7,680
							12	24.50	294
28	100	25.00	2,500	—	—	—	96	24.75	2,376
							320	24.00	7,680
							12	24.50	294
							100	25.00	2,500

Closing stock 528 units = ₹ 12,850

Last-in, First-out (LIFO)

The LIFO method of costing and inventory valuation is based on the principle that materials entering production are the most recently purchased. The method assumes that the most recent cost, generally the replacement cost is the most significant in matching cost with revenue in the income determination. The cost of the last lot of materials received is used to price materials issued until the lot is exhausted, then the next lot pricing is used, and so on through successive lots.

Advantages

1. It provides a better matching of current costs with current revenues.
2. It results in real income in times of rising prices, by maintaining net income at a lower level than other costing methods.
3. In industries subject to sharp materials price fluctuations, the method minimises unrealised inventory gains and losses and tends to stabilise reported operating profits. Income is reported only when it is available for distribution as dividends or for other purposes.
4. Probably the most important arguments in favour of LIFO is its role in tax saving. It is generally considered a cheap form of tax avoidance by business firms. By valuing inventory at beginning-of-period prices and calculating cost of sales at the current prices, the firm creates secret reserves which are not taxed. As long as prices and inventory levels do not decline, this benefit remains and in this case the tax saving is permanent. However, if the tax rates go up in the meantime, the so-called tax saving will be eliminated by higher tax rates.
5. LIFO produces an income statement which shows correct profit or losses and financial position. It correlates current cost and sales, and income statements show the result of operation, excluding profits or losses due to changing price levels.

Disadvantages

The following are the limitations of the LIFO method of costing:

1. Inventory valuations do not reflect the current prices and therefore are useless in the context of current conditions.
2. The argument that LIFO should be used for matching current costs with current revenue, is not sound. The most recent purchase costs are matched against the revenues of the current period. However, unless both purchases and sales occur regularly in even quantities, the revenues will not be matched with the current costs at the time of sale. When purchases are irregular and unrelated to the timing of sales, the matching is illogical and unsystematic, particularly if prices and costs are changing rapidly.
3. The profit of a firm can be manipulated with the LIFO method in operation. By timing purchases, a company can cause higher or lower costs to flow into the income statement, thus increasing or decreasing reported net income at will.
4. Another limitation which also results from LIFO's lowering of the earnings figure is the effect it will have on existing bonus and profit sharing plans. Employees and managers who are interested in the growth of these plans may have difficulty in understanding a drop in the benefits which were created wholly or partially by an accounting change.

During a period of rising costs, LIFO produces the desirable effect of reducing taxable income and tax liability; thereby conserving cash. On the other hand, it also affects the profit reported in the financial statements.

Illustrative Problem 2. Prepare a stores ledger account from the following transactions under the LIFO method.

Jan.	1	Received 1,000 units @	₹ 1.00 per unit
	10	Received 260 units @	₹ 1.05 per unit
	20	Issue 700 units	
Feb.	4	Received 400 units @	₹ 1.15 per unit
	21	Received 300 units @	₹ 1.25 per unit
March	16	Issue 620 units	
April	12	Issued 240 units	
May	10	Received 500 units @	₹ 1.10 per unit
	25	Issued 380 units	

SOLUTION**Stores Ledger Account (LIFO)**

	Receipts			Issue			Stock		
Date	Qty.	Rate	Amt	Qty.	Rate	Amt	Qty.	Rate	Amt
January									
1	1,000	1.00	1,000	—	—	—	1,000	1.00	1,000
10	260	1.05	273	—	—		1,260		1,273
20	—	—	—	260	1.05	273	560		560
				440	1.00	440			
February									
4	400	1.15	460	—	—	—	960		1,020
21	300	1.25	375	—	—	—	1,260		1,395
March									
16	—	—	—	300	1.25	375	640		652
				320	1.15	368			
April									
12	—	—	—	80	1.15	92	400		400
				160	1.00	160			
May									
10	500	1.10	550	—	—	—	900		950
25	—	—	—	380	1.10	418	520		532

The Closing Stock consists of

120 units at ₹ 1.10 = 132

400 units at Re. 1.00 = 400

₹ 532

Highest-in, First-out (HIFO)

This method is based on the principle that materials received at the highest price in the stock are issued first. This will have the effect of pricing materials issued at the highest price and inventory valuation being made at the lowest possible prices. If the prices fluctuate widely, the highest cost will always be entering into the cost of goods sold. For instance, suppose on a particular date the stock ledger shows stock representing 500 units at the rate of ₹ 20, 700 units at the rate of ₹ 12, and 300 units at the rate of ₹ 25. If materials are issued, then out of the above three lots, first of all 300 units would be issued. After this lot is over, then the second lot of 500 units, which becomes the highest priced stock after despatches of 300 units, would be taken up for transmission to production departments. Like other methods, this method also requires detailed records on the stores ledger.

Base Stock Price

Under this method, it is assumed that the minimum stock of a commodity which must always be carried is in the nature of a fixed asset and is never realised while the business continues. This minimum stock is carried at original cost. The stock in excess of this figure would be treated in accordance with one of the other methods, that is, FIFO or LIFO. The limitation of this method is that while measuring the return on capital employed in the business, the stock value may be undervalued and therefore the resulting business results will not be reliable.

Illustrative Problem 3. From the following information prepare a stores ledger account assuming 100 units as base stock following the FIFO method:

Rate		Rate per unit (₹)
January 1, 2007	Received 500 units	20
January 10	Received 300 units	24
January 15	Issued 700 units	—
January 20	Received 400 units	28
January 25	Issued 300 units	—
January 27	Received 500 units	22
January 31	Issued 200 units	—

SOLUTION

Stores Ledger Account
Base stock Price with FIFO (minimum stock 100 units)

Date	Receipts			Issue			Stock		
	Qty.	Rate	Amt	Qty.	Rate	Amt	Qty.	Rate	Amt
2016									
Jan. 1	500	20	10,000	—	—	—	500	20	10,000
Jan. 10	300	24	7,200				500	20	10,000
							300	24	7,200
Jan. 15	—	—	—	400	20	8,000	100	20	2,000
				300	24	7,200			
Jan. 20	400	28	11,200	—	—	—	400	28	11,200
Jan. 25	—	—	—	300	28	8,400	100	20	2,000
							100	28	2,800
Jan. 27, 2007	500	22	11,000				500	22	11,000
Jan. 31	—	—	—	100	28	2,800	100	20	2,000
				100	22	2,200	400	22	8,800

B. Average Price Methods**Simple Average**

This method is based on the principle that materials issued should be priced on an average price and not on exact cost price. The simple average is an average of prices without having regard to the quantities involved. It should be used when prices do not

fluctuate very much and the stock value is small. The average under this method is calculated by dividing the total of rates of materials in the storeroom by the number of rates of prices. This method is easy to operate.

Illustrative Problem 4. Prepare a stores ledger account by following the simple average method on the basis of information given in Illustrative Problem 3.

SOLUTION

Stores Ledger Account
(Simple Average Price Method)

Date	Receipts			Issue			Stock		
	Qty.	Rate	Amt	Qty.	Rate	Amt	Qty.	Rate	Amt
2016									
Jan. 1	500	20	10,000	—	—	—	500	20	10,000
Jan. 10	300	24	7,200				500	20	10,000
							300	24	7,200
Jan. 15	—	—	—	700	22	15,400	100		1,800
Jan. 20	400	28	11,200	—	—	—	500		13,000
Jan. 25	—	—	—	300	26	7,800	200		5,200
Jan. 27	500	22	11,000	—	—	—	700		16,200
Jan. 31	—	—	—	200	25	5,000	500		11,200

Average price for different issues has been calculated as follows:

Jan. 15 700 units = $20 + 24/2 = ₹ 22$ per unit

Jan. 25 300 units = $24 + 28/2 = ₹ 26$ per unit

Jan. 31 200 units = $28 + 22/2 = ₹ 25$ per unit

Weighted Average

Under this method, issue of materials is priced at the average cost price of the materials in hand, a new average being computed whenever materials are received. In this method, total quantities and total costs are considered while computing the average price

and not the total of rates divided by total number of rates as in simple average. The weighted average is calculated each time a purchase is made. The quantity bought is added to the stock in hand, and the revised balance is then divided into the new cash value of the stock. The effect of early price is thus eliminated. This method avoids fluctuations in price and reduces the number of calculations to be made, as each issue is charged at the same price until a fresh purchase necessitates the computation of a new average. It gives an acceptable figure for stock values.

Advantages

The following are the advantages of the weighted average method:

1. The method is logical and consistent as it absorbs cost while determining the average for pricing material issues.
2. The changes in the prices of materials do not much affect the materials issues and stock.
3. The method follows the concept of total stock and total valuation.
4. Both cost of materials issued and in stock tend to reflect actual costs.

Disadvantages

However, the weighted average method also has the following disadvantages:

1. Simplicity and convenience are lost when there is too much change in the prices of materials.
2. An average price is not based on actual price incurred, and therefore is not realistic. It follows only arithmetical convenience.

Illustrative Problem 5. Prepare a store ledger account on the basis of information given in Illustrative Problem 3 by following the weighted average method.

SOLUTION

	Receipts			Issue			Stock		
Date	Qty.	Rate	Amt	Qty.	Rate	Amt	Qty.	Rate	Amt
2016									
Jan. 1	500	20	10,000	—	—	—	500	20	10,000
Jan. 10	300	24	7,200				800	21.50	17,200
Jan. 15	—	—	—	700	21.50	15,050	100		2,150
Jan. 20	400	28	11,200	—	—	—	500	26.70	13,350
Jan. 25	—	—	—	300	26.70	8,010	200		5,340
Jan. 27	500	22	11,000	—	—	—	700		16,340
Jan. 31	—	—	—	200	23.34	4,668	500		11,672

Periodic Simple Average

In cost accounting, where job costs may be prepared infrequently, say monthly, or bimonthly, it may be necessary to price materials issued by taking the average price ruling during that period. If it is calculated monthly, the average of the unit prices of all the receipts during the month is adopted as the rate for pricing issue during the month. Only a simple calculation has to be done at the end of the accounting period. The opening stock is not considered for computing periodic simple average because it has not been purchased during the current period and would have been included in the previous year's calculations. However, purchases made during the current year and closing stock are taken into account while computing this average. Basically, this method follows the principle of simple average price, but a period is set for which the average is calculated. Taking the above example, the total receipts and issue of the materials would be shown as follows:

Receipts			Issues		
Qty	Rate	Amt	Qty	Rate	Amt
1,700	94	39,400	1,200	23.50	28,200

The periodic simple average = $\frac{\text{Total prices of the materials}}{\text{Total No. of prices}}$

$$= \frac{94}{4} = ₹ 23.50$$

$$\begin{aligned}\text{Closing stock} &= \text{Units } 1700 - 1200 = 500 \\ &= ₹ 39,400 - 28,200 = ₹ 11,200.\end{aligned}$$

The above rate, that is, ₹ 23.50 per unit will be used for pricing the materials issued during the period.

Periodic Weighted average

This method is quite similar to the weighted average price method with only one difference that in this method average price is not calculated at the time of every new receipt of materials but only periodically. Periodic weighted average is calculated by dividing the total value of the materials purchased during a given period, by the total quantity purchased during the same period. Opening stock—its value and quantity both—are not considered while computing this average. In the above example, the periodic weighed average will be computed as follows:

	Receipts				Issues		
	Qty	Rate	Amt		Qty	Rate	Amt
Total	1,700	23.18	39,400	1200	23.18	27,816	

$$\begin{aligned}\text{Closing stock quantity} &= 500 \\ \text{Amount} &= ₹ 11,584\end{aligned}$$

Periodic weighted average

$$= \frac{\text{Total cost of materials purchased}}{\text{Total quantity purchased}}$$

$$= \frac{39,400}{1,700}$$

$$= 23.18$$

Moving Simple Average

Under this method, periodic simple average prices are further averaged. In this way, moving average is obtained by dividing periodic average prices of different periods by the number of periods taken. The periods chosen cover the period in which the material is issued. The following example explains this method.

Months	Periodic average price (₹)	Moving average price (₹)
January	2.55	
February	2.65	
March	2.72	
April	2.95	
May	3.15	
June	3.25	2.88
July	3.40	3.02
August	3.50	3.16
September	3.68	3.32
October	3.80	3.46
November	3.90	3.59
December	4.15	3.74

In the above example, moving average has been obtained for a six month period.

The moving simple average method will give prices to be used for materials issued which are below the periodic average prices. This will be true when prices are showing an upward trend. In periods of falling prices, the resulting issue prices under the moving average method will be greater than the periodic average prices. This influences the value of closing stock which may be undervalued or overvalued.

Moving Weighted Average

This method finds the materials issues price by dividing the total of the periodic weighted average prices for a number of periods by the total number of such periods. This is similar to the moving simple average method.

C. Normal Price Methods

Standard Price

This method charges materials issued into the factor at a predetermined budgeted, or estimated price reflecting a normal or an expected future price. A standard price is fixed for each class of materials in advance after making proper investigations. Receipts and issues of materials are recorded in quantities only on the

materials ledgers, thereby simplifying the record keeping. The difference between actual price and standard price is transferred to a purchase price variance which reveals to what extent actual costs are different from standard materials cost. Materials are charged into cost of goods sold at the standard price avoiding inconsistencies in different actual cost methods.

This method helps in knowing the purchase efficiency. If the total actual cost is less than the standard price, there will be favourable purchasing efficiency and *vice versa*. This method is simple to operate and provides stability in costing system. However standard price does not often reflect actual or expected cost, but only a generalised target. The stock value need not show actual cost incurrence and therefore does not necessarily conform to acceptable principles of stock valuation.

Inflated Price

This price includes carrying costs, cost of contingencies and also the losses arising out of evaporation, shrinkage, etc. This method aims to cover/recover the full cost of materials purchased.

Replacement Price or Market Price

Under this method, materials issues are priced at replacement price on the date the issue is made. The replacement cost (market price) is the cost of securing the same type of material at the current moment in time. This method has the following advantages:

Advantages

1. The replacement cost approach matches current revenue against current cost and is therefore useful in measuring the operating results of a business firm correctly and accurately.
2. The use of replacement cost brings out clearly the difference between holding gains and operating gains and financial statement users will have a better understanding of the financial statement. If replacement cost is not used, the profit resulting due to holding of materials and inventory is taxed and therefore, impairs the capital of a business firm.
3. The replacement price if used, will disclose good or bad buying made by the purchase department of the firm.
4. The replacement cost approach helps in determining a selling price for the product which is competitive and realistic.
5. In case the prices of materials have decreased, the materials should be charged to the production at the current replacement price and the resulting loss should be taken into consideration in the accounts of the firm.

Disadvantages

However, this method has certain disadvantages. Firstly, the objectivity is lost in accepting the replacement cost as the basis of materials pricing. The "replacement" concept is a relative one

and in the absence of market for the materials, no equitable replacement price is determinable. This increases the subjectivity in selection of a current replacement price. Secondly, this is not based on actual cost, that is, cost incurred, and therefor may add confusion and complications in cost accounting. Thirdly, this method is workable only when market prices are available and reflect current cost of replacing the materials.

Illustrative Problem 6. The following are the transactions in respect of purchase and issue of components forming part of an assembly of a product manufactured by a firm which requires to update its cost of production, every often for bidding tenders and finalising cost plus contracts.

Date	Quantity (in Nos)	Particulars
2016 January	5	1,000 purchased at ₹ 1.20 each
	11	2,000 issued
February	1	1,500 purchased ₹ 1.30 each
	18	2,400 issued
	26	1,000 issued
March	8	1,000 purchased at ₹ 1.40 each
	17	1,500 purchased at ₹ 1.30
	28	2,000 issued

The stock on January 1, 2016 was 5,000 Nos. valued at ₹ 1.10 each. State the method you would adopt in pricing the issue of components giving reasons. What value would be placed on stocks as on March 31 which happens to be the financial year-end and how would you treat the difference in value if any, on the stock account?

SOLUTION

Stores Ledger

Receipts				Issue			Stock		
Date	Qty.	Rate	Amt	Qty.	Rate	Amt	Qty.	Rate	Amt
Jan. 1							5,000	1.10	5,500
5	1,000	1.20	1,200				6,000		6,700
11				1,000	1.20	1,200			
				1,000	1.10	1,100	4,000		4,400
Feb. 1	1,500	1.30	1,950				5,500		6,350
18				1,500	1.30	1,950			
				900	1.10	990	3,100		3,410
26				1,000	1.10	1,100	2,100		2,310
Mar. 8	1,000	1.40	1,400				3,100		3,710
17	1,500	1.30	1,950				4,600		5,660
28				1,500	1.30	1,950			
				500	1.40	700	2,600		3,010
31							2,600		3,010

Note:

The closing stock consists of 500	units @ ₹ 1.40	= ₹ 700
2,100	units @ ₹ 1.10	= ₹ 2,310
<u>2,600</u>		<u>₹ 3,010</u>

The stores ledger shows that the value of closing stock based on actual cost is ₹ 3,010. The last purchase effected on March 17 @ ₹ 1.30 per unit represents the current market price. On this basis, the value of stock as on March 31 works out to ₹ 3,380. This is higher than cost. Moreover in cost books stocks are shown at cost and not at market value. Hence, no adjustment is otherwise necessary.

Illustrative Problem 7. From the records of an oil distributing company, the following summarised information is available for the month of March 2016.

Sales of the month: ₹ 19,25,000

Opening Stock as on 1.3.2016: 1.25,000 litres @ ₹ 6.50 per litre

Purchases (including freight and insurance):

March 5 1,50,000 litres @ ₹ 7.10 per litre

March 27 1,00,000 litres @ ₹ 7.00 per litre

Closing stock as on 31.3.2016: 1,30,000 litres.

General administrative expenses for the month: ₹ 45,000

On the basis of the above information, work out the following using FIFO and LIFO methods of inventory valuation assuming that pricing of issues is being done at the end of the month after all receipts during the month:

(a) Value of closing stock as on 31.3.2016

(b) Cost of goods sold during March 2016

(c) Profit or loss for March 2016

SOLUTION**(A) FIFO Method of Pricing Issues****Stores Ledger**

Date	Particulars	Receipts			Issue			Stock		
		Qty.litre	Rate ₹ per litre	Value ₹	Qty.litres	Rate ₹ per litre	Value ₹	Qty.litres	Rate ₹ per litre	Value ₹
1.3.2016	Balance b/d							1,25,000	6.50	8,12,500
5.3.2016	Purchases	1,50,000	7.10	10,65,000			2,75,000		18,77,500	
27.3.2016	Purchases	1,00,000	7.00	7,00,000			3,75,000		25,77,500	
	Issues (3,75,000 – 1,30,000 = 2,45,000 units)				1,25,000	6.50	8,12,500	2,50,000		17,65,000
					1,20,000	7.10	8,52,000	1,30,000		9,13,000
		2,50,000		17,65,000	2,45,000		16,64,500			

(B) LIFO Method of Pricing Issues**Stores Ledger**

Date	Particulars	Receipts			Issue			Stock		
		Qty.litre	Rate ₹ per litre	Value ₹	Qty.litres	Rate ₹ per litre	Value ₹	Qty.litres	Rate ₹ per litre	Value ₹
1.3.2016	Balance b/d							1,25,000	6.50	8,12,500
5.3.2016	Purchases	1,50,000	7.10	10,65,000				2,75,000		18,77,500
27.3.2016	Purchases	1,00,000	7.00	7,00,000				3,75,000		25,77,500
	Issues				1,00,000	7.00	7,00,000			
					1,45,000	7.10	10,29,500	1,30,000		8,48,000
		2,50,000		17,65,000	2,45,000		17,29,500			

Closing stock, cost of goods sold, profit under FIFO

(a) Value of closing stock	₹	9,13,000
(b) Cost of goods sold (8,12,500 + 8,52,000)	₹	16,64,500
(c) Profit		
Sales	₹	19,25,000
Less: Cost of goods sold	₹	(16,64,500)
General administration expenses	₹	(45,000)
Profit	₹	2,15,500

Closing stock, cost of goods sold, profit under LIFO

(a) Value of closing stock	₹	848,000
(b) Cost of goods sold (7,00,000 + 10,29,500)	₹	17,29,500
(c) Profit: Sales	₹	19,25,000
Less: Cost of goods sold	17,29,500	
General administration expenses	45,00	17,74,500
Profit	₹	1,50,500

Illustrative Problem 8. Show how the items given ahead relating to purchases and issue of raw material item will appear in the stores ledger card, using weighted average method for issue pricing:

		Units	Prices per units ₹
Jan. 1	Opening Balance	300	20
Jan. 5	Purchases	200	22
Jan. 11	Issue	150	?
Jan. 22	Purchases	200	23
Jan. 24	Issue	150	?
Jan. 28	Issue	200	?

SOLUTION**Store Ledger Account**

Receipts				Issue			Stock	
Date	Qty.	Rate	Amt	Qty.	Rate	Amt	Qty.	Amt
Jan. 1	—	—	—	—	—	—	300	6,000
Jan. 5	200	22	4,400	—	—	—	500	10,400
Jan. 11	—	—	—	150	20.80	3,120	350	7,280
Jan. 22	200	23	4,600	—	—	—	550	11,880
Jan. 24	—	—	—	150	21.60	3,240	400	8,640
Jan. 28	—	—	—	200	21.60	4,320	200	4,320

Issue Prices:

$$\begin{aligned}
 \text{Jan 11} &= \frac{10,400}{500} = ₹ 20.80 \text{ per unit} \\
 \text{Jan 24} &= \frac{11,880}{550} = ₹ 21.60 \text{ per unit} \\
 \text{Jan 28} &= \frac{8,640}{400} = ₹ 21.60 \text{ per unit}
 \end{aligned}$$

Illustrative Problem 9. The Stock Ledger Account for Material X in a manufacturing concern reveals the following data for the quarter ended Sept. 30, 2016.

		Receipts		Issues	
		Quantity Units	Price ₹	Quantity Units	Price ₹
July 1	Balance b/d	1,600	2.00	—	—
July 9		3,000	2.20	—	—
July 13		—	—	1,200	2,556
Aug. 5		—	—	900	1,917
Aug. 17		3,600	2.40	—	—
Aug. 24		—	—	1,800	4,122
Sept. 11		2,500	2.50	—	—
Sept. 27		—	—	2,100	4,971
Sept. 29		—	—	700	1,656

Physical verification on Sept. 30, 2016 revealed an actual stock of 3,800 units. You are required to:

- Indicate the method of pricing employed above.
- Complete the above account by making entries you would consider necessary including adjustments, if any, and giving explanations for such adjustments.

SOLUTION

- The verification of the value of issues applied in the problem shows that Weighted Average Method of pricing has been followed. For example, the issue price of 1200 units of July 13 will be ₹ 2.13 $\left(\frac{₹ 2556}{1200 \text{ units}} \right)$ which is the weighed average price of purchase made on July 9 and July 1 opening stock, calculated as follows:

Weighted average price

$$\begin{aligned}
 &= \frac{(1600 \text{ units} \times ₹ 2) + (3000 \text{ units} \times ₹ 2.20)}{1600 \text{ units} + 3000 \text{ units}} \\
 &= \frac{₹ 9800}{4600 \text{ units}} \\
 &= ₹ 2.13
 \end{aligned}$$

- The complete Stores Ledger account giving the transactions as stated in the problem together with the necessary adjustments is given below:

Stores Ledger Account (Weighted average Method)

	Receipts			Issue			Stock		
Date	Qty.	Rate ₹	Amount ₹	Qty.	Rate ₹	Amount ₹	Qty.	Rate ₹	Amount ₹
July 1	1600	2.00	3,200				1,600	2.00	3,200
9	3,000	2.20	6,600				4,600	2.13	9,800
13				1200	2.13	2,556	3,400	2.13	7,244
Aug. 5				900	2.13	1,917	2,500	2.13	5,327
17	3,600	2.40	8,640				6,100	2.29	13,967
24				1800	2.29	4,122	4,300	2.29	9,845
Sept. 11	2,500	2.50	6,250				6,800	2.37	16,095
27				2100	2.37	4,971	4,700	2.37	11,124
29				700	2.37	1,656	4,000	2.37	9,468
30				200*	2.37	473	3,800	2.37	8,995

Closing Stock: 3,800 units, value of closing stock = ₹ 8,995

* Shortage of 200 units has been charged at the weighted average price of the goods in stock.

Closing stock 3800 units ? ₹ 2.37 = ₹ 9006. Since the figures of issue prices have been taken directly as given in the question, there is a minor difference in the value of closing stock.

Illustrative Problem 10. The following transactions in respect of material Y occurred during the six months ended 30th June, 2017.

Month	Purchase (units)	Price per unit (₹)	Issued (units)
January	200	25	Nil
February	300	24	250
March	425	26	300
April	475	23	550
May	500	25	800
June	600	20	400

Required:

The chief accountant argues that the value of closing stock remains the same, no matter which method of pricing of material issues is used. Do you agree? Why or why not? Detailed stores ledgers are not required

SOLUTION

In the given problem the total number of units purchased from January to May 2017 is 1,900 and the same have also been issued

during this period. Thus, there was no stock at the end of May, 2017 which could become opening stock for the next month. In June, 2017; only a single purchase and a single issue of material was made. The closing stock is of 200 units. In this situation, stock of 200 units at the end of June, 2017 will be valued at ₹ 20 per unit irrespective of the pricing method of material issues. Hence, one would agree with the argument of the Chief Accountant.

However, this will not be true with the value of closing stock at the end of each month. Moreover, the value of closing stock at the end of June, 2017 would have been different under different pricing methods if there were several purchases at different prices and several issues during the month.

Illustrative Problem 11. ABC Limited provides you the following information. Calculate the cost of goods sold and ending inventory, applying the LIFO method of pricing raw materials under the Perpetual and Periodical Inventory Control System.

Date	Particulars	Units	Per unit cost (₹)
January 1	Opening Stock	200	10
10	Purchases	400	12
12	Withdrawals	500	—
16	Purchases	300	11
19	Issues	200	—
30	Receipts	100	15

Also explain in brief the reasons for a difference in profit, if any.

SOLUTION**Computation of Cost of Goods Sold and Ending Inventory**

Particulars	Under Perpetual Inventory Method	Under Periodic Inventory Method
	Units × Rate = Amount	Units × Rate = Amount
	₹	₹
(i) Cost of Goods sold/withdrawn or issued:		
On 12th Jan.	400 × 12 = 4,800 100 × 10 = 1,000 <u>500 5,800</u>	100 × 15 = 1,500 300 × 11 = 3,300 <u>300 × 12 = 3,600</u>
		700, ₹ 8,400
On 19th Jan.	200 × 11 = 2,200 Total ₹ 8,000	
(ii) Ending Inventory	100 × 10 = 1,000 100 × 11 = 1,100 100 × 15 = 1,500 <u>300 ₹ 3,600</u>	100 × 12 = 1,200 200 × 10 = 2,000 <u>300 ₹ 3,200</u>

Reasons for Difference in Profits. The cost of good sold/issued/withdrawn is more under Periodic Inventory System as compared to Perpetual Inventory System. Hence, the profit under the former will be less as compared to the later. Alternatively, it can be so said that less the amount of ending inventory, less will be the profits.

Illustrative Problem 12. The following are the particulars regarding receipts and issues of certain material:

Opening stock	1,000 kg @ ₹ 9.00 per kg.
Purchased	5,000 kg @ ₹ 8.50 per kg
Issued	600 kg
Issued	3,750 kg
Issued	650 kg
Purchased	2,500 kg @ ₹ 8 per kg

The credit balance of price variance account, before transfer to costing profit and loss account, was ₹ 500. Calculate the standard rate at which the above issues should be made, and determine the value of closing stock.

SOLUTION

The standard price at which the materials were issued in the last period was ₹ 9. This gave a profit of ₹ 500.

Therefore, this time, materials should be valued at a lower standard price as compared to last period. The standard price for this period should therefore be:

$$\frac{\text{₹ 9,000} - \text{₹ 500}}{1,000} = \frac{\text{₹ 8,500}}{1,000} = \text{₹ 8.50 per kg}$$

Value of the Closing Stocks:

Opening stock	1,000	kg @ ₹ 9	₹ 9,000
Purchases	5,000	kg @ ₹ 8.50	42,500
Purchases	2,500	kg @ ₹ 8	20,000
	8,500		71,500
Less: Issues	5,000	@ ₹ 8.50	42,500
Balance	3,500	units	₹ 29,000

The value of stock at standard price is ₹ 29,750 (3,500 × 8.50). The stock therefore will be valued at ₹ 29,750 and ₹ 750 will be debited to the price variance account.

D. Specific Identification Method

The specific identification method involves:

- Keeping track of the purchase price of each specific unit.
- Knowing which specific units are sold and
- Pricing the ending inventory at the actual prices of the specific units not sold.

The objective is to match the unit cost of the specific item sold with sales revenue. This method is based on the assumption that each unit purchased, sold or in inventory has its own identity, that it is separate and distinguishable from any other unit. Each unit sold or remaining in inventory is identified and its specific unit cost is used in calculating cost of goods sold or ending inventory cost. To take an example, assume that an art dealer purchased two seemingly identical pieces of pottery during a period. The first piece is purchased for ₹ 3,000 and the second is purchased several months latter for ₹ 3,500. Assume also that only one of these items is sold by the dealer during the period. The amounts assigned to cost of goods sold and ending inventory will depend on which specific piece of pottery is sold. If the item sold is the first piece of pottery, cost of goods sold is ₹ 3,000 and ending inventory is ₹ 3,500. On the other hand, if the second piece is the one sold, the numbers would be reversed; that is cost of goods sold will be ₹ 3,500 and ending inventory would be ₹ 3,000.

Specific identification is used for inventory items that are not ordinarily interchangeable, whereas FIFO, weighted average cost, and LIFO are typically used when there are large numbers of interchangeable items in inventory. Specific identification matches the actual historical costs of the specific inventory items to their physical flow; the costs remain in inventory until the actual identifiable inventory is sold. FIFO, weighted average cost, and LIFO are based on cost flow assumptions. Under these methods, companies must make certain assumptions about which goods are sold and which goods remain in ending inventory. As a result, the allocation of costs to the units sold and to the units in ending inventory can be different from the physical movement of the items.

The specific identification method provides a highly objective procedure for matching costs with sales revenue because the costs flow pattern matches the physical flow of the goods. However, this method does not work for large volumes of identical lowcost items. This method is appropriate for companies

that handle a relatively low volume of physical units, each having a high cost per unit such as original oil paintings, antiques, diamonds, automobiles, jewellery, furs etc. The specific identification method is not appropriate where each unit is the same in appearance but is differentiated from other units through serial numbers, such as the same model of washers, refrigerators or televisions.

LOWER OF COST OR MARKET (LCM)

The different methods of inventory costing such as FIFO, LIFO determine the value of inventory in terms of historical cost. However, according to conservatism concept, inventory should be reported on the balance sheet at the lower of its cost or its market value. Generally speaking, inventory is valued in terms of cost. But there should be a departure from the cost basis of valuing inventory and it should be reduced below cost when the utility of goods has declined and its sale proceeds or value of the items will be less than their cost. The decline in the value of inventory below cost can be due to different causes such as physical deterioration, obsolescence, drops in price level etc. In these situations, inventory is reported at market value. The difference in value (cost – market value) is recognised as a loss of the current period.

It should be understood that the market value of inventory needs to be estimated as the inventory has not in fact been sold. As a rule, the market value concept is used in terms of current replacement cost of inventory, that is, what it will cost currently to purchase or manufacture the item. Thus, the LCM rule recognises a holding loss in the period in which the replacement cost of an item dropped, rather than in the period in which the

item actually is sold. The holding loss, as stated earlier, is the difference between purchase cost and the subsequent lower replacement cost. If applicable, the LCM rule simply measures inventory at the lower (replacement) market figure. As a result of it, net income decreases by the amount that the closing inventory has been written down. When the closing inventory becomes part of the cost of goods sold in a future period when selling prices are low, the lower carrying value of closing inventory helps in maintaining normal profit margins in the period of sale.

While applying the rule of 'lower of cost or market' the following upper and lower boundaries are used with regard to market value (current replacement cost) concept:

- (1) Market value should not be higher than the estimated net realisable value, that is, the estimated selling price of the item less the costs associated with selling it.
- (2) Market value should not be lower than the net realisable value less a normal profit margin.

The above rules on 'lower of cost or market' is summarised as follows:

“Use historical cost if the cost price is lowest; otherwise, use the next lowest of the other three possibilities.”

The following example present the application of 'lower of cost or market' in different situations. In this example four possible situations A, B, C and D are assumed and historical cost, current replacement cost, net realisable value and net realisable value less profit margin figures of inventory are given.

The value at which inventory will be valued in these different situation is indicated by star (*)

Situation	Historical cost (₹)	Current Replacement (₹)	Net Realisable value (Ceiling) (₹)	Net Realisable value less profit margin (floor) (₹)
A	*700	800	1000	900
B	900	*800	900	*700
C	900	700	900	*800
D	1000	900	*800	700

The above example proves that not all decreases in replacement prices are followed by proportionate reductions in selling prices (net realisable value). Therefore, the application of LCM rule is subject to the following additional guidelines:

(i) If selling price is not expected to drop, inventory may be priced at cost even though it exceeds replacement cost.

For example, assume that an item costing ₹ 80 are being sold for ₹ 100 during the year, yielding a gross profit of 20% on sales. If the selling price remains at ₹ 100 and the replacement cost drops to ₹ 60 (a 25% decline), inventory will not be written down.

However, if there is a proportionate decrease in the selling price, i.e., selling price also declines by 25% and becomes ₹ 75, then inventory will be shown at ₹ 60 replacement cost.

In this case, after showing the inventory at ₹ 60, the current period's income will be less by ₹ 20 (the difference between the historical cost and replacement cost). Further, when this item valued at ₹ 60, is sold in a subsequent period for ₹ 75, a normal gross profit of 20% on sales will be reported (₹ 75 – ₹ 60 = ₹ 15 gross profit margin).

(ii) If selling price is expected to drop—but less than proportionately to the decline in replacement cost—inventory is written down only to the extent necessary to maintain a normal gross profit in the period of sale. Taking the above example, if the selling price drops from ₹ 100 to ₹ 90 and the replacement cost declines to ₹ 60, inventory will be shown at ₹ 72 (₹ 90 20% of ₹ 90). This amount maintains a 20% gross profit margin when the item is sold for ₹ 40.

Arguments in Support of LCM Rule

Supporters of the LCM Rules argue that an exception to the historical costs basis is desirable because it (LCM) serves the useful purpose of achieving better matching of costs and revenues and contributes to usefulness of periodic income measurement. The arguments in favour of LCM rule is that no assets should appear on a business enterprise's balance sheet in an amount greater than is likely to be recovered from the use or sale of that asset in the normal course of events. Unrecoverable amounts have no value and therefore are not assets. International Accounting Standards Committee⁴ observes:

"The historical cost of inventories may not be realisable if their selling prices have declined, if they are damaged, or if they have become wholly or partially obsolete. The practice of writing inventories down below historical cost to net realisable value accords with the view that current assets should not be carried in excess of amounts expected to be realised. Declines in value are computed separately for individual items, groups or similar items, an entire class of inventory (for example, finished goods), or items relating to a class of business, or they are computed on an overall basis for all the inventories down based on a class of inventory, on a class of business, or on an overall basis results in offsetting losses incurred against unrealised gains."

Depending on the character and composition of the inventory, the rule of cost or market, whichever is lower may properly be applied either directly to each item or to the total of the inventory (or in some case to the total to the components of each major category). The method should be that which most clearly reflects periodic income.

Criticism of LCM Rule

At the outset, it may be noted that lower of cost or market is not a method of inventory costing but rather one of recognising measurable expected loss. The cost or market concept when applied to inventories is tied closely to the concept of realisation of revenue at the time of sale, but with the recognition of loss as soon as evidence of loss appears. The principal objections to the rule center around its violation of the historical cost principle. LCM rule is criticised on many grounds:

(i) It violates the concept of consistency because it permits a change in valuation base from one period to another and even within the inventory itself. It treats value increases and value decreases differently. If the market value of goods is greater than its cost, there is no recognition of the increased value on the balance sheet.

(ii) It is said to be a major cause of distortion of profit and loss.

(iii) Although it may be considered conservative with respect to the current period, it is unconservative with respect to the income of future period.

(iv) The current period may be charged with the result of inefficient purchasing and management, which should be included

in the measurement of operating performance at the time of sale. However, it may also be argued that these should be recorded in the current period rather than in the period of sale.

(v) An increase in the market price in a subsequent period may result in an unrealised gain if the original cost is always used as the basis for comparison with the current market price (assuming, of course, that market in both periods is below the original cost).

(vi) The cost or market rule is said to permit excessive subjectivity in the accounts. This is based on the assumption that market is always more subjective than cost.

INVENTORY VALUATION METHODS UNDER IFRS AND U.S. GAAP

Inventory valuation methods are referred to as cost formulas and cost flow assumptions under IFRS and U.S. GAAP, respectively. If the choice of method results in more cost being allocated to cost of sales and less cost being allocated to inventory than would be the case with other methods, the chosen method will cause, in the current year, reported gross profit, net income, and inventory carrying amount to be lower than if alternative methods had been used. Accounting for inventory, and consequently the allocation of costs, thus has a direct impact on financial statements and their comparability.

Both IFRS and U.S. GAAP allow companies to use the following inventory valuation methods: specific identification; first-in, first-out (FIFO); and weighted average cost. U.S. GAAP allow companies to use an additional method: last-in, first-out (LIFO). A company must use the same inventory valuation method for all items that have a similar nature and use. For items with a different nature or use, a different inventory valuation method can be used. When items are sold, the carrying amount of the inventory is recognised as an expense (cost of sales) according to the cost formula (cost flow assumption) in use.

Significant financial risk can result from the holding of inventory. The cost of inventory may not be recoverable because of spoilage, obsolescence, or declines in selling prices. Under IFRS, "inventories shall be measured at the lower of cost and net realisable value." Net realisable value is the estimated selling price in the ordinary course of business less the estimated costs necessary to get the inventory in condition for sale and to make the sale. The assessment of net realisable value is typically done by item or by groups of similar or related items. In the event that the value of inventory declines below the carrying amount on the balance sheet, the inventory carrying amount must be written down to its net realisable value and the loss (reduction in value) recognised as an expense on the income statement. Rather than write-down the inventory through the inventory account, a company may use an inventory valuation allowance (reserve) account. The inventory amount net of the valuation allowance equals the carrying amount of the inventory after write-downs.

In each subsequent period, a new assessment of net realisable value is made. Reversal (limited to the amount of the original

write-down) is required for a subsequent increase in value of inventory previously written down. The amount of any reversal of any write-down of inventory arising from an increase in net realisable value is recognised as a reduction in cost of sales (a reduction in the amount of inventories recognised as an expense).

Under U.S. GAAP, inventory is measured at the lower of cost or market. Market value is defined as current replacement cost subject to upper and lower limits. Market value cannot exceed net realisable value (selling price less reasonably estimated costs of completion and disposal). The lower limit of market value is net realisable value less a normal profit margin. Any write-down reduces the value of the inventory, and the loss in value (expense) is generally reflected in the income statement in cost of goods sold. U.S. GAAP prohibit the reversal of a write-down; this rule is different from the treatment under IFRS.

IAS 2 does not apply to the inventories of producers of agricultural and forest products, producers of minerals and mineral products, and commodity broker-traders whose inventories are measured at net realisable value (fair value less costs to sell and, if necessary, complete) according to well-established industry practices. If an active market exists for these products, the quoted market price in that market is the appropriate basis for determining the fair value of that asset. If an active market does not exist, a company may use market-determined prices or values (such as the most recent market transaction price) when available. Changes in the value of inventory (increases or decreases) are recognised in profit or loss in the period of the change. U.S. GAAP are similar to IFRS in the treatment of inventories of agricultural and forest products and mineral ores. Mark-to-market inventory accounting is allowed for refined bullion of precious metals.

IFRS require the following financial statement disclosures concerning inventory:

- (a) the accounting policies adopted in measuring inventories, including the cost formula (inventory valuation method) used;
- (b) the total carrying amount of inventories and the carrying amount in classifications (for example, merchandise, raw materials, production supplies, work in progress, and finished goods) appropriate to the entity;
- (c) the carrying amount of inventories carried at fair value less costs to sell;
- (d) the amount of inventories recognised as an expense during the period (cost of sales);
- (e) the amount of any write-down of inventories recognised as an expense in the period;
- (f) the amount of any reversal of any write-down that is recognised as a reduction in cost of sales in the period;
- (g) the circumstances or events that led to the reversal of a write-down of inventories; and
- (h) the carrying amount of inventories pledged as security for liabilities,

Inventory-related disclosures under U.S. GAAP are very similar to the disclosures above, except that requirements (f) and (g) are not relevant because U.S. GAAP do not permit the reversal of prior-year inventory write-downs. U.S. GAAP also require disclosure of significant estimates applicable to inventories and of any material amount of income resulting from the liquidation of LIFO inventory.

In rare situations, a company may decide that it is appropriate to change its inventory valuation method (cost formula). Under IFRS, a change in accounting policy (including a change in cost formula) is acceptable only if the change results in the financial statements providing reliable and more relevant information about the effects of transactions, other events, or conditions on the business entity's financial position, financial performance, or cash flows. Changes in accounting policy are accounted for retrospectively. If the change is justifiable, historical information is restated for all accounting periods (typically the previous one or two years) that are presented for comparability purposes with the current year in annual financial reports. Adjustments of financial statement information relating to accounting periods prior to those presented are reflected in the beginning balance of retained earnings for the earliest year presented for comparison purposes. This retrospective restatement requirement enhances the comparability of financial statements over time. An exemption to the retrospective restatement requirement applies when it is impracticable to determine either the period—specific effects or the cumulative effect of the change.

Under U.S. GAAP, a company making a change in inventory valuation method is required to explain why the newly adopted inventory valuation method is superior and preferable to the old method. In addition, U.S. tax regulations may also restrict changes in inventory valuation methods and require permission from the Internal Revenue Service (IRS) prior to implementation. If a company decides to change from LIFO to another inventory method, U.S. GAAP require a retrospective restatement of inventory and retained earnings. Historical financial statements are also restated for the effects of the change. If a company decides to change to the LIFO method, it must do so on a prospective basis. Retrospective adjustments are not made to the financial statements. Instead, the carrying value of inventory under the old method will become the initial LIFO layer in the year of LIFO adoption.

AS-2 ON INVENTORY VALUATION

AS-2 has advocated to value inventories (finished goods) at the lower of historical cost and net realisable value. It comments:

1. Applicability

AS 2 does not apply in accounting for the following inventories:

- (a) Work in progress arising under construction contracts, including directly related service contracts.

- (b) Work in progress arising in the ordinary course of business of service providers.
- (c) Shares, debentures and other financial instruments held as inventory in trade, and
- (d) Producers' inventories of livestock, agricultural and forest products, and mineral oils, ores and gases to the extent that they are measured at net realisable value in accordance with well established practices in those industries.

2. Scope

AS 2 defines inventories as assets

- (a) Held for sale in the ordinary course of business. It means finished goods ready for sale in case of a manufacturer and for traders, goods purchased by them with the intention of resale but not yet sold. These are known as Finished Goods.
- (b) In the process of production for such sale. These refer to the goods which are introduced to the production process but the production is not yet completed i.e. not fully converted into finished goods. These are known as Work-in-progress.
- (c) In the form of materials or supplies to be consumed in the production process or in the rendering of services. It refers to all the materials and spares, i.e., to be consumed in the process of production. These are known as Raw Materials.

3. Valuation of Inventories

As stated earlier inventories should be valued at the lower of cost and net realisable value.

Cost of goods is the summation of:

- (a) Cost of Purchase.
- (b) Cost of Conversion.
- (c) Other cost necessary to bring the inventory in present location and condition.

As shown in Fig. 9.1 finished goods should be valued at cost or market price whichever is lower, in other words, finished goods are valued at the lower of cost or net realisable value.

Cost has three elements as discussed below:

Cost of Purchase — Cost of purchase includes the purchase price plus all other necessary expenses directly attributable to purchase of inventory like, taxes and duties (other than those subsequently recoverable by the enterprise from the taxing authorities), carriage inward, loading/unloading excluding expenses recoverable from the supplier.

From the above sum, following items are deducted – duty drawback, CENVAT, VAT, trade discount, rebates.

Cost of Conversion — For a trading company cost of purchase along with other cost (discussed below) constitutes cost of inventory, but for a manufacturer cost of inventory also includes cost of conversion.

Other Costs — Other costs are included in the cost of inventories only to the extent that they are incurred in bringing the inventories to their present location and condition. For example, it may be appropriate to include overheads other than production overheads or the costs of designing products for specific customers in the cost of inventories.

AS 2 gives the following as examples of costs that should be excluded from the cost of inventories and recognised as expenses in the period in which they are incurred:

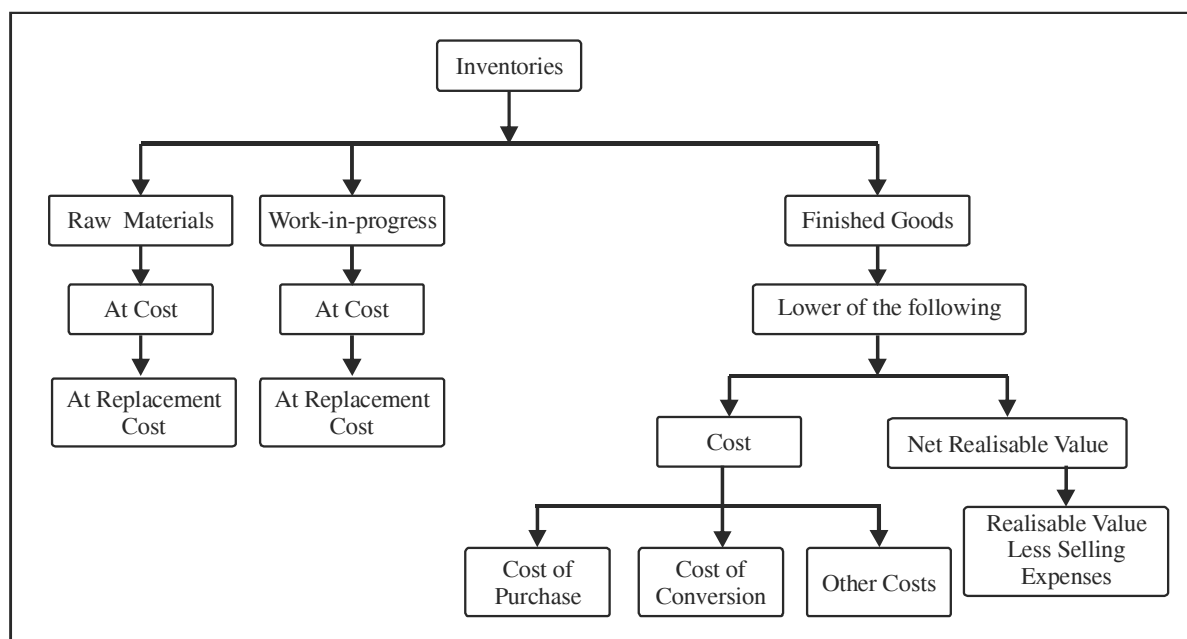


Fig. 9.1: Valuation of Inventories

- (a) Abnormal amounts of wasted materials, labour, or other production costs.
- (b) Storage costs, unless those costs are necessary in the production process prior to a further production stage.
- (c) Administrative overheads that do not contribute to bringing the inventories to their present location and condition and
- (d) Selling and distribution costs.

Borrowing Costs — Interest and other borrowing costs are usually considered as not relating to bringing the inventories to their present location and condition and are, therefore, usually not included in the cost of inventories.

There may, however, be few exceptions to the above rule. As per AS 16, borrowing costs that are directly attributable to the acquisition, construction or production of a qualifying asset are capitalised as part of the cost of the qualifying asset. Accordingly, inventories that necessarily take a substantial period of time to bring them to a saleable condition are qualifying assets.

As per AS 16, for inventories that are qualifying assets, any directly attributable borrowing costs should be capitalised as part of their cost.

4. Cost Formula Suggested under AS 2

- (i) Specific Identification Method
- (ii) FIFO (First-In First-Out)
- (iii) Weighted Average Cost
- (iv) Standard Cost of Method
- (v) Retail Method

5. Net Realisable Value (NRV)

Net realisable value is the estimated selling price in the ordinary course of business less the estimated costs of completion and the estimated costs necessary to make the sale.

When it is said that inventory should be valued at the lower of cost or net realisable value, one should note that only under two circumstances cost of inventories will surpass its net realisable value:

1. The goods are damaged or obsolete and not expected to realise the normal sale price.
2. The cost necessary for the production of goods has gone up by greater degree.

Both the above cases are not expected in the normal functioning of the business, hence whenever it is found that goods are valued at NRV, care should be taken to study the existing market position for the relevant products.

NRV of the goods are estimated on item to item basis and only items of the same characteristics are grouped together. Such estimation is made at the time of finalisation of accounts and

circumstances existing on the date of balance sheet evident from the events after the balance sheet confirming the estimation should be taken into consideration. Also assessment is made on each balance sheet date of such estimation.

While estimating the NRV, the purpose of holding the inventory should also be taken into consideration. For example, the net realisable value of the quantity of inventory held to satisfy firm sales or service contracts is based on the contract price. If the sales contracts are for less than the inventory quantities held, the net realisable value of the excess inventory is based on general selling prices. Contingent losses on firm sales contracts in excess of inventory quantities held and contingent losses on firm purchase contracts are dealt with in accordance with the principles enunciated in AS 4, Contingencies and Events Occurring after the Balance Sheet Date.

For example, a concern has 10,000 units in inventory, of which 6,000 is to be delivered for ₹ 40 each as per a contract with one of the customer. Cost of inventory is ₹ 45 and NRV estimated to be ₹ 50. In this case 6,000 units will be valued @ ₹ 40 each and remaining 4,000 units will be valued @ ₹ 45 each.

This provision of cost or NRV whichever is less, is applicable to only those goods which are ready for sale, *i.e.*, finished goods. Since raw materials and work in progress are not available for sale, they don't have any realisable value and therefore NRV can never be estimated. These goods should always be valued at cost. Only exception is the case when the net realisable value of the relevant finished goods is lower than cost, in this case, the relevant raw materials and work in progress should be written down to net realisable value. In such circumstances, the replacement cost of the materials may be the best available measure of their net realisable value.

6. Disclosures

The financial statements should disclose:

- (a) The accounting policies adopted in measuring inventories, including the cost formula used; and
- (b) The total carrying amount of inventories together with a classification appropriate to the enterprise.

Information about the carrying amounts held in different classifications of inventories and the extent of the changes in these assets is useful to financial statement users. Common classifications of inventories are

- (1) raw materials and components,
- (2) work in progress,
- (3) finished goods,
- (4) stores and spares, and
- (5) loose tools.

INDIAN ACCOUNTING STANDARD (IND AS) 2 ON INVENTORIES

Objective

The objective of this Standard is to prescribe the accounting treatment for inventories. A primary issue in accounting for inventories is the amount of cost to be recognised as an asset and carried forward until the related revenues are recognised. This Standard deals with the determination of cost and its subsequent recognition as an expense, including any write-down to net realisable value. It also provides guidance on the cost formulas that are used to assign costs to inventories.

Scope

This Standard applies to all inventories, except:

- (a) **financial instruments (Ind AS 32, Financial Instruments: Presentation and Ind AS 109 Financial Instruments and); and**
- (b) **biological assets (i.e., living animals or plants) related to agricultural activity and agricultural produce at the point of harvest (See Ind AS 41, Agriculture).**

This Standard does not apply to the measurement of inventories held by:

- (a) **producers of agricultural and forest products, agricultural produce after harvest, and minerals and mineral products, to the extent that they are measured at net realisable value in accordance with well-established practices in those industries. When such inventories are measured at net realisable value, changes in that value are recognised in profit or loss in the period of the change.**
- (b) **commodity broker-traders who measure their inventories at fair value less costs to sell. When such inventories are measured at fair value less costs to sell, changes in fair value less costs to sell are recognised in profit or loss in the period of the change.**

Definitions

The following terms are used in this Standard with the meanings specified:

Inventories are assets:

- (a) **held for sale in the ordinary course of business;**
- (b) **in the process of production for such sale; or**
- (c) **in the form of materials or supplies to be consumed in the production process or in the rendering of services.**

Net realisable value is the estimated selling price in the ordinary course of business less the estimated costs of completion and the estimated costs necessary to make the sale.

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. (See Ind AS 113, *Fair Value Measurement*.)

Measurement of inventories

(i) **Inventories shall be measured at the lower of cost and net realisable value.**

Cost of inventories

(ii) **The cost of inventories shall comprise all costs of purchase, costs of conversion and other costs incurred in bringing the inventories to their present location and condition.**

Techniques for the measurement of cost

(i) Techniques for the measurement of the cost of inventories, such as the standard cost method or the retail method, may be used for convenience if the results approximate cost. Standard costs take into account normal levels of materials and supplies, labour, efficiency and capacity utilisation. They are regularly reviewed and, if necessary, revised in the light of current conditions.

(ii) The retail method is often used in the retail industry for measuring inventories of large numbers of rapidly changing items with similar margins for which it is impracticable to use other costing methods. The cost of the inventory is determined by reducing the sales value of the inventory by the appropriate percentage gross margin. The percentage used takes into consideration inventory that has been marked down to below its original selling price. An average percentage for each retail department is often used.

Cost Formulas

(i) The cost of inventories of items that are not ordinarily interchangeable and goods or services produced and segregated for specific projects shall be assigned by using specific identification of their individual costs.

(ii) Specific identification of cost means that specific costs are attributed to identified items of inventory. This is the appropriate treatment for items that are segregated for a specific project, regardless of whether they have been bought or produced. However, specific identification of costs is inappropriate when there are large numbers of items of inventory that are ordinarily interchangeable. In such circumstances, the method of selecting those items that remain in inventories could be used to obtain predetermined effects on profit or loss.

(iii) **The cost of inventories, other than those dealt with in paragraph (i), shall be assigned by using the first-in, first-out (FIFO) or weighted average cost formula. An entity shall use the same cost formula for all inventories having a similar nature and use to the entity. For inventories with a different nature or use, different cost formulas may be justified.**

(iv) The FIFO formula assumes that the items of inventory that were purchased or produced first are sold first, and consequently the items remaining in inventory at the end of the period are those most recently purchased or produced. Under the weighted average cost formula, the cost of each item is determined from the weighted average of the cost of similar items at the beginning of a period and the cost of similar items purchased or produced during the period. The average may be calculated on a periodic basis, or as each additional shipment is received, depending upon the circumstances of the entity.

(v) For example, inventories used in one operating segment may have a use to the entity different from the same type of inventories used in another operating segment. However, a difference in geographical location of inventories (or in the respective tax rules), by itself, is not sufficient to justify the use of different cost formulas.

Net realisable value

(i) The cost of inventories may not be recoverable if those inventories are damaged, if they have become wholly or partially obsolete, or if their selling prices have declined. The cost of inventories may also not be recoverable if the estimated costs of completion or the estimated costs to be incurred to make the sale have increased. The practice of writing inventories down below cost to net realisable value is consistent with the view that assets should not be carried in excess of amounts expected to be realised from their sale or use.

(ii) Inventories are usually written down to net realisable value item by item. In some circumstances, however, it may be appropriate to group similar or related items. This may be the case with items of inventory relating to the same product line that have similar purposes or end uses, are produced and marketed in the same geographical area, and cannot be practicably evaluated separately from other items in that product line. It is not appropriate to write inventories down on the basis of a classification of inventory, for example, finished goods, or all the inventories in a particular operating segment.

(iii) Estimates of net realisable value are based on the most reliable evidence available at the time the estimates are made, of the amount the inventories are expected to realise. These estimates take into consideration fluctuations of price or cost directly relating to events occurring after the end of the period to the extent that such events confirm conditions existing at the end of the period.

(iv) Estimates of net realisable value also take into consideration the purpose for which the inventory is held. For example, the net realisable value of the quantity of inventory held to satisfy firm sales or service contracts is based on the contract price. If the sales contracts are for less than the inventory quantities held, the net realisable value of the excess is based on general selling prices. Provisions may arise from firm sales contracts in excess of inventory quantities held or from firm purchase contracts. Such provisions are dealt with under Ind AS 37, Provisions, Contingent Liabilities and Contingent Assets.

(v) Materials and other supplies held for use in the production of inventories are not written down below cost if the finished products in which they will be incorporated are expected to be sold at or above cost. However, when a decline in the price of materials indicates that the cost of the finished products exceeds net realisable value, the materials are written down to net realisable value. In such circumstances, the replacement cost of the materials may be the best available measure of their net realisable value.

(vi) A new assessment is made of net realisable value in each subsequent period. When the circumstances that previously caused inventories to be written down below cost no longer exist or when there is clear evidence of an increase in net realisable value because of changed economic circumstances, the amount of the write-down is reversed (*i.e.*, the reversal is limited to the amount of the original write-down) so that the new carrying amount is the lower of the cost and the revised net realisable value. This occurs, for example, when an item of inventory that is carried at net realisable value, because its selling price has declined, is still, on hand in a subsequent period and its selling price has increased.

Recognition as an expense

(i) When inventories are sold, the carrying amount of those inventories shall be recognised as an expense in the period in which the related revenue is recognised. The amount of any write-down of inventories to net realizable value and all losses of inventories shall be recognised as an expense in the period the write-down or loss occurs. The amount of any reversal of any write-down of inventories, arising from an increase in net realisable value, shall be recognised as a reduction in the amount of inventories recognized as an expense in the period in which the reversal occurs.

(ii) Some inventories may be allocated to other asset accounts, for example, inventory used as a component of self-constructed property, plant or equipment. Inventories allocated to another asset in this way are recognised as an expense during the useful life of that asset.

Disclosure

The financial statements shall disclose:

- (a) the accounting policies adopted in measuring inventories, including the cost formula used;
- (b) the total carrying amount of inventories and the carrying amount in classifications appropriate to the entity;
- (c) the carrying amount of inventories carried at fair value less costs to sell;
- (d) the amount of inventories recognised as an expense during the period;
- (e) the amount of any write-down of inventories, recognised as an expense in the period in accordance with paragraph (i) (Recognition as an expense);

- (f) the amount of any reversal of any 'write-down that is recognised as a reduction in the amount of inventories recognized as expense in the period in accordance with paragraph (i);
- (g) the circumstances or events that led to the reversal of a write-down of inventories in accordance with paragraph (i); and
- (h) the carrying amount of inventories pledged as security for liabilities.

CONSISTENCY IN THE VALUATION OF INVENTORY

The principle of consistency is one of basic concepts underlying reliable financial statements. This principle means that once a company has adopted a particular accounting method, the company should follow that method consistently rather than switch methods from one year to the next. If a company ignores the principle of consistency in accounting for inventories, it could cause its net income for any given year to increase or decrease merely by changing its method of inventory valuation. The principle of consistency does not mean that every company in an industry must use the same accounting method; it does mean that a given company should not switch year after year from one accounting method to another.

It should be understood that a company has considerable latitude in selecting a method of inventory valuation best suited to its needs. The principle of consistency comes into a play after a given method has been selected. It is also true that change from one inventory method to another will usually cause reported income to change significantly in the year in which the change is made. Frequent switching of methods would make the income statement undependable as a means of portraying trends in operating results. Because of the principle of consistency, the user of financial statements is able to assume that the company has followed the same accounting methods it used in the preceding year. Thus, the value of financial statements is increased because they enable the user to make reliable comparison of the results achieved from year to year.

The principle of consistency does not mean that a business can never change its method of inventory valuation. However, when a change is made, the effects of the change upon reported net income should be disclosed fully in the footnotes accompanying the financial statements. Adequate disclosure of all information necessary for the proper interpretation of financial statements is another basic principle of accounting. Even when the same method of inventory valuation is being followed consistently, the financial statements should include a disclosure valuation method in use.

INVENTORY SYSTEMS

There are two principal ways of accounting for inventories:

Perpetual Inventory System

The perpetual inventory method requires a continuous record of addition to or reductions in material, work in progress and cost of goods sold on a day-to-day basis. Such a record facilitates managerial control and preparation of interim financial statements. Physical inventory counts are usually taken at least once a year in order to check on the validity of the accounting records. The perpetual inventory system may give such additional information as goods ordered, expected delivery date and unit costs. Usually, these records are maintained on a quantity basis but values can be included. It is an essential feature of the perpetual inventory method that items of stock are checked periodically, normally at least once or twice each year. This ensures that the stock records tally with the physical stocks, which is vital if the control procedure is to function properly.

The perpetual inventory method has the following advantages:

- (1) The stock-taking task which is long and costly is avoided under this method. On the other hand, the inventory of different items of materials in accordance with the stores ledger can be promptly prepared for the preparation of the income statement and balance sheet at interim periods if required without a physical inventory being taken.
- (2) Management may be informed daily of number of units and the value of each kind of material on hand—information which tends to eliminate delays and stoppage in production.
- (3) The investment in materials and supplies may be kept at the lowest point in conformity with operating requirements.
- (4) A system of internal check is always in operation and the activities of different departments, such as purchasing, stores and production are continuously checked against each other. This results into detailed and reliable checks on the stores also.
- (5) It is not necessary to stop production so as to carry out a complete physical stocktaking.
- (6) Perpetual inventory records provide details about materials cost for individual products, jobs, processes, production orders or departments. These information are helpful to management in exercising control over costs.
- (7) Discrepancies and errors are promptly discovered and localised and remedial action can be taken to avoid their occurrence in the future.
- (8) This method has a moral effect on the staff, makes them disciplined and careful and acts as a check against dishonest actions.

- (9) The disadvantages of excessive stock are avoided, such as loss of interest on capital invested in stock, loss through deterioration, risk of obsolescence.

Periodic Inventory System

Under the periodic method, the entire book inventory is verified at a given date by an actual count of materials on hand. This physical inventory is usually taken near the end of the accounting period. Some firms even suspend plant operations when this is done. This method provides for the recording of purchases, purchase returns and purchase allowances on a daily basis but does not provide for a continuous inventory or for a daily computation of the goods sold. At the end of each accounting period, a physical count is made of the quantity of goods on hand and the value of inventory is determined by using an inventory pricing method (FIFO, LIFO or Average Cost) and attaching costs to units counted. The cost of goods sold is computed by deducting closing inventory from the sum of opening inventory and purchases made during the current period. It is assumed that goods not on hand at the end of accounting period have been sold. There is no system and accounting for shrinkage, losses, theft and waste throughout the accounting period and they can be discovered only after the end of the period.

Taking a physical inventory at the year end is an important task in the periodic inventory system. It must be ensured that all items have been counted accurately. Counting procedures usually involves teams of people assigned to specific sections of the factory and to inventory storage areas. Large items are counted individually, while small items may be weightcounted. Counted items are tagged to prevent double counting and information from the tags concerning each item's description and quantity is recorded on the inventory sheet.

CONSEQUENCES OF THE CHOICE OF INVENTORY METHODS

The different inventory valuation methods have their own merits and demerits and it is difficult to suggest which method should be adopted by business enterprises. In fact, the choice of inventory method depends on the answers relating to the following four questions:

- (1) Which method is most likely to maximise the enterprise's net income?
- (2) Which method is most likely to minimise the income tax liability and thereby maximise its net cash inflow?
- (3) Which method is most likely to have the greatest information value?
- (4) Which method is least subject to abuse?

The above factors have been discussed in detail in the following paragraphs.

(1) Income Effects: Other things being equal, management prefers to report higher income to the company's shareholders

rather than small income. Another reason that higher income is more attractive than low income, may be that the company's creditors have imposed restrictions on managerial actions if reported income falls below a specified level. A third possible reason for showing high rather than low income is that large reported earnings can induce high market prices for the company's shares. Although, research conducted in this area suggests that this can be true if larger cash flows follow as well, many managers apparently believe that the investment market accepts income numbers at face value.

Management's decision to adopt a method should be based on its estimate of the impact of this decision in most future periods rather than in one year only. Whether FIFO or LIFO is likely to maximise net income in most years depends mainly on whether acquisition prices are rising or falling. In general, FIFO leads to a higher net income than LIFO if prices are rising. Income considerations therefore favour the use of FIFO costing for any item that is subject to a generally rising price trend. But how does the choice affect income in any one year? The answer depends on a number of factors, mainly the following:

- (1) Whether prices this year are higher or lower than the FIFO unit cost of the beginning inventory.
- (2) Whether the physical inventory quantity at the end of the year is greater than, equal to, or less than the inventory on hand at the beginning of the year.
- (3) Special additional considerations when a liquidation takes place that is, when the inventory quantity decreases during the year.

If the inventory quantity increases or remains constant, FIFO income will exceed LIFO income when acquisition prices are increasing, will equal LIFO income when prices are steady, and will be less than LIFO income when prices are falling. The reason is that LIFO never brings prioryear prices into the income statement if inventories increase or remain constant, whereas FIFO always brings these old prices into the cost of goods sold. If prices are rising, these old prices will be lower than LIFO costs; if prices are falling, the old prices will be higher than current LIFO costs.

(2) Income Tax Effects: If cash flow is the only consideration, management would be expected to choose the method that would maximise the company's cash flows. A large net cash flow gives management the ability to make the company grow, to pay its employees competitive salaries and wages, to declare cash dividends, and to reward the managers themselves. The only direct effect of the choice of the inventory method on cash flow is on the company's income taxes. The impact of the FIFO/LIFO choice on taxable income is the same as its impact on the income before income taxes that is reported in the company's financial statements. If FIFO income is greater than LIFO, FIFO income taxes will be greater than LIFO's—and FIFO cash flow therefore will be smaller than LIFO's. Conversely, in a year in which LIFO income is greater than FIFO income would be, LIFO's cash flow will be less than FIFO's cash flow.

LIFO generally meets the cash flow criterion better than FIFO because the prices of the most products and commodities have been and continue to be on longterm upward trends. In addition, since most businesses are usually growing, the quantity of inventory that is bought and sold tends to be increasing as well. With a combination of rising prices and generally rising or steady inventory levels, LIFO produces a greater cost of goods sold, lower income taxes, and a greater cash flow than FIFO.

In practice, management's inventory method decision is usually whether to switch to LIFO from FIFO or average costing, effective in the fiscal year that has just ended. The reason is that FIFO and average costing have been in use much longer than LIFO, and one of them is likely to have been adopted long ago in the company's history. Whenever price move upward sharply and appear likely to continue rising for a number of years, the tax advantages of LIFO are likely to seem more important to management than its unfavourable income effects.

Although the decision to adopt LIFO is not based on the situation in a single year, the switch tends to be made in a year in which LIFO will reduce taxable income. This means that the LIFO base quantity will be at a low unit cost relative to the yearend LIFO cost, and this cost will carry forward into the future. If the long-term price trend is upward but prices fell during the year just ended, the switch to LIFO would likely to be postponed.

(3) Information Effects: External users use the data published in financial statements for making economic decision which require predictions about the amount and timing of the company's future income. Inventory costing method with the greatest information value therefore is the method that is the most likely to be useful to those who make these predictions. Although the precise meaning of information value is not clear, Shillinglaw and Meyer,⁵ suggest that the preferable method is the one that comes closest to providing investors and other outsiders with the following:

- (a) Cost assigned to the goods sold should help the investor identify the sustainable gross margin—that is, the profit the company can sustain on a continuing basis.
- (b) Cost of the inventory on hand should bear a normal relationship to the amount to be realised from a future sale of that inventory.

(a) Sustainable gross margin: Sustainable gross margin is the spread between products' selling prices and replacement costs. As the cost of buying goods increases, the selling price is likely to rise as well. If the selling price does not increase as fast as the unit cost rises, the company's ability to generate cash and pay dividends will be reduced. The company will also find it difficult to continue to replace the sold goods and to maintain its operating capacity at the previous level; expansion of business is impossible to contemplate. Investors in turn might reasonably conclude that the company is stagnating and losing its competitive edge. Insights such as these can be obtained by examining income amounts that reflect a company's sustainable gross margin. Measures of net income that do not reflect the spread between

selling price and replacement cost may convey erroneous and misleading impressions if they are used in these kind of analyses. For example, suppose a retailer buys 1000 units of merchandise from a whole saler at ₹ 10 per unit and sells them to retail customers at a price of ₹ 15 per unit, a margin of ₹ 5 a unit. If the replacement cost had risen to ₹ 12 at the time of the sale, the sustainable gross margin will be only ₹ 3 a unit. Unless conditions change, the gross margin on the next sale of 1000 units will be only ₹ 3 a unit, because the cost of goods sold will be ₹ 12, not ₹ 10 a unit. Given this argument, the best inventory method is the method which produces a gross margin that best approximates the margin between the current selling price and the current acquisition cost of the items sold. In a period of stable or increasing inventory levels, the LIFO cost of goods sold is likely to be closer than FIFO to the current acquisition cost.

The main disadvantages of LIFO is that the direction and size of the gap between LIFO gross margin and sustainable gross margin are difficult to determine when inventory liquidation takes place. The FIFO cost of goods sold can be closer to current acquisition costs than LIFO if a substantial inventory reduction takes place, bringing lower prior-year prices into the cost of goods sold. FIFO may also produce better approximations of sustainable gross margin if purchases are made during the year at prices that reflect unusual conditions. For example, if most purchases during the year are made at penalty prices during a strike in suppliers' plants, these will be reflected in their entirety in the LIFO cost of goods sold if the year-end inventory is at or below the beginning-of-year level. The FIFO cost of goods sold in that year may be closer to the normal replacement cost.

In short, LIFO may approximate the current replacement cost of goods sold better than FIFO, but not always. Furthermore, the amount and direction of the error are difficult to estimate without supplemental information.

(b) Inventory management: In a strict sense inventories are measured at their historical cost because this shows the amount of resources that have been used to acquire them. Many users of financial statements, however, interpret cost to be a surrogate for the value of companies inventories. Although preparers of financial statements disclaim any responsibility for this interpretation, many readers of financial statements would like to use the cost of inventories of companies as the basis for imputing the value of merchandise on hand. This value, in turn, becomes an important number for investors seeking to predict the company's future cash flows. This can be valid only if the unit costs in the end-of-period inventory reflect current or nearcurrent prices. Prices paid for inventory in the distant past have no relevance to how much can be recovered from their sale today. The only prices that come close to answering this question are those that could be obtained for the inventory sold in an orderly manner, less selling costs, bad debts, and interest on investment in the inventory in the interim. Alternatively, under certain conditions, current replacement costs could serve as surrogates for the recoverable amounts.

FIFO does a better job of approximating the current replacement cost of inventories than LIFO does. The units costs in a FIFO inventory are seldom more than a few months old; LIFO inventories, by contrast, may be measured at the unit costs of 10, 20, or even more years in the past.

(4) Scope of Manipulation: External users of financial statements need assurance that management has few opportunities to affect net income by taking actions that do not affect the company's wealth. FIFO passes this test better than LIFO. For example, suppose a company is approaching the end of its fiscal year with fewer items in inventory than it had at the beginning of the year. If it takes no action, and LIFO is used, some of the current year's cost of goods sold will be measured at prior year prices. Management can prevent this by buying enough before the end of the year to bring the inventory up to the beginning-of-year level. Management therefore is in a position to affect net income by its year-end purchasing decisions. Under FIFO, these purchasing decisions will merely affect the cost of the ending inventory.

The search for the 'best' method of inventory valuation is rendered difficult because the inventory figure is used in both the balance sheet and the income statement, and these two financial statements are intended for different purposes. An inventory valuation method which gives significant figures for the income statement may thus produce misleading amounts for the balance sheet, whereas a method which produces a realistic figure for inventory on the balance sheet may provide less realistic data for the income statement. In the income statement the function of the inventory figure is to permit a matching of costs and revenue. In the balance sheet, the inventory and other current assets are regarded as a measure of the company's ability to meet its current debts. For this purpose, a valuation of inventory in line with current replacement cost would appear to be more significant.

It can be argued that the more rapid the turnover rate, the smaller will be the difference between the several methods. Also the smaller the change in prices, the smaller will be the difference between the methods. In fact, if prices are perfectly stable and all lots of merchandise are purchased at the same price, all of the various cost methods will result in the same net income and asset valuation. Backer concludes:

"In general, a company must monitor the working of its inventory costing methods continuously to make sure that they give meaningful results. Escape hatches such as reduction to lower of cost or market need to be employed or a change in method made whenever results from a previously chosen method go awry. The fact that no one inventory cost flow method gives meaningful results under all conditions seems to be a strong reason why uniformity of method would not solve the problem of meaningful inventory costs."⁶

REFERENCES

1. Everett E. Adam, Jr. and Ronald J. Ebert, *Production and Operations Management*, Englewood Cliffs: Prentice Hall, 1982, p. 464.
2. Paul H. Walgenbach, Ernst I. Hanson and Norman E. Dittrich, *Financial Accounting*, Harcourt Brace Jovanovich, 1988, p. 329.
3. American Institute of Certified Public Accountants, *Accounting Research Bulletin No. 43*, AICPA, 1968.
4. International Accounting Standards Committee, *Valuation and Presentation of Inventories in the Context of Historical Cost Systems*, IAS 2, March 1976.
5. Gordon Shillinglaw and Philip E. Meyer, *Accounting, A Management Approach*, Irwin, 1986, p. 280.
6. Morton Backer, *Financial Reporting for Security Investment and Credit Decisions*, NAA, 1970, p. 102.

QUESTIONS

1. Define the term 'inventory'. Why are inventories necessary?
2. Explain the objectives of inventory measurement.
3. What are different inventory costing methods?
4. Distinguish between the two terms—goods flow and cost flow.
5. In what ways, valuation of inventory is essential in accounting?
6. Compare and contrast FIFO and LIFO as methods of inventory valuation.
7. Discuss the advantages and disadvantages of FIFO method of inventory valuation.
8. Explain the advantages and disadvantages of LIFO method of inventory valuation.
9. Discuss average price methods of inventory valuation.
10. Explain the following methods of inventory valuation:
 - (a) Standard cost method
 - (b) Replacement cost method.
11. During rising prices which method of inventory valuation is preferable and why?
12. What is specific identification method of inventory valuation?
13. Explain 'Lower of Cost or Market' rule for inventory valuation. What are the limitations of this rule?
14. Give arguments in support of 'Lower of Cost or Market' rule.
15. What are the recommendations of AS-2 on inventory valuation?
16. Explain the guidelines regarding valuation of inventories below historical cost.
17. Explain the importance of consistency in the valuation of inventory.
18. Discuss perpetual and periodic inventory system. What are their advantages and disadvantages?
19. Explain the factors influencing choice of inventory methods.
20. What are the implications associated with the selection of inventory methods?
21. "A departure from the basis of pricing the inventory is required when the utility of goods is no longer as great as its cost." In the light of this statement, evaluate lower of cost or market (LCM) rule.

22. Discuss the factors and objectives to be considered while selecting a method of inventory valuation.
23. Through an error in counting of goods at December 31, 2015, the ABC company overstated the amount of goods on hand by ₹ 10,000. Assuming that the error was not discovered, what was the effect upon net income for 2015? Upon owners' equity at December 31, 2015? Upon net income for year 2016? Upon owners equity at December 31, 2016?
24. Is the use of an appropriate valuation method for the inventory at the end of the year more important in producing a dependable income statement, or in producing a dependable balance sheet? Give arguments.
25. Why do some accountants consider the net income reported by business during a period of rising prices to be overstated?
26. You have been asked to make an analysis of the financial statements of two companies in the same industry, ABC company and XYZ company. Prices have been increasing steadily for several years. In the course of analysis, you find that the inventory value shown on the ABC company balance sheet is quite close to the current replacement cost of the merchandise on hand. However, for XYZ company, the carrying value of the inventory is far below current replacement cost. What method of inventory valuation is probably used by ABC company? By XYZ company? If it is assumed that the two companies are identical except for the inventory valuation used, which company has probably been reporting higher net income in recent years?
27. Assume that a business uses the FIFO (First-in, First-out) method of inventory valuation during a prolonged period of inflation and that the business pays dividends equal to the amount of reported net income. Suggest a problem that may arise in continued successful operation of the business.
28. ACB Company was established in January 2015. The company made the following three purchases of merchandise in chronological order:
1800 units at ₹ 225 each, 3200 units at ₹ 240, and 2400 units at ₹ 265.
By early December, the company came to know that 7000 units would be sold by year-end at an average selling price of ₹ 420. Management decided to purchase an additional 800 units in December at a unit cost of ₹ 288. The company's suppliers, anxious to increase 2015 sales, offered a substantial quantity discount if the company triples the size of its order. Under the terms of this offer, the company could buy 2400 units at a unit cost of ₹ 268.

You are required to explain:

- (a) What effect, if any, would the December purchase decision have had on ABC company's FIFO-based financial statements in 2015?
- (b) What effect, if any, would the December purchase decision have had on ABC company's LIFO-based financial statements in 2015?

MULTIPLE CHOICE QUESTIONS

Select the correct answer for the following multiple choice questions.

1. When valuing raw materials inventory at lower of cost or market, what is the meaning of the term 'market'?

- (a) Net realisable value
- (b) Net realisable value less a normal profit margin
- (c) Current replacement cost
- (d) Discounted present value.

Ans. (c).

2. If a unit of inventory has declined in value below original cost, but the market value exceeds net realisable value, the amount to be used for purposes of inventory valuation is

- (a) Net realisable value
- (b) Original cost
- (c) Market value
- (d) Net realisable value less a normal profit margin.

Ans. (a).

3. In no case can "Market" in the lower-of-cost or market rule be more than,

- (a) Estimated selling price in the ordinary of business
- (b) Estimated selling price in the ordinary course of business less reasonably predicable costs of completion and disposal
- (c) Estimated selling price in the ordinary course of business less reasonably predictable costs of completion and disposal and an allowance for an approximately normal profit margin.
- (d) Estimated selling price in the ordinary course of business less reasonably predictable costs of completion and disposal, an allowance for an approximately normal profit margin, and an adequate reserve for possible future losses.

Ans. (b).

4. When inventory declines in value below original (historical) cost, and this decline is considered other than temporary, what is the maximum amount that the inventory can be valued at?

- (a) Sales price net of conversion costs
- (b) Net realisable value
- (c) Historical cost
- (d) Net realisable value reduced by a normal profit margin.

Ans. (b).

5. An item of inventory purchased this period for ₹ 15 has been written down to its current replacement cost of ₹ 10. It sells for ₹ 30 with disposal cost of ₹ 3 and normal profit of ₹ 12 Which of the following statements is not true?

- (a) The cost of sales of the following year will be understated.
- (b) The current year's income is understated.
- (c) The closing inventory of the current year is understated.
- (d) Income of the following year will be understated.

Ans. (d).

6. Which of the following is true in applying the lower-of-cost-or-market rule to work in process inventory?

- (a) This category of inventory is an exception and the rule does not apply.
- (b) Costs of completing the inventory are added to cost of disposal and both deducted from estimated selling price when computing realisable value.
- (c) Market value cannot ordinarily be determined.

(d) Equivalent production is multiplied by the selling price.

Ans. (b).

7. To produce an inventory valuation which approximates the lower of cost or market using the conventional retail inventory method, the computation of the ratio of cost to retail should

- (a) Include markups but not markdowns.
- (b) Include markups and markdowns.
- (c) Ignore both markups and markdowns.
- (d) Include markdowns and not markups.

Ans. (a).

8. The retail inventory method is based on the assumption that the,

- (a) Final inventory and the total of goods available for sale contain the same proportion of highcost and low cost ratio goods.
- (b) Ratio of gross margin to sales is approximately the same each period.
- (c) Ratio of cost to retail changes at a constant rate.
- (d) Proportions of markups and markdowns to selling price are the same.

Ans. (a).

9. A major advantage of the retail inventory methods is that it,

- (a) Permits companies which use it to avoid taking an annual physical inventory.
- (b) Gives a more accurate statement of inventory costs than other methods.
- (c) Hides cost from customers and employees.
- (d) Provides a method of inventory control and facilitates determination of the periodic inventory for certain types of companies.

Ans. (d).

10. Which method of inventory pricing best approximates specific identification of the actual flow of costs and units 'in most manufacturing situations?

- (a) Average cost
- (b) First-in, first-out
- (c) Last-in, first-out
- (d) Base stock

Ans. (b).

11. Which of the following statements is not valid as it applies to inventory costing methods?

- (a) If inventory quantities are to be maintained, part of the earnings must be invested (plowed back) in inventories when FIFO is used during a period of rising prices.
- (b) Lifo tends to smooth out the net income pattern since it matches current cost of goods sold with current revenue, when inventories remain at constant quantities.
- (c) When a firm using the LIFO method fails to maintain its usual inventory position (reduces stock on hand below customary levels) there may be a matching of old costs with current revenues.

(d) The use of FIFO permits some control by management over the amount of net income for a period through controlled purchases which is not true with LIFO.

Ans. (d).

12. ABC Corporation's inventory cost on its statement of Financial position was lower using FIFO than Lifo. Assuming no beginning inventory, what direction did the cost of purchases move during the period?

- (a) Up
- (b) Down
- (c) Steady
- (d) Cannot be determined.

Ans. (b).

13. Assuming no beginning inventory, what can be said about the trend of inventory prices if cost of goods sold computed when inventory is valued using the FIFO method exceeds cost of goods sold when inventory is valued using LIFO methods?

- (a) Prices decreased
- (b) Prices remain unchanged
- (c) Prices increased
- (d) Price trend cannot be determined from information given.

Ans. (a).

14. A company has been using the LIFO cost method of inventory valuation for 15 years. Its 2016 ending inventory was ₹ 15,000 but it would have been ₹ 26,000 if FIFO had been used. Thus, if FIFO had been used, this company's net income before taxes would have been

- (a) ₹ 11,000 less over the 15-year period.
- (b) ₹ 11,000 greater over the 15-year period.
- (c) ₹ 11,000 greater in 2016.
- (d) ₹ 11,000 less in 2016.

Ans. (b).

15. An inventory pricing procedure in which the oldest costs incurred rarely have an effect on the ending inventory valuation is

- (a) FIFO
- (b) LIFO
- (c) Conventional retail
- (d) Weighted average

Ans. (a).

16. According to the FASB conceptual framework, which of the following attributes would not be used to measure inventory?

- (a) Historical cost.
- (b) Replacement cost.
- (c) Net realizable value.
- (d) Present value of future cash flows.

Ans. (d).

17. How should the following costs affect a retailer's inventory?

	<i>Freight-in</i>	<i>Interest on inventory loan</i>
(a)	Increase	No effect
(b)	Increase	Increase

- (c) No effect Increase
(d) No effect No effect

Ans. (a).

18. Reporting inventory at the lower of cost or market is a departure from the accounting principle of

- (a) Historical cost.
(b) Consistency.
(c) Conservatism.
(d) Full disclosure.

Ans. (a).

19. The original cost of an inventory item is below both replacement cost and net realizable value. The net realizable value less normal profit margin is below the original cost. Under the lower of cost or market method, the inventory item should be valued at

- (a) Replacement cost.
(b) Net realizable value.
(c) Net realizable value less normal profit margin.
(d) Original cost.

Ans. (d).

20. Which of the following statements are correct when a company applying the lower of cost or market method reports its inventory at replacement cost?

- I. The original cost is less than replacement cost
II. The net realizable value is greater than replacement cost.
(a) I only.
(b) II only.
(c) Both I and II.
(d) Neither I nor II.

Ans. (b).

21. The original cost of an inventory item is above the replacement cost and the net realizable value. The replacement cost is below the net realizable value less the normal profit margin. As a result, under the lower of cost or market method, the inventory item should be reported at the

- (a) Net realizable value
(b) Net realizable value less the normal profit margin.
(c) Replacement cost.
(d) Original cost.

Ans. (b).

22. A company decided to change its inventory valuation method from FIFO to LIFO in a period of rising prices. What was the result of the change on ending inventory and net income in the year of the change?

<i>Ending inventory</i>	<i>Net income</i>
(a) Increase	Increase
(b) Increase	Decrease
(c) Decrease	Decrease
(d) Decrease	Increase

Ans. (c).

23. Generally, which inventory costing method approximates most closely the current cost for each of the following?

	<i>Cost of goods sold</i>	<i>Ending inventory</i>
(a) LIFO		FIFO
(b) LIFO		LIFO
(c) FIFO		FIFO
(d) FIFO		LIFO

Ans. (a)

Problems

1. From the following details of stores receipts and issues of material "EXA" in a manufacturing unit, prepare the Stock Ledger using "Weighted Average" method of valuing the issues:

- Nov. 1 Opening stock 2,000 units @ ₹. 5 each.
Nov. 3 Issued 1,500 units to Production.
Nov. 4 Received 4,500 units @ ₹ 6.00 each.
Nov. 8 Issued 1,600 units to production.
Nov. 9 Returned to stores 100 units by Production Department (from the issues of November, 3).
Nov. 16 Received 2,400 units @ ₹ 6.50 each.
Nov. 19 Returned to the supplier 200 units out of the quantity received on November, 4.
Nov. 20 Received 1,000 units @ ₹ 7.00 each.
Nov. 24 Issued to production 2,100 units.
Nov. 27 Received 1,200 units @ ₹ 7.50 each.
Nov. 29 Issued to Production 2,800 units.
(use rates upto two decimal places).

[**Ans.** Cost of issued materials ₹ 18,256 Closing stock ₹ 19,558]

2. You are presented with the following information by Sphix Engineering Co. relating to the first week of September, 2015.

Materials—The transactions in connection with the materials are as follows:

<i>Days</i>	<i>Receipts</i>		<i>Rate per unit (₹)</i>	<i>Issues</i>	
	<i>Units</i>			<i>Units</i>	
1st	40		15.00		
2nd	20		16.50		
3rd				30	
4th	50		14.30		
5th				20	
6th				40	

Calculate the cost of materials issued under FIFO method and Weighted Average Method of issue of materials.

[**Ans.**

	<i>Cost of materials issued</i>		<i>Units</i>	<i>Stock</i>	
	<i>Units</i>	<i>Amt ₹</i>	<i>₹</i>	<i>Amt.</i>	
FIFO		90	1359	20	
286					
Weighted Average	90	1350	20	295]	

3. Show the stores ledger entries as they would appear when using
- the weighted average method
 - the LIFO method of pricing issues, in connection with the following transactions:
4. On January 1, Mr. G started a small business buying and selling a special yarn. He invested his savings of ₹ 4,00,000 in the business and during the next six months, the following transactions occurred:

April		Unit	Value
1.	Balance in hand	300	600
2.	Purchased	200	440
4.	Issued	150	
6.	Purchased	200	460
11.	Issued	150	
19.	Issued	200	
20.	Purchased	200	480
27.	Issued	250	

Date of receiptQuantity		Yarn Purchase				Yarn Sales	
		Total cost boxes	Date of despatch (₹)			Quantity boxes	Total value (₹)
January	13	200	7,200	February	10	500	25,000
February	8	400	15,200	April	20	600	27,000
March	11	600	24,000	June	25	400	15,200
April	12	400	14,000				
June	15	500	14,000				

The yarn is stored in premises Mr. G. has rented and the closing stock of yarn counted on 30th June was 500 boxes. Other expenses incurred and paid in cash during the six months period amounted of ₹ 2300.

Required:

- Calculate the value of the material issues during the six month period and the value of closing stock at the end of June, using the following methods of pricing:
 - FIFO
 - LIFO, and
 - Weighted average
- Calculate and discuss the effect each of the three methods of material pricing will have on the reported profit of the business, and examine the performance of the business during the first six month period.

[Ans.	Closing stock	Cost of sales	Profit
FIFO	₹ 14,000	₹ 19,600	4,500
FIFO	₹ 19,600	₹ 54,800	10,100
Weighted Average	₹ 16,486	₹ 57,914	6,986]

5. You are the Chief Accountant of a sugar factory, whose cost of production per tonne of sugar is given below:

	30-6-2015 (₹)	30-6-2016 (₹)
Sugarcane cost	1,700	1,900
Sugarcane transport and supervision	50	55
Other process chemicals	45	50
Fuel	15	16
Salaries, wages and bonus	60	75
Repairs, renewals and maintenance	125	135
Packing materials and expenses	75	85
Interest	250	150
Selling overheads	20	20
Administration overheads	85	95
Depreciation	300	300
Total Cost	2,725	2,881
Free market sale price	2,800	4,800
Controlled market sale price	2,600	2,600
Export price	1,650	5,400

Salaries, wage and bonus include administration salaries ₹ 20.

You have been valuing the closing stock of sugar consistently at cost or market price whichever is lower. For the purpose of arriving at cost, you have been taking the total cost as given above.

The auditor objects to the method of arriving at cost adopted in view of Accounting Standard No. 2 on valuation of inventory and he wants to exclude the depreciation, interest, administration and selling overheads.

Keeping the stipulations of the accounting Standard-2 in view, give your opinion on:

- (a) What shall be the cost for the purpose of valuation of stock in both the above years?
- (b) In view of the accumulation of heavy stock, the directors want to be consistent with the method of valuation of stocks as in the past in order to present a reasonable financial position. Will you be able to convince the auditors that the method of arriving at total cost is the correct method and, if yes, how?
- (c) If the author's opinion is adopted, what shall be the nature of disclosure in the published accounts, if any?
- (d) What shall be the basis for valuing stock in each of the above years?

Note:

Local sales price include excise duty of ₹ 500 per tonne.

[Ans.]

- (a) Total cost year 2015, ₹ 2,350
Year 2016, ₹ 2,596
- (b) Depreciation of factory assets is a part of factory overhead and must be included in product costs. Auditor's opinion to exclude it is not reasonable.
- (c) Auditor's opinion amounts to change in accounting policy and as per AS-2, it should be disclosed.
- (d) Lower of cost and minimum of realisable values.
year 2015 ₹ 1,650
year 2016 ₹ 2,100]



Accounting and Reporting of Intangibles

Intangible Assets — Meaning

Merriam Webster's International Dictionary defines *intangible* as "incapable of being defined or determined with certainty or precision."

According to Lev: Assets are claims to future benefits, such as the rents generated by commercial property, interest payments derived from a bond, and cash flows from a production facility. An intangible asset is a claim to future benefits that does not have a physical or financial (a stock or a bond) embodiment. A patent, a brand, and a unique organizational structure (for example, an Internet-based supply chain) that generate cost savings are intangible assets.¹

There are three terms *intangibles*, *knowledge assets*, and *intellectual capital* which are used interchangeably. All three are widely used—*intangibles* in the accounting literature, *knowledge assets* by economists, and *intellectual capital* in the management and legal literature—but they refer essentially to the same thing: a nonphysical claim to future benefits. When the claim is legally secured (protected), such as in the case of patents, trademarks, or copyrights, the asset is generally referred to as *intellectual property*.

Lev² further explains: Finally, it should be noted that the demarcation lines between intangible assets and other forms of capital are often blurry. Intangibles are frequently embedded in physical assets (for example, the technology and knowledge contained in an airplane) and in labor (the tacit knowledge of employees), leading to considerable interaction between tangible and intangible assets in the creation of value. These interactions pose serious challenges to the measurement and valuation of intangibles. When such interactions are intense, the valuation of intangibles on a stand-alone basis becomes impossible.

To summarize: intangible assets are nonphysical sources of value (claims to future benefits) generated by innovation (discovery), unique organizational designs, or human resource practices. Intangibles often interact with tangible and financial assets to create corporate value and economic growth."

According to IAS 38, Intangible Assets

"*Intangible assets* are defined as nonmonetary assets without physical substance held for use in production or supply of goods or services, for rental to others, or for administrative purposes and that are identifiable, that are controlled by an enterprise as a result of past events, and from which future economic benefits are expected to flow to the enterprise. The

definition of intangible assets requires that the asset be identifiable in order to distinguish it from goodwill.

Goodwill represents future economic benefits from synergy between identifiable assets or from intangible assets that do not meet the criteria for recognition as an intangible asset.

Examples of intangible assets are brand names, copyrights, covenants not to compete, franchises, future interests, licenses, operating rights, patents, record masters, secret processes, trademarks, and trade names. If identified, assets that result from activities such as advertising and R&D are identifiable intangible assets as long as knowledge or other intangible aspects about the assets are the primary outcome and not any physical element of those assets. Intangible assets have value because they, like tangible assets, are expected to produce future that, benefits for the entity. This means in principle, the same accounting treatment should be applied to both types of assets.

Closely related to intangible assets are deferred charges (to revenue). Deferred charges are expenditures not recognized as costs of the period in which they are incurred, but carried forward as assets to be written off in future periods to match future revenue. Examples that are categorized as long-term assets, because they will be amortized over more than one year, are advertising and promotion costs, R&D costs, organization costs, start up costs, and legal costs. The distinction between intangibles and deferred charges is at best vague. In fact, deferred charges can, be considered a type of intangible assets. Some, including the IASB, are reluctant to recognize deferred charges as assets.

Intangible assets are assets lacking physical substance. Under IFRS, identifiable intangible assets must meet three definitional criteria. They must be (1) identifiable (either capable of being separated from the entity or arising from contractual or legal rights), (2) under the control of the company, and (3) expected to generate future economic benefits. In addition, two recognition criteria must be met: (1) It is probable that the expected future economic benefits of the asset will flow to the company, and (2) the cost of the asset can be reliably measured. Goodwill, which is not considered an identifiable intangible asset, arises when one company purchases another and the acquisition price exceeds the fair value of the identifiable assets (both the tangible assets and the identifiable intangible assets) acquired.

Financial analysts have traditionally viewed the values assigned to intangible assets, particularly goodwill, with caution. Consequently, in assessing financial statements, analysts often exclude the book value assigned to intangibles, reducing net

equity by an equal amount and increasing pretax income by any amortisation expense or impairment associated with the intangibles. An arbitrary assignment of zero value to intangibles is not advisable; instead, an analyst should examine each listed intangible and assess whether an adjustment should be made. Note disclosures about intangible assets may provide useful information to the analyst. These disclosures include information about useful lives, amortisation rates and methods, and impairment losses recognised or reversed.

ACCOUNTING FOR INTANGIBLE ASSETS

Accounting for an intangible asset depends on how it is acquired. The following sections describe accounting for intangible assets obtained in three ways:

1. Intangible Assets Developed Internally.
2. Intangible Assets Acquired in a Business Combination.
3. Intangible Assets Purchased in Situations Other Than Business Combinations.

1. Intangible Assets Developed Internally

In contrast with the treatment of construction costs of tangible assets, the costs to internally develop intangible assets are generally expensed when incurred. There are some situations, however, in which the costs incurred to internally develop an intangible asset are capitalised. The general analytical issues related to the capitalizing-versus-expensing decision apply here — namely, comparability across companies and the effect on an individual company's trend analysis.

The general requirement that costs to internally develop intangible assets be expensed should be compared with capitalising the cost of acquiring intangible assets in situations other than business combinations. Because costs associated with internally developing intangible assets are usually expensed, a company that has internally developed such intangible assets as patents, copyrights, or brands through expenditures on R&D or advertising will recognise a lower amount of assets than a company that has obtained intangible assets through external purchase. In addition, on the statement of cash flows, costs of internally developing intangible assets are classified as operating cash outflows whereas costs of acquiring intangible assets are classified as investing cash outflows. Differences in strategy (developing versus acquiring intangible assets) can thus impact financial ratios.

IFRS require that expenditures on research (or during the research phase of an internal project) be expensed rather than capitalised as an intangible asset. Research is defined as “original and planned investigation undertaken with the prospect of gaining new scientific or technical knowledge and understanding. The “research phase of an internal project” refers to the period during which a company cannot demonstrate that an intangible asset is being created, for example, the search for alternative materials or systems to use in a production process. IFRS allow companies to recognise an intangible asset arising from development (or the development phase of an internal project) if

certain criteria are met, including a demonstration of the technical feasibility of completing the intangible asset and the intent to use or sell the asset. Development is defined as “the application of research findings or other knowledge to a plan or design for the production of new or substantially improved materials, devices, products, processes, systems or services before the start of commercial production or use.”

Generally, U.S. GAAP require that both research and development cost be expensed as incurred but require capitalisation of certain costs relate to software development. Costs incurred to develop a software product for sale are expensed until the product's technological feasibility is established and are capitalised thereafter. Similarly, companies expense costs related to the development of software for internal use until it is probable that the project will be completed and that the software will be used as intended. Thereafter, development costs are capitalised. The probability that the project will be completed is easier to demonstrate than is technological feasibility. The capitalised costs, related directly to developing software for sale or internal use, include the costs of employees who help build and test the software. The treatment of software development costs under U.S. GAAP is similar to the treatment of all costs of internally developed intangible assets under IFRS.

Lev and Zarowin³ want to extend capitalization for intangible costs in a fashion similar to software capitalization costs when they reach the point of technological feasibility as discussed in SFAS No. 86.

“Given the uncertainty concerns, it makes sense to recognize intangible investments as assets when the uncertainty of benefits is considerably resolved. . . . Accordingly, a reasonable balance between relevance and reliability of information would suggest the capitalization of intangible investment when the project successfully passes a significant technological feasibility test, such as a working model for software or a clinical test for a drug.”

Lev and Zarowin also point out that the clash between relevance and reliability, which has been resolved by immediate write-off, also involves a conflict with the definition of assets in SFAC No. 6.

In arguing their proposal, they state that capitalization at the point of technological feasibility provides relevant information for helping to predict future earnings. And they go even further by restating current and previous income statements for understatements of income in periods when costs were written off and for overstatements of income in subsequent periods.

Lev and Zarowin attach a great deal of importance to restating past financial statements. Correction of the past helps to put the present into a more constructive perspective. Past statements are presently changed on a pro forma basis for changes in accounting principle and are formally restated for material errors.

Though Lev and Zarowin do not discuss particulars, changes to the current income statement are viable candidates to go through comprehensive income. Their proposal deserves to be very seriously considered by accountants in general and the FASB in particular.

Expensing rather than capitalising development costs results in lower net income in the current period. Expensing rather than capitalising will continue to result in lower net income so long as the amount of the current-period development expenses is higher than the amortisation expense that would have resulted from amortising prior periods' capitalised development costs — the typical situation when a company's development costs are increasing. On the statement of cash flows, expensing rather than capitalising development costs results in lower net operating cash flows and higher net investing cash flows. This is because the development costs are reflected as operating cash outflows rather than investing cash outflows.

2. Intangible Assets Acquired in a Business Combination

When one company acquires another company, the transaction is accounted for using the acquisition method of accounting. Under the acquisition method, the company identified as the acquirer allocates the purchase price to each asset acquired (and each liability assumed) on the basis of its fair value. If the purchase price exceeds the sum of the amounts that can be allocated to individual identifiable assets and liabilities, the excess is recorded as goodwill. Goodwill cannot be identified separately from the business as a whole.

Under IFRS, the acquired individual assets include identifiable intangible assets that meet the definitional and recognition criteria. Otherwise, if the item is acquired in a business combination and cannot be recognised as a tangible or identifiable intangible asset, it is recognised as goodwill. Under U.S. GAAP, there are two criteria to judge whether an intangible asset acquired in a business combination should be recognised separately from goodwill: The asset must be either an item arising from contractual or legal rights or an item that can be separated from the acquired company. Examples of intangible assets treated separately from goodwill include the intangible assets previously mentioned that involve exclusive rights (patents, copyrights, franchises, licenses), as well as such items as Internet domain names and video and audiovisual materials.

3. Intangible Assets Purchased in Situations Other than Business Combinations

Intangible assets purchased in situations other than business combinations, such as buying a patent, are treated at acquisition the same as long-lived tangible assets; they are recorded at their fair value when acquired, which is assumed to be equivalent to the purchase price. If several intangible assets are acquired as part of a group, the purchase price is allocated to each asset on the basis of its fair value.

In deciding how to treat individual intangible assets for analytical purposes, analysts are particularly aware that companies must use a substantial amount of judgment and numerous assumptions to determine the fair value of individual intangible assets. For analysis, therefore, understanding the types of intangible assets acquired can often be more useful than focusing on the values assigned to the individual assets. In other words, an analyst would typically be more interested in understanding

what assets a company acquired (for example, franchise rights and a mailing list) than in the precise portion of the purchase price a company allocated to each asset. Understanding the types of assets a company acquires can offer insights into the company's strategic direction and future operating potential.

AS 26 : INTANGIBLE ASSETS

AS 26, came into effect in respect of expenditure incurred on intangible items during accounting periods commenced on or after 1-4-2003 and is mandatory in nature from that date for the following:

- (i) Enterprises whose equity or debt securities are listed on a recognised stock exchange in India, and enterprises that are in the process of issuing equity or debt securities that will be listed on a recognised stock exchange in India as evidenced by the board of directors' resolution in this regard.
- (ii) All other commercial, industrial and business reporting enterprises, whose turnover for the accounting period exceeds ₹ 50 crores.

In respect of all other enterprises, the Accounting Standard comes into effect in respect of expenditure incurred on intangible items during accounting periods commencing on or after 1-4-2004 and is mandatory in nature from that date. From the date of this Standard becoming mandatory for the concerned enterprises, AS 8; AS 6 & AS 10 stand withdrawn for the aspects relating to Intangible Assets.

The following are the main provisions of AS 26.

1. Scope

This standard should be applied by all enterprises in accounting intangible assets, except:

- (a) intangible assets that are covered by another AS,
- (b) financial assets,
- (c) rights and expenditure on the exploration for or development of minerals, oil, natural gas and similar non-regenerative resources,
- (d) intangible assets arising in insurance enterprise from contracts with policyholders,
- (e) expenditure in respect of termination benefits.

2. Intangible Assets

An intangible asset is an identifiable non-monetary asset, without physical substance, held for use in the production or supply of goods or services, for rental to others, or for administrative purposes.

The key components of the definition are:

- Identifiability; and
- Asset (the definition of which encompasses control)

Identifiability

The definition of an intangible asset requires that an intangible asset be identifiable. To be identifiable, it is necessary that the intangible asset is clearly distinguished from goodwill. An intangible asset can be clearly distinguished from goodwill if the asset is separable.

Control

An enterprise controls an asset if the enterprise has the power to obtain the future economic benefits flowing from the underlying resource and also can restrict the access of others to those benefits. The capacity of an enterprise to control the future economic benefits from an intangible asset would normally stem from legal rights that are enforceable in a court of law. However, legal enforceability of a right is not a necessary condition for control since an enterprise may be able to control the future economic benefits in some other way.

3. Future Economic Benefits

The future economic benefits flowing from an intangible asset may include revenue from the sale of products or services, cost savings, or other benefits resulting from the use of the asset by the enterprise.

4. Recognition and Initial Measurement of an Intangible Asset

The recognition of an item as an intangible asset requires an enterprise to demonstrate that the item meets the definition of an intangible asset and recognition criteria set out as below:

- (a) It is probable that the future economic benefits that are attributable to the asset will flow to the enterprise. An enterprise uses judgement to assess the degree of certainty attached to the flow of future economic benefits that are attributable to the use of the asset on the basis of the evidence available at the time of initial recognition, giving greater weight to external evidence and
- (b) The cost of the asset can be measured reliably.

These recognition criteria apply to both costs incurred to acquire an intangible asset and those incurred to generate an asset internally. However, the standard also imposes certain additional criteria for the recognition of internally generated intangible assets.

An intangible asset should be measured initially at cost.

5. Separate Acquisition

If an intangible asset is acquired separately, the cost of the intangible asset can usually be measured reliably. This is particularly so when the purchase consideration is in the form of cash or other monetary assets.

6. Acquisition as Part of an Amalgamation

An intangible asset acquired in an amalgamation in the nature of purchase is accounted for in accordance with AS 14. In accordance with this Standard:

- (a) A transferee recognises an intangible asset that meets the recognition criteria, even if that intangible asset had not been recognised in the financial statements of the transferor and
- (b) If the cost (*i.e.*, fair value) of an intangible asset acquired as part of an amalgamation in the nature of purchase cannot be measured reliably, that asset is not recognised as a separate intangible asset but is included in goodwill.

7. Acquisition by way of a Government Grant

In some cases, an intangible asset may be acquired free of charge, or for nominal consideration, by way of a government grant.

This may occur when a government transfers or allocates to an enterprise intangible assets such as airport landing rights, licences to operate radio or television stations, import licences or quotas or rights to access other restricted resources.

8. Internally Generated Intangible Assets

To assess whether an internally generated intangible asset meets the criteria for recognition, an enterprise classifies the generation of the asset into Research Phase & Development Phase. If an enterprise cannot distinguish the research phase from the development phase of an internal project to create an intangible asset, the enterprise treats the expenditure on that project as if it were incurred in the research phase only.

Internally generated goodwill is not recognized as an asset because it is not an identifiable resource controlled by the enterprise that can be measured reliably at cost.

9. Cost of an Internally Generated Intangible Asset

The cost of an internally generated intangible asset comprises all expenditure that can be directly attributed, or allocated on a reasonable and consistent basis, to creating, producing and making the asset ready for its intended use from the time when the intangible asset first meets the recognition criteria. The cost includes, if applicable.

- (a) Expenditure on materials and services used or consumed in generating the intangible asset.
- (b) The salaries, wages and other employment related costs of personnel directly engaged in generating the asset.
- (c) Any expenditure that is directly attributable to generating the asset, such as fees to register a legal right and the amortisation of patents and licences that are used to generate the asset and
- (d) Overheads that are necessary to generate the asset and that can be allocated on a reasonable and consistent basis to the asset.

The following are not components of the cost of an internally generated intangible asset:

- (a) Selling, administrative and other general overhead expenditure unless this expenditure can be directly attributed to making the asset ready for use.
- (b) Clearly identified inefficiencies and initial operating losses incurred before an asset achieves planned performance and
- (c) Expenditure on training the staff to operate the asset.

10. Items to be Recognised as an Expense

Expenditure on an intangible item should be recognised as an expense when it is incurred unless:

- (a) It forms part of the cost of an intangible asset that meets the recognition criteria or
- (b) The item is acquired in an amalgamation in the nature of purchase and cannot be recognised as an intangible asset. It forms part of the amount attributed to goodwill (capital reserve) at the date of acquisition.

AS 26 states that the following types of expenditure should always be recognised as an expense when it is incurred:

- Research;
- Start-up activities (start-up costs), unless the expenditure qualifies to be included in the cost of a tangible fixed asset. Start-up costs include;
- Preliminary expenses incurred in establishment of a legal entity; such as legal and secretarial costs;
- Expenditure to open a new facility or business (*i.e.*, pre-opening costs); and
- Expenditure prior to starting new operations or launching new products or processes (*i.e.*, pre-operating costs);
- Training activities;
- Advertising and promotional activities; and
- Relocating or re-organising part or all of an enterprise.

It does not apply to payments for the delivery of goods or services made in advance of the delivery of goods or the rendering of services. Such prepayments are recognised as assets.

Expenses recognized as expenses cannot be reclassified as cost of Intangible Asset in later years.

11. Subsequent Expenditure

Subsequent expenditure on an intangible asset after its purchase or its completion should be recognised as an expense when it is incurred unless:

- (a) It is probable that the expenditure will enable the asset to generate future economic benefits in excess of its originally assessed standard of performance and
- (b) The expenditure can be measured and attributed to the asset reliably.

If these conditions are met, the subsequent expenditure should be added to the cost of the intangible asset.

12. Amortisation Period

The depreciable amount of an intangible asset should be allocated on a systematic basis over the best estimate of its useful life. Amortisation should commence when the asset is available for use. Estimates of the useful life of an intangible asset generally become less reliable as the length of the useful life increases. This Statement adopts a presumption that the useful life of intangible assets is unlikely to exceed ten years.

In some cases, there may be persuasive evidence that the useful life of an intangible asset will be a specific period longer than ten years. In these cases, the presumption that the useful life generally does not exceed ten years is rebutted and the enterprise:

- (a) Amortises the intangible asset over the best estimate of its useful life.
- (b) Estimates the recoverable amount of the intangible asset at least annually in order to identify any impairment loss and
- (c) Discloses the reasons why the presumption is rebutted and the factor(s) that played a significant role in determining the useful life of the asset.

13. Amortisation Method

A variety of amortisation methods can be used to allocate the depreciable amount of an asset on a systematic basis over its useful life. These methods include the straight line method, the diminishing balance method and the unit of production method. The method used for an asset is selected based on the expected pattern of consumption of economic benefits and is consistently applied from period to period, unless there is a change in the expected pattern of consumption of economic benefits to be derived from that asset.

The amortisation charge for each period should be recognised as an expense unless another Accounting Standard permits or requires it to be included in the carrying amount of another asset.

14. Residual Value

The residual value of an intangible asset should be assumed to be zero unless:

- (a) There is a commitment by a third party to purchase the asset at the end of its useful life or
- (b) There is an active market for the asset and:
 - (i) Residual value can be determined by reference to that market and
 - (ii) It is probable that such a market will exist at the end of the asset's useful life.

15. Recoverability of the Carrying-Amount Impairment Losses

Impairment losses of intangible assets are calculated on the basis of AS 28. If an impairment loss occurs before the end of the first annual accounting period commencing after acquisition for

an intangible asset acquired in an amalgamation in the nature of purchase, the impairment loss is recognised as an adjustment to both the amount assigned to the intangible asset and the goodwill (capital reserve) recognised at the date of the amalgamation. However, if the impairment loss relates to specific events or changes in circumstances occurring after the date of acquisition, the impairment loss is recognised under AS 28 and not as an adjustment to the amount assigned to the goodwill (capital reserve) recognised at the date of acquisition. In addition to the requirements of AS 28, an enterprise should estimate the recoverable amount of the following intangible assets at least at each financial year end even if there is no indication that the asset is impaired:

- (a) An intangible asset that is not yet available for use and
- (b) An intangible asset that is amortised over a period exceeding ten years from the date when the asset is available for use.

The recoverable amount should be determined under AS 28 and impairment losses recognised accordingly.

16. Retirements and Disposals

An intangible asset should be derecognised (eliminated from the balance sheet) on disposal or when no future economic benefits are expected from its use and subsequent disposal.

Gains or losses arising from the retirement or disposal of an intangible asset should be determined as the difference between the net disposal proceeds and the carrying amount of the asset and should be recognised as income or expense in the statement of profit and loss.

17. Disclosure

The financial statements should disclose the following for each class of intangible assets, distinguishing between internally generated intangible assets and other intangible assets:

- (a) The useful lives or the amortisation rates used.
- (b) The amortisation methods used.
- (c) The gross carrying amount and the accumulated amortisation (aggregated with accumulated impairment losses) at the beginning and end of the period.
- (d) A reconciliation of the carrying amount at the beginning and end of the period showing:
 - (i) Additions, indicating separately those from internal development and through amalgamation.
 - (ii) Retirements and disposals.
 - (iii) Impairment losses recognised in the statement of profit and loss during the period.
 - (iv) Impairment losses reversed in the statement of profit and loss during the period.
 - (v) Amortisation recognised during the period and
 - (vi) Other changes in the carrying amount during the period.

The financial statements should also disclose:

- (a) If an intangible asset is amortised over more than ten years, the reasons why it is presumed that the useful life of an intangible asset will exceed ten years from the date when the asset is available for use. In giving these reasons, the enterprise should describe the factor(s) that played a significant role in determining the useful life of the asset.
- (b) A description, the carrying amount and remaining amortisation period of any individual intangible asset that is material to the financial statements of the enterprise as a whole.
- (c) The existence and carrying amounts of intangible assets whose title is restricted and the carrying amounts of intangible assets pledged as security for liabilities and
- (d) The amount of commitments for the acquisition of intangible assets.

The financial statements should disclose the aggregate amount of research and development expenditure recognised as an expense during the period.

Illustrative Problem 1

D Ltd. is developing a new distribution system of its material, following the costs incurred at different stages on research and development of the system:

Year ended March	Phase/Expenses	Amount (₹ In lakhs)
2012	Research	8
2013	Research	10
2014	Development	30
2015	Development	36
2016	Development	50

On 31.3.12, D Ltd. identified the level of cost savings at ₹ 16 lakhs expected to be achieved by the new system over a period of 5 years, in addition this system developed can be marketed by way of consultancy which will earn cash flow of ₹ 10 lakhs per annum. D Ltd. demonstrated that new system meet the criteria of asset recognition as on 1.4.2014.

Determine the amount/cash which will be expensed and to be capitalized as intangible assets, presuming that no active market exist to determine the selling price of product, *i.e.*, system developed. System shall be available for use from 1.4.2012.

Solution

As per AS 26, research cost of ₹ 18 lakhs to be treated as an expense in respective year ended 31st March 2012 and 2013 respectively.

The development expenses can be capitalized from the date the internally generated assets (new distribution system in this given case) meet the recognition criteria on and from 1.4.2012. Therefore, cost of ₹ 30 + 36 + 50 = ₹ 116 lakhs is to be capitalized as an intangible asset.

However, as per para 62 of AS 26, the intangible asset should be carried at cost less accumulated amortization and accumulated impairment losses.

At the end of 31st March, 2016, D Ltd. should recognize impairment loss of ₹ 22.322 lakhs = (116 – 93.678) and carry the new distribution system at ₹ 93.678 lakhs in the Balance Sheet as per the calculation given below:

Impairment loss is excess of carrying amount of asset over recoverable amount. Recoverable amount is higher of two, i.e., value in use (discounted future cash inflow) and market realizable value of asset.

The calculation of discounted future cash flow is as under assuming 12% discount rate.

(₹ Lakhs)

Year	Cost Savings	Inflow by introducing the system	Total cash inflow	Discounted at 12%	Discounted cash flow
2017	16	10	26	0.893	23.218
2018	16	10	26	0.797	20.722
2019	16	10	26	0.711	18.486
2020	16	10	26	0.635	16.51
2021	16	10	26	0.567	14.742
					93.678

No amortization of asset shall be done in 2012 as amortization starts after use of asset which is during the year 2016-17.

Problem 2

M.S. International Ltd. is developing a new production process. During the financial year ending 31st March, 2015, the total expenditure incurred was ₹ 50 lakhs. This process met the criteria for recognition as an intangible asset on 1st December, 2014. Expenditure incurred till this date was ₹ 22 lakhs. Further expenditure incurred on the process for the financial year ending 31st March, 2016 was ₹ 80 lakhs. As at 31st March, 2016, the recoverable amount of know how embodied in the process is estimated to be ₹ 72 lakhs. This includes estimates of future cash outflows as well as inflows.

You are required to calculate:

(i) Amount to be charged to Profit and Loss A/c for the year ending 31st March, 2015 and carrying value of intangible as on that date.

(ii) Amount to be charged to Profit and Loss A/c and carrying value of intangible as on 31st March, 2016. Ignore depreciation.

Solution

As per AS 26 'Intangible Assets'

(i) For the year ending 31.03.2015

(a) Carrying value of intangible as on 31.03.2015:

At the end of financial year 31st March 2015, the production process will be recognized (i.e., carrying amount) as an intangible asset at a cost of ₹ 28 lakhs (expenditure incurred since the date the recognition criteria were met, i.e., on 1st December 2014).

(b) Expenditure to be charged to Profit and Loss account
The ₹ 22 lakhs is recognized as an expense because the recognition criteria were not met until 1st December 2015. This expenditure will not form part of the cost of the production process recognized in the balance sheet.

(ii) For the year ending 31.03.2016

(a) Expenditure to be charged to Profit and Loss account:

(₹ in lakhs)

Carrying Amount as on 31.03.2015	28
Expenditure during 2015-2016	80
Total book cost	108
Recoverable Amount	72
Impairment loss	36

₹ 36 lakhs to be charged to Profit and loss account for the year ending 31.03.2016.

(b) Carrying value of intangible as on 31.03.2016:

(₹ in lakhs)

Total Book Cost	108
Less: Impairment loss	36
Carrying amount as on 31.03.2016	72

REFERENCES

1. Baruch Lev, *Intangibles: Management, Measurement and Reporting*, Brookings Institution Press, Washington D.C., 2001, p. 5.
2. Baruch Lev, *Ibid*, p. 7.
3. Baruch Lev and P. Zarowin, "The Boundaries of Financial Reporting and How to Extend Them," *Journal of Accounting Research* (Autumn 1999), pp. 353-385.

QUESTIONS

1. Define intangible assets.
2. What is the importance of intangible assets in evaluating financial statements of a business firm?
3. How are intangible assets accounted by a business firm?

4. Explain the following:
 - (i) Intangible assets purchased.
 - (ii) Intangible assets developed internally.
 - (iii) Intangible assets acquired in business combinations.
5. Compare IFRS and US GAAP regarding accounting of intangible assets.
6. What is the scope of AS 26 Intangible assets?
7. Define intangible assets as per AS 26.
8. How are intangible assets identified?
9. What are the guidelines in AS 26 for recognition and measurement of intangible assets?
10. Explain the provisions in AS 26 for intangible assets acquired through separate acquisition.
11. Explain the provisions of AS 26 for acquiring intangible assets through business combinations.
12. Explain internally generated intangible assets.
13. Discuss research phase and development phase of an internal project.
14. What are the rules regarding recognition of an expense on intangible assets?
15. Explain the provisions of AS 26 for revaluation of intangible assets.
16. Discuss disclosure provisions as per AS 26 for intangible assets.
17. How are website costs dealt with in AS 26?



PART – THREE

Accounting Standards

- Chapter 11: Accounting Standards Setting
- Chapter 12: Global Convergence and International Financial Reporting Standards (IFRSs)

Accounting Standards Setting

The use of the word 'Standard' in accounting literature is of a recent origin. What is described as 'standard' today, used to be generally known as 'principles'; a few years ago. The British introduced the term 'standards' in place of 'principles' when they set up their Accounting Standards Steering Committee at the end of 1969, and the Americans adopted the same term ('standard') in 1973, when the Accounting Principles Board was wound up and the Financial Accounting Standards Board was created. In India, this term has mainly become popular since the formation of Accounting Standards Board (ASB) in April 1977 by the Institute of Chartered Accountants of India.

The change from 'principles' to 'standards' is not without significance; it is a wise one. A name can do much to colour one's thinking about the thing named. In this case, the change of nomenclature has had an impact on events in accounting¹. The Wheat Committee in USA, which recommended the transition from the Accounting Principles Board to the Financial Accounting Standards Board, found the word 'standards' more suitable. The Wheat Committee comments:

“‘Accounting principles’ has proven to be an extraordinary elusive term. To the non-accountant (as well as to many accountants) it connotes things basic and fundamental, of a sort which can be expressed in few words, relatively timeliness in nature, and in no way dependent upon changing fashions in business or the evolving needs of the investment community...In the Study's judgment, the word 'standards' is more descriptive of the majority of the Board's (APB) pronouncements as well as the great bulk of its ongoing efforts.”²

DEFINING THE TERM 'STANDARD'

The term 'Accounting Standard' may be defined as written statements issued from time to time by institutions of the accounting profession or institutions in which it has sufficient involvement and which are established expressly for this purpose. Such accounting institutions/bodies are currently found in many countries of the world, *e.g.*, Accounting Standards Board (India), Financial Accounting Standards Board (USA), Accounting Standards Board (UK), Accounting Standards Committee (Canada), etc. At the international level, International Accounting Standards Board (IASB) has been created “to formulate and publish, in the public interest, basic standards to be observed in the presentation of audited accounts and financial statements and to promote their worldwide acceptance and observance.” Littleton³ defines 'standard' as follows:

“A standard is an agreed upon criteria of what is proper practice in a given situation; a basis for comparison and

judgment; a point of departure when variation is justifiable by the circumstances and reported as such. Standards are not designed to confine practice within rigid limits but rather to serve as guideposts to truth, honesty and fair dealing. They are not accidental but intentional in origin; they are expected to be expressive of the deliberately chosen policies of the highest types of businessmen and the most experienced accountants; they direct a high but attainable level of performance, without precluding justifiable departures and variations in the procedures employed.”

Bromwich⁴ observes:

“Accounting standards (are) uniform rules for financial reporting applicable either to all or to a certain class of entity promulgated by what is perceived of as predominantly an element of the accounting community specially created for this purpose. Standard setters can be seen as seeking to prescribe a preferred accounting treatment from the available set of methods for treating one or more accounting problems. Other policy statements by the profession will be referred to as recommendations.”

Accounting standards deal mainly with financial measurements and disclosures used in producing a set of fairly presented financial statements. In this respect, accounting standards can be thought of as a system of measurement and disclosure. They also draw the boundaries within which acceptable conduct lies and in that and many other respects, they are similar in nature to laws. Accounting standards can thus be seen as a technical response to calls for better financial accounting and reporting; or as a reflection of a society's changing expectations of corporate behaviour and a vehicle in social and political monitoring and control of the enterprise.⁵ Thus, Accounting Standards (ASs) are written policy documents issued by expert accounting body or by government or other regulatory body covering the aspects of recognition, measurement, treatment, presentation and disclosure of accounting transactions in the financial statements.

Accounting standards, however, do not aim to put accounting in a straightjacket. Rather, they attempt to limit the theoretically possible flexibility and to give practitioners realistic working guidelines. If the individual circumstances of a particular business firm are such that an existing standard is not suitable, then alternative practices, regarded as more suitable, can be adopted. It is, therefore, possible to achieve both uniformity and flexibility in accounting practice. These two apparent opposites, *i.e.*, uniformity and flexibility are not incompatible. It is also important to recognise that if standards are not acceptable, if they are not enforceable, and if they are not enforced, then they are not

standards in any meaningful sense of the word. The process of enforcement is essential because if standards are not made compulsory they lose their utility and cease to be standards. In case, standards do not enjoy mandatory supports, members of the accounting profession are expected when acting as auditors or professional accountants, to observe accounting standards or to seek observance of standards by business enterprises.

BENEFITS OF ACCOUNTING STANDARDS

Accounting standards have evolved out of the concern and criticism which the flexibility in accounting practice has created. At present, accounting standards are regarded a major component in the framework of accounting and reporting practices. Standards exist to help the accounting practitioners to apply those accounting practices regarded as the most suitable for the circumstances covered. Further, they help individual companies and their managements to justify whatever practices they adopt when producing their financial state meets. The benefits of establishing accounting standards manifest themselves in different ways, either because they are real effects of those standards because people perceive certain effects, or because they expect certain effects to follow and modify their behaviour accordingly. The benefits of accounting standards may be listed as follows:

- (1) *To Improve the Credibility and Reliability of Financial Statements* Financial statements of business enterprises are used by a diverse group of users for making sound economic decisions such as shareholders (existing and potential), suppliers (existing and potential), trade creditors, customers employees, taxation authorities, and other interested parties. It is necessary, therefore, that the financial statements, the users use and upon which they rely, present a fair picture of the position and progress of the enterprise. It is the function of accounting (and auditing) standards to create this general sense of confidence by providing a structural framework within which credible financial statements can be produced. Where various alternative methods of measuring an economic activity exists, it is important that the best available one be used uniformly within a firm, by different firms, and to the extent practicable, by different industries. This guideline is required in order to meet a basic need of managers, investors and creditors to compare results and financial conditions of different segments of firms, different periods of a firm, different firms, and different industries. The value of the information provided by each enterprise to its investors is greatly enhanced if it can be compared easily; with information from other enterprises. In the absence of standards, there would be no incentives to encourage an enterprise to conform to any particular model for the sake of comparability. Regulation, like rule of the road for drivers, is necessary to secure what everyone wants.⁶ Thus, the main aim of accounting standards is to protect users of financial

statements by providing them with information in which they can have confidence.

- (2) *Benefits to Accountants and Auditors* Accountants and auditors with the passage of time and a changing climate of opinion, have to work in an environment where they face the threat of stern sanctions and bad name to their professions. These result partly from changed penalties and remedies available under the company law and partly from the greater willingness of aggrieved parties and to take their causes before the courts. The risk to auditors of these developments are considerable, whether in terms of uncovered financial exposure to liability or adverse effects on professional reputation resulting from unfavourable publicity. Particularly dangerous are cases of undetected fraud, and of audited accounts, which are held to be misleading due to insufficient disclosure or use of inappropriate accounting principles. Given the increasing risks, the accounting profession realised that it needed to know what accounting standards are to prevail.

Though individual accountant and chartered accountancy firm are concerned with their own reputations, the other accountants' and firms' misconduct would prove costly since all accountants belong to a class in the eyes of public. While members of a chartered accountancy firm can discipline their fellow partners, it is difficult to monitor the performance of other chartered accountants. For this purpose, the establishment of standard to which all chartered or certified accountants subscribe is useful.⁷ Thus, accounting standards are beneficial not only to the business enterprises but also to the accountants and auditors as well.

- (3) *Determining Managerial Accountability* Accounting standards facilitate in determining specific corporate accountability and regulation of the company and thus help in measuring the effectiveness of management's stewardship. They help in assessing managerial skill in maintaining and improving the profitability of the company, they depict the progress of the company, its solvency and liquidity and generally they are important factors increasing the effectiveness of management's performance of its duties and of its leadership. Standards aim to ensure consistency and comparability in place of (imposed) uniformity in financial reporting to permit better comparisons in profitability, financial position, future prospects and other performance indicators associated with different business firms. Management's basic purpose should be to make a choice of the best method (standard) available. The guidelines of relevance and appropriateness to intended use may be so crucial in a given setting that a departure from uniformity of practice (with full disclosure) may be justified. On the other hand, uniformity should never be the justification for inappropriate information. An accounting standard

should significantly reduce the amount of manipulation of the reported accounting numbers that is likely to occur in the absence of the standard. If the standard is subject to manipulation, its effect is more likely to be dysfunctional, since the managers can hide their actual performance under the cloak of reporting according to externally determined accounting standards.⁸

- (4) *Reform in Accounting Theory and Practice* Financial accounting has lacked, especially in the past, a coherent logical conceptual framework and structure for accounting measurements, financial reporting objectives and substantiated evidence on accounting practice and usefulness of accounting data. This encouraged the emerging intelligent of accounting to develop accounting theories, to improve existing practices or to rectify their defects. In 1960s, there was an outbreak in the accounting literature concerned with the issues and arguments about basic concepts in accounting; accounting standard, rules and law; wider effects of accounting policy choices. The search for the golden boomerang of accounting has yielded achievements and resulted into a greater awareness of alternative possibilities for defining and measuring financial performance.⁹

According to Advisory Group on Accounting and Auditing (January 2001) setup by Reserve Bank of India: .

“Standards help to promote sound financial systems domestically, and financial stability internationally. They play an important role in strengthening financial regulation and supervision, enhancing transparency, facilitating institutional development and reducing vulnerabilities. Standards also facilitate informed decision making in lending and investment and improve market integrity and, thereby, minimise the risks of financial distress and contagion. Standards are not ends in themselves but a means for promoting sound financial fundamentals and sustained

economic growth. The adoption of standards in itself, however, is not sufficient to ensure financial stability. The implementation of standards must fit into a country’s overall strategy for economic and financial sector development taking into account the stage of development, level of institutional capacity and other domestic factors.”

The RBI Advisory Group further observes:

A need for accounting standards arises mainly due to the following factors:—

- First, the financial statements are prepared by drawing an artificial line of cut-off at the year-end, even though business continues as an ongoing concern and many transactions come to a logical end. In many transactions, one leg of a transaction may be completed, while the other leg of the same transaction may yet remain to take place. For instance, a question arises as to whether to value unsold goods at the end of the accounting period at cost or realised value and which cost formula to use, which alternative method to use for evaluating depreciated/amortised value of fixed assets, how to ascertain a number of assets/liabilities, claims and counterclaims and the correct treatment of uncertainties involved in evaluating a particular transaction. Therefore, the need arises for evolving appropriate accounting policies to deal with these questions.
- Secondly, given the fact that a number of accounting policies may emerge for dealing with the same situation, the need arises for accounting standards to narrow down the choice of accounting policies so that the financial statements are prepared in a common language which is clear understood and which makes the financial statements prepared by different entities reasonably comparable with one another.

Accounting Standards can be described as a vehicle whereby the wisdom and experience of the profession emerges as a consensus in a complex and changing economic and business

Kingfisher Airlines loses ₹ 755 cr in Q3

Loss Would Be Higher At ₹ 1090 Cr If Accepted A/C Standards Followed

Grounded Kingfisher Airlines (KFA) on Tuesday reported a loss of ₹ 755 crore in the October-December, 2012, period — the first quarter when it did not fly. The airline’s auditors, however, said in their report that the Q3 loss Would have been higher at ₹ 1,090 crore if treatment of items like loans taxes and aircraft costs followed “generally accepted accounting standards prevalent in India”. KFA had stopped flying on October 1 and its licence ex-pired on December 31. With no income from operations, its Q3 FY13 loss is 70% higher than the ₹ 444.3 crore lost in same quarter last fiscal.

The auditor pointed out that KFA, whose net worth is eroded, may have prepared its accounts on a going concern basis but that assumption will be dependent on getting the airline’s licence renewed by the Directorate General of Civil Aviation (DGCA); fund infusion and resuming normal operations.

KFA CMD admitted in his notes with the accounts that “the company has incurred substantial losses and its net worth has been eroded” but said, “the company is in constant dialogue with DGCA and is confident of meeting DGCA requirements for renewal of the permit and re-start of its operations at the earliest.” The airline’s share closed almost 2.4% lower on Tuesday at ₹ 12.24 on BSE.

The limited review report of the auditor, Bangalore-based B K Ramadhyani & CO, has disagreed with KFA’s recognition of deferred tax credit aggregating ₹ 362.7 crore. “In our opinion, the virtual certainty test for recognition of deferred tax credit... is not satisfied,” the report says.

However, CMD says, “The management is of the opinion that there is a virtual certainty supported by convincing evidence against which such deferred tax will be realized notwithstanding that the auditors have opined to the contrary”.

Similarly, the auditor says that KFA’s treatment of cost incurred on major repairs and maintenance of aircraft is not in accordance with GAAP. “Estimates of number of unflown tickets and their average value, based on which management has reportedly estimated the amount of unearned reve.nue, not being drawn from accounting records, could not be reviewed by us,” the review report said.

Figure 11.1: Corporate Insight

Source: The Times of India (Times Business), New Delhi, February 6, 2013.

situation in preference to the views of individual compilers of financial statements. Accounting as a “language of business” communicates the financial results and health of an enterprise to various interested parties by means of periodical financial statements. Like any other language, accounting should have its grammar (set of rules) and that is Accounting Standards.

MANAGEMENT AND STANDARDS SETTING

Corporate managements play a central role in the determination of accounting standards. Management is central to any discussion of financial reporting, whether at the statutory, or regulatory level or at the level of official pronouncements of accounting bodies. Managements influence the standard setting based on its own selfinterest. As long as financial accounting standards have potential effects on the firm’s future cash flows, standard setting by (accounting) bodies will be met by corporate lobbying. Watts and Zimmerman¹⁰ observe:

“Managers have greater incentive to choose accounting standards which report lower earnings (thereby increasing cash flows, firm value, and their welfare) due to tax, political and regulatory considerations than to choose accounting standards which report higher earnings and, thereby, increase their incentive compensation. However, this prediction is conditional upon the firm being regulated or subject to political pressure. In small (*i.e.*, low political costs) unregulated firms, we would expect that managers do have incentives to select accounting standards which report higher earnings, if the expected gain in incentive compensation is greater than the foregone expected tax consequences. Finally, we expect management also to consider the accounting standard’s impact on the firm’s bookkeeping costs (and hence their own welfare).”

Watts and Zimmerman’s (above) view of accounting standards need not to be applied for deciding good or bad accounting. The self-interest of management is all that counts, at least in determining the position of the preparers of financial statements. Self-interest apparently points in opposite directions for large and small companies, mainly because large companies are more susceptible to political interference and are therefore more sensitive about appearing to be too prosperous. However, Solomons does not agree with this view of Watts and Zimmerman and state that “the views that business advocate, which of course are not unanimous even within a single industry, cannot universally be explained by reference to their self-interest. And even if they could, there is nothing like a one-to-one relationship between the lobbying positions taken by any particular groups of firms and the standards that are eventually promulgated.”¹¹

Some persons argue that management should be given freedom and not be constrained by definitive sets of accounting measurement rules. This view does not appear to be correct and is not based on reality. Management should not be allowed to adopt any form of accounting it likes, for this type of freedom

could lead to significant doubts the quality of financial reporting and thereby reduce its credibility and potential usefulness. Given the freedom to managements, they may indulge in undesirable “creative accounting,” and tend to conceal the truth rather than to disclose. This does not mean that there is conflict between management and investors over the question of objectives and benefits associated with accounting standards. Anything that makes the goals of investors and the goals of management congruent with each other will diminish the danger that accounting (and other) issues will be decided to the detriment of one group and in favour of the other. The accounting profession’s efforts should be directed towards achieving consensus among the constituents, *e.g.*, investors and creditors, managers, auditors, government, the public at large, who may have different interests, different needs, and different point of view in standards setting. Without a consensus among the parties to accounting standards, there can be no effective enforcement. After studying the preferences (like and dislikes) of every constituent, the accounting profession should develop a measure of the overall “usefulness” of each preferred standard for all constituents and society. Ronen¹² observes:

“The arguments voiced for increasing the uniformity of accounting standards and reducing the flexibility of management in choosing among different accounting treatments could well be explained from an economic standpoint as means for reducing audit (monitoring) cost and for reducing the ambiguity of the resulting signal and the possible effect of such ambiguity on investors reaction. The larger the ambiguity of the signal resulting from an excessive flexibility on the part of management of choosing among accounting means of generating the signal, the lesser the reliability of the inference that can be made by investors on the basis of the signals received.”

STANDARD SETTING BY WHOM?

An important question with regard to standard setting is deciding whether standards should be set by government or a private sector body or a government backed agency. Before arriving at any conclusion, an analysis of different arguments has been presented here.

1. Government as Standard Setter

The following arguments are generally given for standard setting by the government:

- (1) A government would be free of conflicts of interest—more impartial and more responsive to all interests; it would not become a tool of business interests or of the accounting profession. Some argue that if the government were to assume this responsibility, business pressure groups would have less influence than they appear to have had over the conclusion of the private sector bodies. Also, government may not have to devote as many resources to obtaining consensus for proposed accounting reforms as do private sector standards

setting bodies. It is said that non-compliance and explicit criticisms by business enterprises create difficulties in the enforcement of standards. Governments who command a reasonable majority may promulgate those accounting reforms which they desire without major and costly consensus seeking activity.

- (2) A government can better enforce compliance with accounting standards in that it is backed by the enforcement power of law. The problem of the enforcement of accounting standards would be minimised. In promulgating accounting standards and regulations the legislator would provide whatever penalties they felt necessary for non-compliance. Accounting standards, as a practical matter, have a force of law and therefore, should be established by a government.
- (3) A government would act more quickly on pressing problems and would be more responsive to the public interest. Also, the government is better equipped to control the redistributive effects of accounting standards than private sector standard setter and can more easily ameliorate their impact on any sector of society if this is desired. Private sector standard setting bodies have but minimum control over such effects. The only other way in which private standard setters can take such effects into account is by altering the substance of proposed standards so as to vary their impact on those parts of society which it is wished to either aid or protect from adverse effects. Such activities may have a cost in terms of distorting accounting standards away from what otherwise would be thought to improve the efficiency of resources allocation. The government may be better able to meet legitimate arguments concerning the economic consequences of accounting regulations without altering what might otherwise be regarded as an accounting ideal.”¹³
- (4) Government could better bring to bear the variety of intellectual disciplines that should be, but have not been, brought to bear on accounting standards—economists, lawyers, investors, as well as accountants.
- (5) Public accountants may desire that accounting standards be enforced by government, for several reasons. One is the fear that competition among accountants may lead some to chance compromising their integrity. Another is the desire (common to most sellers of goods and services) to increase the demand for their products by legal requirements. A third is derived from the specialist’s belief that the laity would benefit from a higher quality product, but does not recognise the benefits therefrom because of ignorance; consequently a legal requirement should be imposed.

There are some problems associated with government being a standard setter. These difficulties are as follows:

- (1) Technical accounting issues may be decided on the basis of the views of the political party in power at any time. It has also been argued that the perceived political importance of accounting matters would not be sufficient to obtain scarce legislative time. Thus, the Legislature may be seen as generally rubber stamping the idea of interested civil servants and those who have influence on them and on politicians. That such regulation of accounting is better for society than private sector regulation may be doubted by many.
- (2) The process of accounting regulation by the government is lengthy and does not possess flexibility even where an item is judged of sufficient importance to obtain legislative time. The difficulty of getting items through the Legislature may discourage efforts to change established accounting standards and may lead to rigidity.
- (3) The standards and regulations set up by government may fall short of objectivity and accuracy. In fact, government is behaviour-oriented. Its basic business is to encourage or to force people to behave in certain ways. Accounting standards and regulations in a government environment would develop around two behavioural objectives, *viz.*, (i) rule of conduct approach and (ii) economic incentives approach.¹⁴ The objective of a rule of conduct approach would be to restrain unfair economic behaviour. The primary objective of standards setting from this view would be to limit the discretion of practitioners in order to minimise variations in reporting the earnings results of similar facts and circumstances. Standards reflecting this view would likely to emphasise uniformity of method and verifiability of results rather than accuracy of measurement. The objective of economic incentives approach would be to set standards that would motivate decision makers to act in ways that furthered government’s social and economic goals. It flows from a view that accuracy of earnings measurement is impossible, and an accounting theory built on a measurement objective impractical. It sees the bottom line reported earnings, as a strong motivator and assumes that decision makers would react to the reported data even if that data varied significantly from what most practitioners might think was a more accurate measure. In this view, earnings would not be a measured result of observed economic activity; it would be a calculated cause of economic action.

Accounting standards, in fact, should develop around a primary objective of measuring return on investment for particular organisations as accurately as possible. It should be developed as a measurement process, measurement of economic activity neutral as to behavioural consequences. It should be a tool for all economic decision makers—buyer and seller, lender and borrower, manager and shareholders, regulator and regulated, general interest and special interest, public sector and private sector. This

kind of accounting standard and policy, it is doubted, could develop in government.

2. Private Sector Standard Setting Body

Arguments have also been advanced for giving standard setting task to private sector body. These arguments may be listed as follows:

- (1) Government could neither attract enough high quality talent nor devote sufficient resources to standards setting.
- (2) A government would be susceptible to undue political influences both from special interest groups and for reinforcing current government policy objectives.
- (3) Government is noted for their inflexibility and general lack of responsiveness on a timely basis to meet changing conditions. If the government were to assume prime responsibility, any incentive for the accounting profession to contribute to the standard setting process would be significantly reduced.
- (4) Government standard setting would harm the vitality of the accounting profession, decreasing the supply of professional talent devoted to standards setting and turning accountants away from independent auditing and toward client advocacy.
- (5) A private sector standard setting body would be more responsive to the needs of diverse interests; more appreciative of the complexities of modern business, hence more tolerant of judgmental decisions on the part of accounting practitioners; and more sensitive to the costs of providing and using information.

The standard setting by private sector bodies involve some problems. Firstly, private sector standard setting body are susceptible to charges of inefficiency and are vulnerable to 'capture' by those who are supposed to be under their control. Secondly, standard setting in the private sector may be influenced by vested individual interests and thus may not obviously aid the social welfare. Thirdly, standards set by private sector body do not command a force of law but depend only on voluntary acceptance. In this way, there will be no compliance with accounting standards.

3. Standard Setting by Autonomous Agency

As stated earlier, the standard setting task could be done by government or a private sector body. However, both the alternatives have problems. In accounting literature, it is now argued that government should delegate most, if not all, accounting decisions to some agency.

It appears a governmental agency may prove useful as compared to standard setting in public sector and private sector. Such an agency would have the clear and explicit support of the government and the Legislature. Therefore, all advantages which are claimed in favour of government as a standard setter, also

accrue to such agencies. The Agency may have technical expertise and may employ qualified professionals to handle the technical matters than that of private sector accounting standard setting bodies. Such agencies should be able to promulgate accounting regulations and standards in a more speedy and efficient way than the government. The standard setting task by Agency would not imply large cost and would ensure compliance to standards. Such an agency may be more independent than a public sector or private sector body and can draw majority of its members from the concerned areas. Also, it would be accountable to society than any private sector bodies. To make such an agency accountable to society, it may be provided that it should prepare an annual report describing its activities during the period under review.

Some fears have been expressed about a government backed agency as standard setter. It is contended that agency's functioning may be arbitrary. The government may broadly delineate the powers, principles and concepts within which the agency may be empowered to act. However the staff of the agency may not be as careful as needed in standard setting task. The American SEC has not been able to create much confidence towards its activities and has been regarded a conservative force in accounting area and has in its judgements often acted in its own interests.¹⁵ Such agencies are very susceptible to political pressure, government pressure and even to lobbying from vested groups. Bromwich argues:

"It is not so much actual intervention by superior bodies that may restrict the freedom of subordinate agencies. It is rather the knowledge that those discontented with, or jealous of an agency's activities may seek to challenge them by putting pressure on more authoritative bodies. Defensive actions to protect such agencies against these challenges include utilising procedures which are neutral between individuals and efforts to discover a strong intellectual framework can be seen. Responses of this type take considerable time and resources and are likely to retard the agency's progress with its real tasks."¹⁶

It is difficult to answer categorically that standard setting should be done by government or private sector body or government backed agency. In a country like India, where accountancy profession is not yet fully developed, it may not be advisable to assign the private sector the tasks of standard setting. In USA, standard setting is done by FASB, a private sector organisation, but SEC also contributes to the formulation of accounting policies. Standard setting through a government body is fought with many dangers as the government may be doing measurement to serve its own purposes and uses. Similarly, standard setting purely in private sector may be influenced greatly by business groups and other vested interests. To follow a middle path, a standard setting agency should be set up with an organisation, independent from governmental and private influences, and well structured, which could concentrate on objective accounting measurements and determination of business profit. Its working and process of developing standards

should neither be influenced by governmental interests nor private interests. This will ensure that standards developed would be correct, acceptable to the financial community and preserve the credibility of financial statements.

DIFFICULTIES IN STANDARD SETTING

Difficulties faced in standard setting may vary from country to country as there may be differences in economic, legal, social and accounting environment. However, there are some problems which seem to be common to all standard-setter. They may be listed as follows:

1. Difficulties in Definition

To agree on the scope of accounting and of principles or standards, is admittedly most difficult. Some, for example, equate accounting with public accounting, that is mainly with auditing and the problems of the auditor. Another opinion is that it (accounting) is frequently assumed to have a basis in a private enterprise economy. Some use “principles” as a synonym for “rules or procedure”. The result is that the number of principles become large and most uneven in coverage and in quality. Another group seems to equate “principles” with “convention,” that is, with consensus or agreement. If this is the case, then a principle can be changed if all agree it should be or alternatively, the only propositions that can qualify as principles are those that command consensus or agreement. Such disagreement leads to difficulty in standard setting and further does not make the standards totally acceptable to society.

2. Political Bargaining in Standard Setting

Earlier, but not so many years ago, accounting could be thought of as an essentially non-political subject. But, today, as the standard setting process reveals, accounting can no longer be thought of as nonpolitical. The numbers that accountants report, have a significant impact on economic behaviour. Accounting rules therefore affect human behaviour. The stories conveyed by annual reports confirm or disappoint investor expectations and have the power to move millions (whether of money or persons). For all the bloodless image that accounting may have, people really care about the way the financial score is kept. Hence, the process by which they are made is said to be political. Horngreen¹⁷ writes that:

“The setting of accounting standards is as much a product of political action as of flawless logic or empirical findings. Why? Because the setting of standards is a social decision. Standards place restrictions on behaviour; therefore, they must be accepted by the affected parties. Acceptance may be forced or voluntary or some of both. In a democratic society, getting acceptance is an exceedingly complicated process that requires skilful marketing in a political arena.”

Tweedie and Whittington¹⁸ observe “Accounting standard setting is certainly a political process, responding to pressures from the economic environment and compromising between the conflicting interests of different parties. It is important that

standardsetters be aware of this and that they be aware of the specific pressure and interests involved. It would be unrealistic to expect to determine standards without such difficulties, and the best way to deal with them is to admit their existence rather than pretending to ignore them.”

3. Conflict in Accounting Theories

There has been remarkable growth in accounting theories especially relating to income measurement, asset valuation, capital maintenance. Though much of the developments has taken place abroad, (USA, UK, Canada, Australia, etc.), accounting in other countries has also been influenced. While the theorists battled on, the various sectional interests found that the theories could be used to support their own causes and arguments. At present, there is not a single theory in accounting which commands universal acceptance and recognition. There is no best answer to the different terms like profit, wealth, distributable income, value, capital maintenance, and so forth. We cannot say what is the best way to measure profit. If the profession truly wishes to be helpful it needs to discover from users, or to suggest to them, what would support their decision making, and then do develop the measures which best reflect those ideas.

The search for an agreed conceptional framework could be regarded as essential to orderly standard setting and a responsible way for the standard-setter to act. Also, it could be helpful in distracting critics while getting on with the real issues in accounting problems. Absence of a conceptual framework, *i.e.*, a set of interlocking ideas on accountability and measurement is not conducive to standard setting and improved financial accounting and reporting.

4. Pluralism

The existence of multiple accounting agencies has made the task of standard setting more difficult. In India, company financial reporting is influenced, although in different degrees, by Accounting Standards Board of ICAI, Ministry of Company Affairs, Institute of Cost Accountants of India, Securities and Exchange Board of India (SEBI). No one agency has jurisdiction over the entire area of accounting standards. Similarly in other countries also, there is plurality of accounting bodies. For example, in USA there are organisations like Securities and Exchange Commission, Financial Accounting Standards Board, American Institute of Certified Public Accountants. In U.K., there are Accounting Standards Board of ICAEW and Companies Acts to deal with accounting matters and financial reporting.

If pluralism were reduced or eliminated, the path toward the goal would be smoother. However, the absence of pluralism is not a necessary condition for agreement on standards developed by a single accounting body. No one would claim that the mere absence of an obstacle constitutes a sufficient condition for success.

A standard setter has to face many difficulties in standard setting process. In a rational way, a standard setting body should

first define the objectives of financial accounting and reporting, identify user groups to be served, and the information which were useful to them before starting the process of standard setting. A standard setting process, *i.e.*, the process of selecting the appropriate accounting method includes the following important stages¹⁹:

- (1) *Identification and assessment of theory* – The various theories underlying alternative accounting methods should be examined for individual merit and internal consistency. In the light of the conceptual framework, the relevance of the alternative methods to the various users of accounts would be assessed.
- (2) *Research into the costs and benefit of alternative methods* – The role of research would be:
 - (a) to examine the realism of the assumptions underlying the various methods.
 - (b) to assess, and preferably quantify, the benefits accruing to users resulting from the introduction of each alternative method; and
 - (c) to identify the costs and practical difficulties of implementation by field studies.
- (3) *Choice between alternative methods* – The final stage of the process involves the exercise of judgment in the selection of an appropriate accounting policy. The standardsetting body is confronted by a social choice problem similar to that faced by a Government in deciding how to allocate public expenditure and by which means taxes should be raised to pay for it. A choice may have to be made to favour certain groups of users at the expense of others, as ultimately the amount of information which can be published is limited. The decision involves the assessment of the benefits accruing to different users of accounts, and the costs associated with these benefits, bearing in mind that some of the users of accounts bear none of the costs. Ideally, the choice would be made from a 'neutral' viewpoint, but 'neutrality' can be determined in practice only if there exists a social welfare function for comparing various costs and benefits to different parties in a manner which is universally accepted as being 'neutral.'

TYPES OF ACCOUNTING STANDARDS

Accounting Standards may be classified by their subjectmatter and by how they are enforced. According to subjectmatter, standards may be as follows:

- (1) *Disclosure Standards* Such standards are the minimum uniform rules for external reporting. They require only an explicit disclosure of accounting methods used and assumptions made in preparing financial statements. Such a standard is likely to be controversial or creates conflicts of interest, particularly since it does not constrain the choice of accounting policies or items to be disclosed.

- (2) *Presentation Standards* They specify the form and type of accounting information to be presented. They may specify that certain financial statements be presented (*e.g.*, a fundsflow statement) or that items be presented in particular order in financial statements. Such standards place only a little more constraint upon the choice of accounting policies than disclosure standards and aim to reduce the costs to users of utilising financial statements.
- (3) *Content Standards* – These standards specify the accounting information which is to be published. There are three aspects to such standards:
 - (a) *Disclosure-content standards* which specify only the categories of information to be disclosed.
 - (b) *Specific-construct standards* which specify how specific items should be reported in accounts, *e.g.*, a standard which specifies that finance leases be capitalised and disclosed in balance sheet.
 - (c) *Conceptually-based standards* which specify the accounting treatment of items based upon a coherent and complete framework of accounting.

Another classification of accounting standards may be based upon their method of preparation and enforcement. Such standards are:

- (1) *Evolutionary and Voluntary Compliance Standards*— Such standards have evolved as best practices and represent the conventional approach to accounting. As such, their general acceptability implies voluntary compliance by individual companies.
- (2) *Privately Set Standards*— Private accountancy bodies may formulate standards and devise means for their enforcement. Other bodies such as trade associations or stock exchanges may set accounting standards for companies as a condition of membership or listing. Enforcement powers are thus more readily available.
- (3) *Governmental Standards*— These standards may be laws relating to company accounting practices and disclosure, as in the case of the Indian Companies Acts, or tax rules defining taxable profit. Alternatively, Government departments or agencies may regulate accounting practices for certain industries.

It is significant to note that the above two classifications are complementary and not competitive.

STANDARDS SETTING IN UK AND USA

Standards setting or standardisation imply the development, definition and promulgation, acceptance, and enforcement of a written and explicit body of rules relating to measurement and disclosure of information in financial statements.

Prior to the 1970s, few paid much attention to the standards setting process in accounting. Little research was done on the

subject. Beginning in the 1970s, however, it became clear that standard setting was a fascinating process influencing the economic self-interests of affected parties. Currently, standards setting boards or committees are active in a number of countries such as the United States, Canada, United Kingdom, Australia, New Zealand, Japan, the Netherlands, including India. The purpose of each of these standardsetting organisations is to promote the dissemination of timely and useful financial information to investors and certain other parties having an interest in companies' economic performance.

In the following sections, the process of standards setting in UK and USA has been described.

UNITED KINGDOM

The first substantial British interest in the area of accounting policy making seems to have been seen in the 1940s. The underlying cause of this concern was discontent with the accounting establishment. The first committee of the Institute of Chartered Accountants of England and Wales (ICAEW) charged with laying down guidelines concerning accounting practice emerged as a byproduct of a compromise which allowed Council to continue to be composed of mainly practicing members. However, upto 1960, there was little concern with the process of accounting policymaking. There was some evidence of fresh thinking in the 1960s and a research committee was formed in 1964. The strong concern was felt by many academic accountants who suggested research programmes to explore the possibility of setting accounting standards. All these (and other) pressures led the ICAEW to issue a Statement of Intent on Accounting Standards in the 1970s. Subsequently, the Accounting Standards Committee (ASC) was established in 1970.

The ASC has been replaced by Accounting Standards Board (ASB) in 1990.

In establishing the ASC, the ICAEW stated its intention to advance accounting standards along five lines as follows:

- (1) Narrowing the areas of difference and variety of accounting practice. This was to be achieved by publishing authoritative statements on best accounting practice.
- (2) Disclosure of accounting bases. This was to be required when accounts include significant items whose values depend upon judgement.
- (3) Disclosure of departures from established definitive accounting standards.
- (4) Wider exposure for major proposals on accounting standards.
- (5) Continuing programme for encouraging improved accounting standards in legal and regulatory measures.

In seeking to meet its terms of reference the ASC set Statement of Standard Accounting Practices (SSAPs) by a process which entailed effectively four elements: research; drafting; evaluation;

and approval. Similar characteristics determined the preparation of another type of document which was introduced by the ASC, the Statement of Recommended Practice (SORP). SORPs were designed to apply to matters of less general applicability than SSAPs and could be produced by the ASC itself or by groups of organizations representing an economic sector. In the case of latter, if SORPs were judged to have been properly prepared, they would be franked by the ASC.

Following a continuing concern that the standard setting process needed a thorough revision, the accounting bodies in 1987 set up a review committee, named after its chairman, Sir Ron Dearing, to review procedures for developing and enforcing accounting standards in Great Britain and Ireland. The Dearing Report recommended the establishment of a new body, the Financial Reporting Council (FRC). This was to oversee two independent entities, the Accounting Standards Board (ASB) and the Review Panel. These recommendations were accepted and implemented, with effect from August 1990.

The FRC, comprising 20 members, gives guidance to the ASB on priorities, work programme and issues of public concern, and acts as an instrument for promoting good accounting practice. The ASB comprises nine members including a fulltime chairman and technical director. An Urgent Issues Task Force (UITF) is an offshoot of the ASB. Its role is to tackle urgent matters not covered by existing standards. The Review Panel has fifteen members. It is concerned with monitoring the accounts of large companies to note and investigate any departure from accounting standards. In the last resort, the Review Panel may bring civil proceedings against a company which will not revise its accounts in order to give a true and fair view.

In 1991, the ASB published its "Statement of Aims" which stated that it aims to establish and improve standards of financial accounting and reporting, for the benefit of users, preparers and auditors of financial information. The Board intends to achieve its aims by:

- (1) Developing principles to guide it in establishing standards and to provide a framework within which others can exercise judgement in resolving accounting issues.
- (2) Issuing new accounting standards, or amending existing ones, in response to evolving business practices, new economic developments and deficiencies being identified in current practice.
- (3) Addressing urgent issues promptly.

The Board follows certain guidelines in conducting its affairs:

- (1) To be objective and to ensure that the information resulting from the application of accounting standards faithfully represents the underlying commercial activity. Such information should be neutral in the sense that it is free from any form of bias intended to influence users in a particular direction and should not be designed to favour any group of users or preparers.

- (2) To ensure that accounting standards are clearly expressed and supported by a reasoned analysis of the issues.
- (3) To determine what should be incorporated in accounting standards based on research, public consultation and careful deliberations about the usefulness of the resulting information.
- (4) To ensure that a process of regular communication of accounting standards is produced with due regard to international developments.
- (5) To ensure that there is consistency both from one accounting standard to another and between accounting standards and company law.
- (6) To issue accounting standards only when the expected benefits exceed the perceived costs. The Board recognizes that reliable cost/benefit calculations are seldom possible. However, it will always assess the need for standards in terms of the significance and extent of the problem being addressed and will choose the standard which appears to be most effective in cost/benefit terms.
- (7) To take account of the desire of the financial community for evolutionary rather than revolutionary change in the reporting process, where this is consistent with the objective outlined above.

In 1983, the Accounting Standards Committee (ASC) obtained a written opinion from counsel on the meaning of true and fair with particular reference to the role of accounting standards. The opinion states that financial statements will not be true and fair unless the information they contain is sufficient in quantity and quality to satisfy the reasonable expectations of the readers to whom they are addressed. But the expectations of the readers are likely to be influenced by the practices of accountants because, by and large, they will expect to get what they ordinarily get and that, in turn, will depend upon the normal practices of accountants. Therefore, the compliance with accepted accounting principles is treated as *prima facie* evidence that the financial statements are true and fair. The opinion states that since the function of the ASC is to formulate what it considers should be generally accepted accounting principles, the value of a Statement of Standard Accounting Practice (SSAP) to a court is:

- (a) A statement of professional opinion which readers may expect in financial statements which are true and fair.
- (b) That readers expect financial statements to comply with standards.

The opinion concludes, therefore, that financial statements which depart from standards may be held not to be true and fair, unless a strong body of professional opinion opts out of applying the standard. The Companies Act, 1989 introduced a requirement to state whether the accounts have been prepared in accordance

with applicable accounting standards and give details of, and the reasons for, any material departures.

Statement of Standard Accounting Practices (SSAPs), which are produced mainly by a committee after a period of exposure and comment on the proposed statements, are mandatory for all qualified accountants involved in producing company financial statements. Such accountants (preparers) must ensure that stated standards are implemented by the companies by whom they are employed, unless circumstances dictate that there should be a departure; in which case, this has to be fully disclosed in the published financial statements. Company auditors are also required to verify that companies have been following standard accounting practices and to report any disagreement with the departures made.

Despite these impositions on accountants, however, Statements of Standard Accounting Practices (SSAPs) are not mandatory on the persons ultimately responsible for the production and quality of financial statements (company directors), unless they also happen to be accountants to whom the statements apply. Thus it appears to be quite conceivable that company managements can deviate from the stated accounting standards, irrespective of the circumstances, though this will require to be verified by their auditors. In other words, professional statements of this kind do not appear to have the same force as those contained in statutory provisions such as the Companies Acts. The onus for implementation appears to be largely with individual accountants. However, Part II Schedule and Companies Act, 1948 and Companies Acts of 1980 and 1981, contain most of the main accounting principles underlying the present series of SSAPs. Also, SSAPs intended to add to truth and fairness are effectively to be considered by the company and its management when preparing its financial statements. Thus, those persons responsible for presenting company financial statements cannot ignore such SSAPs. But the ASB, whose authority is not backed by a government agency like SEC in USA has to rely on acceptance of its pronouncements on the existence of a consensus of views among practicing accountants, industry, commerce, and on occasion, the government.

UK accounting standards always indicate, in an appendix, whether or not they are consistent with IASB standards. Companies which apply UK standards are therefore to a considerable extent applying IASs implicitly but seldom acknowledge that fact in their annual reports. The ASB has identified three different strategies for reacting to the mounting pressure for harmonization:

- adopt international standards for domestic purposes
- develop domestic requirements without regard to international standards, or
- harmonize national requirements with international standards where possible.

Analysis of benefits and limitations led the ASB to support the third strategy. The Board has taken the view that it will depart from international consensus only when:

- there are particular legal or fiscal problems which dictate such a cause, or
- the Board genuinely believes that the international approach is wrong and that an independent UK standard might point the way to an eventual improvement in international practice.

USA

In USA until the early 1930s, accounting evolved in accordance with the best professional judgment of CPAs and managers. Heavy dependence was placed on the leadership of thoughtful practitioners. Then, the Securities and Exchange Commission (SEC) was created in 1934 to administer the Securities Act of 1933 and the Securities Exchange Act of 1934. The Commission is given the responsibility and authority to prescribe accounting standards and rules for reports filed pursuant to the securities acts. Further, the Commission defines the conditions under which public accountants who attest to the statements are considered independent, and disciplines attesting accountants who violate these conditions. In 1936, the American Institute of Certified Public Accountants (AICPA) established a Committee on Accounting Procedure. The AICPA devoted its attention almost entirely to resolving specific accounting problems and topics rather than developing general accounting principles.

The Accounting Principles Board (APB) succeeded the Committee on Accounting Procedure of AICPA in 1959. The APB was created partially in response to criticism of the old Committee as being too concerned with putting out bush fires, as being too wedded to an *ad hoc* approach that lacked an overall conceptual framework. In contrast, the APB pronouncements were supposed to sprout from fundamental research that would formulate a grand set of tightly integrated, internally consistent accounting principles. Indeed, the APB commissioned such research, but the APB's series of 31 opinions was often criticised for being unrelated to any overall framework. Despite the good intention of the APB programme, history repeated itself. The APB approach was similar to the piecemeal approach of its predecessor. In fact, the Wheat Study Group that gave the APB the kiss of death devoted a section of its report to a negative appraisal of the APB research Programme. Of course, this kind of criticism of the APB flowed from many other sources. For instance, the academic community and many practitioners flayed the APB because it was working without any accounting objectives or any collection of general principles. In short, observers alleged that there was not enough tidy rationality embedded in the process of accounting policymaking.²⁰

As a result of the criticism of the Accounting Principles Board, the Financial Accounting Standards Board was set up in 1972 as a designated organisation in the private sector for establishing standards of financial accounting and reporting in U.S.

Financial Accounting Standards Board (FASB)

In October 1985, the FASB issued a statement of what is conceived to be its mission: "to establish and improve standards

of financial accounting and reporting for the guidance and education of the public including issuers, auditors and users of financial information."²¹ The statement further says that the Board seeks to accomplish its mission by the following measures:

- (1) Improving the usefulness of financial reporting by focusing on certain primary characteristics (relevance, reliability, comparability, and consistency).
- (2) Keeping standards up to date.
- (3) Considering areas of financial reporting that need improvement.
- (4) Improving the general understanding of financial reporting, its nature, and its purposes.

In pursuing these aims, the Board says that it follows the following precepts:

- (1) To be objective in its decision making and preserve neutrality in the information that results from its standards.
- (2) To weigh the views of its constituents but ultimately to rely on its own judgment.
- (3) To issue standards only when benefits are expected to exceed costs
- (4) To minimise disruption when making needed changes.
- (5) To review past decisions and to make changes when necessary.

The structure for establishing financial accounting standards has been modified somewhat since the FASB's founding in 1973. The modifications were the result of recommendations made in 1977 by the Structure Committee of the Financial Accounting Foundation (FAF). Figure 11.2 diagrams the organizational structure and its relationship to its constituency.

The FAF's Board of Trustees consists of 16 members, 11 members nominated by eight organizations: the AAA, AICPA, CFA Institute, Financial Executives International (FEI), Government Finance Officers Association, Institute of Management Accountants (IMA), Securities Industry Association, and National Association of State Auditors, Comptrollers and Treasurers. An additional five members come from at-large nominations. The Trustees approve all member additions and are responsible for oversight, administration, and finances of the FASB and the Governmental Accounting Standards Board (GASB).

The FASB includes seven members, each serving five-year terms. Any individual member can serve a maximum of two terms. During their terms of office, board members must maintain complete independence. This applies not only to other employment arrangements (past, present, or future) but also to investments. "There must be no conflict, real or apparent, between the members' private interest and the public interest." The background requirement for board members is simply knowledge of accounting, finance, and business and concern for the public

interest. In March 1979, for the first time the Board had a majority of members with backgrounds primarily in areas other than public accounting.

The Financial Accounting Standards Advisory Council (FASAC) is instrumental in the establishment of financial accounting standards. It is also appointed by the Board of Trustees. The FASAC advises the FASB on its operating and project plans, agenda and priorities, and appointment of task forces, as well as on all major or technical issues.

The standard setting procedure starts with the identification of a problem. A task force is then formed to explore all aspects of the problem. It produces a discussion memorandum identifying all issues and possible solutions, which is widely circulated to interested parties. The FASB then convenes a public hearing during which interested parties may make their views known to the Board. Subsequently, an exposure draft of the final standard is issued and written comments are requested. After consideration of written comments, either another exposure draft is issued (if significant changes are deemed necessary) or the Board takes a final vote. A normal 4-to-3 majority vote is required for passing new standards.

Before the FASB promulgates a major standard, it is required by its rules to follow extensive 'due process' procedures that gives those concerned with the subjectmatter of the standard plenty of opportunity to influence the outcome of the Board's deliberations. In connection with each of its major standards, the Board:

- (a) appoints a task force of technical experts representing a broad spectrum of preparers, auditors and users of financial information to advise on the project.
- (b) studies existing literature on the subject and conducts such additional research as may be necessary.
- (c) publishes a comprehensive discussion of issues and possible solutions as a basis for public comment.
- (d) conducts a public hearing.
- (e) After the results of the public hearing and other responses have been analysed by the Board's staff and have been considered by the Board, an exposure draft of a proposed standard is issued for the public comment and 90 to 120 days are allowed for comment. If the comments indicate that substantial revisions of the exposure draft are necessary, a second exposure draft may be issued, with further time allowed for public comment.

The end product of the above elaborate and costly procedure is the promulgation of a statement of financial accounting standards (SFAS). Besides the formal statement, the Board also issues, Statements of Concepts, Interpretations, Technical Bulletins. Statements of Standard establish new standards or amend those previously issued. Statements of Concepts do not establish new standards or require any change in application of existing accounting principles. They establish new general concepts that will be used to guide the development of standards, and to provide guidance in solving problems. Because of their long range importance, Statements of Concepts are developed under the same extensive 'due process' the FASB must follow in developing Statements of Financial Accounting Standards on major topics. Interpretations clarify, explain or elaborate on existing standards. Since 1979, the Board's staff has been authorised to issue technical bulletins giving guidance on the interpretation of a standard. These (bulletins) have to be reviewed by the Board members before they are issued, but they are not pronouncements by the Board. The Board has carried out many research projects also.

The FASB is quite productive when compared with its predecessors. As of June 2009, it issued 168 Statements of Financial Accounting Standards, as well as numerous interpretations and technical bulletins. Since establishing the FASB Accounting Standards Codification in 2009, it issued more than 58 additional accounting standards updates. In Addition, between 1978 and 2010 the FASB issued eight Statements of Financial Accounting Concepts. These statements constitute the conceptual framework, a document that is intended to provide a theoretical underpinning for the assessment of accounting standards and practices.

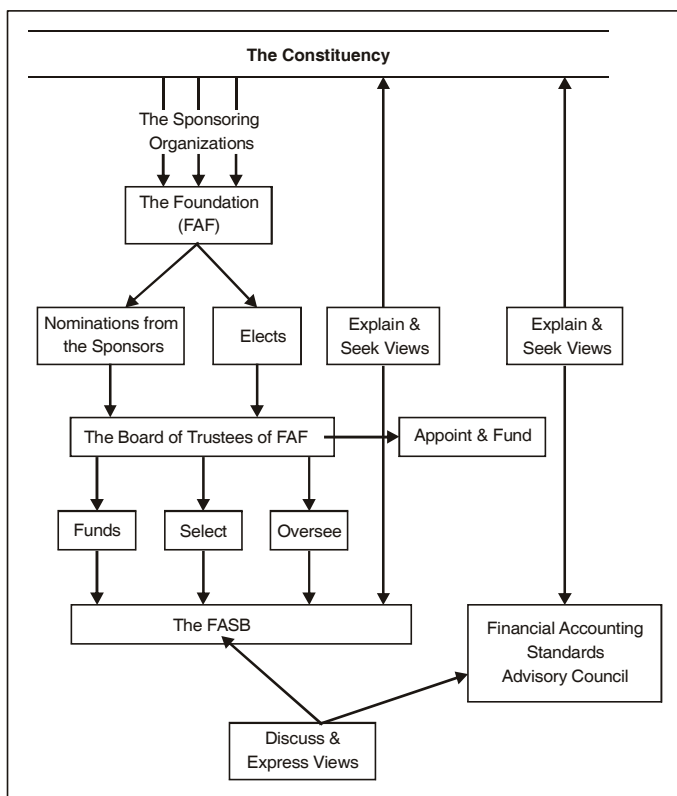


Figure 11.2: The Structure of the Board's Constituency Relationships

A further challenge to the FASB's standard setting powers is from the Government Accounting Standards Board (GASB), created by the FAF in 1984 to deal with municipal accounting. Unfortunately, its responsibilities overlap with those of the FASB, resulting in an old-fashioned turf battle. Separately issued, general purpose financial statements for entities such as hospitals, colleges, universities, and pension plans are supposed to use FASB standards, except where the GASB has issued a particular standard covering a specific type of entity or a precise economic practice or activity. As a result of this overlap, GASB standards tend to "muscle out" particular FASB standards for governmental entities. The situation became intolerable for both private and public industries that previously used FASB standards and preferred to continue to do so. However, some public sector organizations wanted the dispute settled on the basis of public versus private ownership and threatened to withdraw support of the FAF if that issue was not settled. A tentative compromise largely agreed to this system. In addition, separately issued general purpose financial statements of colleges and universities, health care organizations, and gas and electric utilities are subject to FASB standards unless governing boards of public-sector organizations in these categories decide to be governed by GASB standards.

Enforcement of Standards

The FASB itself, as a private rule making agency, has neither enforcement powers, nor the Financial Accounting Foundation. The force behind the FASB, standards comes from two other bodies, the SEC and the AICPA. A few months after the establishment of the FASB in 1973, the SEC issued ASR 150, and it is from that release that the FASB derives most of its authority. ASR 150 stated that "for purposes of this policy, principles, standards and practices promulgated by the FASB in its statements and interpretations will be considered by the Commission as having substantial authoritative support, and those contrary to such FASB promulgations will be considered to have no such support." More recently, in ASR 280 (September 1980), the SEC reaffirmed its intention to rely on the FASB "for leadership in establishing financial accounting and reporting standards," while recognising that "there is, of course, always the possibility that the Commission (SEC) may conclude it cannot accept the FASB standard in a particular area (but) such events have been rare."

Similarly, FASB derives authority from the Rules 203 and 204 of the Rules of Conduct of the AICPA's Code of Professional Ethics. Rule 203 places a duty on auditors to report on departures from FASB standards in financial statements audited by them. An Interpretation of Rule 203 states categorically that rule "relates solely to the provisions of Statements of Financial Accounting Standards (SFASs) which establishes accounting principles with respect to basic financial statements (balance sheets, statements of income, statement of changes in retained earnings, disclosure of changes in other categories of stockholders equity, statements of changes in financial position, and descriptions of accounting policies and related notes)." SFASs that stipulate that certain

information should be disclosed outside the basic financial statements are not covered by Rule 203. However, Rule 204 gives authority to pronouncements of the FASB on such matters.

The U.S. SEC has primary responsibility for securities and capital markets regulation in the United States and is an ordinary member of IOSCO. Any company issuing securities within the United States, or otherwise involved in U.S. capital markets, is subject to the rules and regulations of the SEC. The SEC, one of the oldest and most developed regulatory authorities, originated as a result of reform efforts made after the great stock market crash of 1929, sometimes referred to as simply the "Great Crash."

A number of laws affect reporting companies, broker/dealers, and other market participants. From a financial reporting and analysis perspective, the most significant pieces of legislation are the Securities Acts of 1933 and 1934 and the Sarbanes-Oxley Act of 2002.

- **Securities Act of 1933 (The 1933 Act):** This act specifies the financial and other significant information that investors must receive when securities are sold, prohibits misrepresentations, and requires initial registration of all public issuances of securities.
- **Securities Exchange Act of 1934 (The 1934 Act):** This act created the SEC, gave the SEC authority over all aspects of the securities industry, and empowered the SEC to require periodic reporting by companies with publicly traded securities.
- **Sarbanes-Oxley (SOX) Act of 2002:** The Sarbanes-Oxley Act of 2002 created the Public Company Accounting Oversight Board (PCAOB) to oversee auditors. The SEC is responsible for carrying out the requirements of the act and overseeing the PCAOB. The act addresses auditor independence; for example, it prohibits auditors from providing certain non-audit services to the companies they audit. The act strengthens corporate responsibility for financial reports; for example, it requires the chief executive officer and the chief financial officer to certify that the company's financial reports fairly present the company's condition. Furthermore, Section 404 of the Sarbanes-Oxley Act requires management to report on the effectiveness of the company's internal control over financial reporting and to obtain a report from its external auditor attesting to management's assertion about the effectiveness of the company's internal control.

A subtle but important SOX-related change concerns the FASB budget; the majority of its funding (\$26+ million direct expenses per year) originally came from private-sector contributions. SOX now requires that FASB funding be like PCAOB funding, originating from fee assessments on public companies and accountants, not contributions. The change increases FASB's independence from the constituents it serves but increases its dependence on the SEC for approval of its budget. For the past two decades, the accounting profession and the government have strongly advocated the importance of the

FASB as an independent regulatory body. For better or worse, the FASB lost a significant amount of independence from the SEC with SOX's passage. Now, the SEC controls the FASB's funding via the budgetary process. As a result of SOX, the FASB can no longer assess operating fees from corporations and public accountants.

The SEC has statutory authority to establish financial accounting and reporting standards for publicly held companies under the Securities Exchange Act of 1934. Throughout its history, however, the Commission's policy has been to rely on the private sector for this function to the extent that the private sector demonstrates ability to fulfil the responsibility in the public interest. Since its inception, the approach of the Commission has been to delegate its authority, import, to the private accounting profession to determine—subject to its oversight—the proper disclosure and measurement rules. The Commission's hesitation probably stems from its realisation that the costs potentially incurred would exceed the benefits to it as an agency. The costs include disagreements among the constitutions (*e.g.*, accountants, auditors, investors, financial analysts, brokers, companies, press, government, legislators) as to which standards apply. The commission perhaps also realises that general content standards that imply economic measurements are open to potential criticisms. While the Commission (SEC) has steadfastly maintained its general policy of reliance on the accounting profession for accounting standard setting, it has nevertheless not adopted a totally passive role. It has established presentation standards and a very large number of specific rules that attempt to govern almost every situation that has come to its attention. Thus, companies and public accountants are faced with the expense of learning and following these regulations' while it is doubtful that users have achieved much in the way of benefit. Benston²² stated that "The USA's experience with the SEC leads me to conclude that it is not likely that such an agency will or even can determine the optimal set of information to be disclosed or 'the best' accounting standards to be followed. To the contrary, the agency has incentives to add considerable costs and few benefits to the disclosure process, and tends to do so."

Another aspect of SEC operations involves electronic filing of financial data with the SEC via "EDGAR" (Electronic Data Gathering, Analysis, and Retrieval System). Most public domestic companies began filing electronically in 1996. While some problems have occurred, the program appears to be quite successful. A related development involves corporate reporting via the Internet. Research has found wide variation in timeliness of corporate information presented on the Internet. Some enterprises provide up-to-date information such as monthly sales, whereas others may present outdated information such as two-year-old financial statements. Financial reporting on the Internet is certain to become much more important in coming years, especially with the eventual adoption of extensible Business Reporting Language, a computer language for the electronic transmission of business and financial data known as XBRL.

In 2005, the SEC initiated an XBRL Voluntary Filing Program (VFP) to debug potential problems in these interactive data filings. This was seen as a clear step toward full adoption in the near future, and in 2009 the SEC mandated supplemental filings using XBRL. The VFP proved successful in providing improved accuracy of financial reporting data.

Recently, a survey²³ made about the attitudes towards the US Financial Accounting Standards Board shows that most of the financial community thought it produced too many standards, stressed technically correct solutions at the expense of practicability, did not consider significant areas of deficiency which could be improved by standard setting quickly enough and was not sufficient by responsive to the needs of small business. However, the survey also showed that over the last five years awareness and positiveness about FASB, its work and overall performance have increased. FASB statements were seen as effective since they improved on generally accepted accounting principles and dealt with the right issues.

STANDARD SETTING IN INDIA

Standard Setting Bodies in India

In India, we have standard setting bodies which are, in practice, the national regulators, who have the legal authority to set and implement regulatory rules and procedures in the financial sector. For example, the Reserve Bank of India (RBI) is responsible for regulation and supervision of banks and other financial institutions and money, foreign exchange and Government securities markets. The Securities and Exchange Board of India (SEBI) is charged with the duty to protect the interests of investors in securities and to promote the development of, and to regulate the securities market by measures as it deems fit. The Insurance Regulatory and Development Authority (IRDA) is entrusted with the task of protecting the interests of the policy holders, to regulate, promote and ensure orderly growth of the insurance industry and for matters therewith or incidental thereto. The Ministry of Corporate Affairs, *inter alia*, provides legal framework for incorporation and proper functioning of companies, surveillance over the working of corporate sector to ensure financial health and compliance with statutory provisions, prescribing cost audit rules and appointment of cost auditors, investigation of complaints, coordination with other regulatory bodies such as other Government departments and autonomous institutions like SEBI, RBI and stock exchanges and monitoring the development of professional bodies, *i.e.*, Institute of Chartered Accountants of India (ICAI), Institute of Company Secretaries (ICS) and Institute of Cost Accountants of India (ICWAI).

Further, we have selfregulatory organizations such as the Indian Banks Association (IBA), Fixed Income Money Market and Derivatives Association of India (FIMMDA), Association of Merchant Bankers of India (AMBI), Association of Mutual Funds of India (AMFI), Foreign Exchange Dealers Association of India (FEDAI), Primary Dealers Association of India (PDAI), clearing house associations and stock exchanges, among others, which

play a critical role in developing codes of conduct and setting and maintaining standards for different segments of the financial system with a view to promoting and protecting interests of institutions, investors and depositors in India.

Standards set by ASB

Recognising the need to harmonise the diverse accounting policies and practice in India and keeping in view the international development in the field of accounting, the Institute of Chartered Accountants of India constituted the Accounting Standards Board (ASB) in April 1977.

The council of the Institute of Chartered Accountants of India has issued revised 'Preface to the Statements of Accounting Standards' in 2004, superseding the earlier Preface issued in January 1979. The following is the text of the Preface to the Statements of Accounting Standards (revised 2004), issued by the Council of the Institute of Chartered Accountants of India.

1. Formation of the Accounting Standards Board

(1) The Institute of Chartered Accountants of India (ICAI), recognising the need to harmonise the diverse accounting policies and practices in use in India, constituted the Accounting Standards Board (ASB) on 21st April, 1977.

(2) The composition of the ASB is fairly broad based and ensures participation of all interest groups in the standard setting process. Apart from the elected members of the Council of the ICAI nominated on the ASB, the following are represented on the ASB:

- (i) Nominee of the Central Government representing the Department of Company Affairs on the Council of the ICAI
- (ii) Nominee of the Central Government representing the Office of the Comptroller and Auditor General of India on the Council of the ICAI
- (iii) Nominee of the Central Government representing the Central Board of Direct Taxes on the Council of the ICAI
- (iv) Representative of the Institute of Cost Accountants of India
- (v) Representative of the Institute of Company Secretaries of India
- (vi) Representatives of Industry Associations (1 from Associated Chambers of Commerce and Industry (ASSOCHAM), 1 from Confederation of Indian Industry (CII) and 1 from Federation of Indian Chambers of Commerce and Industry (FICCI)
- (vii) Representative of Reserve Bank Of India
- (viii) Representative of Securities and Exchange Board of India
- (ix) Representative of Comptroller and Auditor General of India (C&AG)

- (x) Representative of Central Board of Excise and Customs
- (xi) Representatives of Academic Institutions (1 from Universities and 1 from Indian Institutes of Management)
- (xii) Representative of Financial Institutions
- (xiii) Eminent professionals co-opted by the ICAI (they may be in practice or in industry, government, education, etc.)
- (xiv) Chairman of the Research Committee and the Chairman of the Expert Advisory Committee of the ICAI, if they are not otherwise members of the Accounting Standards Board
- (xv) Representative(s) of any other body, as considered appropriate by the ICAI

2. Objectives and Functions of the Accounting Standards Board

(1) The following are the objectives of the Accounting Standards Board:

- (i) To conceive of and suggest areas in which Accounting Standards need to be developed.
- (ii) To formulate Accounting Standards with a view to assisting the Council of the ICAI in evolving and establishing Accounting Standards in India.
- (iii) To examine how far the relevant International Accounting Standard/International Financial Reporting Standard can be adapted while formulating the Accounting Standard and to adapt the same.
- (iv) To review, at regular intervals, the Accounting Standards from the point of view of acceptance or changed conditions, and, if necessary, revise the same.
- (v) To provide, from time to time, interpretations and guidance on Accounting Standards.
- (vi) To send comments on various consultative papers such as Exposure Drafts, Discussion Papers etc., issued by International Accounting Standards Board and various other International bodies such as Asian Oceanian Standard Setters Group (AOSSG).
- (vii) To carry out such other functions relating to Accounting Standards.

(2) The main function of the ASB is to formulate Accounting Standards so that such standards may be established by the ICAI in India. While formulating the Accounting Standards, the ASB will take into consideration the applicable laws, customs, usages and business environment prevailing in India.

(3) The ICAI, being a full-fledged member of the International Federation of Accountants (IFAC), is expected, inter alia, to actively promote the International Accounting Standards Board's (IASB) pronouncements in the country with a view to facilitate

global harmonisation of accounting standards. Accordingly, while formulating the Accounting Standards, the ASB will give due consideration to International Accounting Standards (IASs) issued by the International Accounting Standards Committee (predecessor body to IASB) or International Financial Reporting Standards (IFRSs) issued by the IASB, as the case may be, and try to integrate them, to the extent possible, in the light of the conditions and practices prevailing in India.

(4) The Accounting Standards are issued under the authority of the Council of the ICAI. The ASB has also been entrusted with the responsibility of propagating the Accounting Standards and of persuading the concerned parties to adopt them in the preparation and presentation of financial statements. The ASB will provide interpretations and guidance on issues arising from Accounting Standards. The ASB will also review the Accounting Standards at periodical intervals and, if necessary, revise the same.

3. General Purpose Financial Statements

(1) For discharging its functions, the ASB will keep in view the purposes and limitations of financial statements and the attest function of the auditors. The ASB will enumerate and describe the basic concept to which accounting principles should be oriented and state the accounting principles to which the practices and procedures should conform.

(2) The ASB will clarify the terms commonly used in financial statements and suggest improvements in the terminology wherever necessary. The ASB will examine the various current alternative practices in vogue and endeavour to eliminate or reduce alternatives within the bounds of rationality.

(3) Accounting Standards are designed to apply to the general purpose financial statements and other financial reporting, which are subject to the attest function of the members of the ICAI. Accounting Standards apply in respect of any enterprise (whether organised in corporate, co operative¹ or other forms) engaged in commercial, industrial or business activities, irrespective of whether it is profit-oriented or it is established for charitable or religious purposes. Accounting Standards will not, however, apply to enterprises only carrying on the activities which are not of commercial, industrial or business nature, (e.g., an activity of collecting donations and giving them to flood affected people). Exclusion of an enterprise from the applicability of the Accounting Standards would be permissible only if no part of the activity of such enterprise is commercial, industrial or business in nature. Even if a very small proportion of the activities of an enterprise is considered to be commercial, industrial or business in nature, the

Accounting Standards would apply to all its activities including those which are not commercial, industrial or business in nature².

(4) The term 'General Purpose Financial Statements' includes balance sheet, statement of profit and loss, a cash flow statement (wherever applicable) and statements and explanatory notes which form part thereof, issued for the use of various stakeholders, Governments and their agencies and the public. References to financial statements in this Preface and in the standards issued from time to time will be construed to refer to General Purpose Financial Statements.

(5) Responsibility for the preparation of financial statements and for adequate disclosure is that of the management of the enterprise. The auditor's responsibility is to form his opinion and report on such financial statements.

4. Scope of Accounting Standards

(1) Efforts will be made to issue Accounting Standards which are in conformity with the provisions of the applicable laws, customs, usages and business environment in India. However, if a particular Accounting Standard is found to be not in conformity with law, the provisions of the said law will prevail and the financial statements should be prepared in conformity with such law.

(2) The Accounting Standards by their very nature cannot and do not override the local regulations which govern the preparation and presentation of financial statements in the country. However, the ICAI will determine the extent of disclosure to be made in financial statements and the auditor's report thereon. Such disclosure may be by way of appropriate notes explaining the treatment of particular items. Such explanatory notes will be only in the nature of clarification and therefore need not be treated as adverse comments on the related financial statements.

(3) The Accounting Standards are intended to apply only to items which are material. Any limitations with regard to the applicability of a specific Accounting Standard will be made clear by the ICAI from time to time. The date from which a particular Standard will come into effect, as well as the class of enterprises to which it will apply, will also be specified by the ICAI. However, no standard will have retroactive application, unless otherwise stated.

(4) The Institute will use its best endeavours to persuade the Government, appropriate authorities, industrial and business community to adopt the Accounting Standards in order to achieve uniformity in preparation and presentation of financial statements.

(5) In formulation of Accounting Standards, the emphasis would be on laying down accounting principles and not detailed rules for application and implementation thereof.

(6) The Standards formulated by the ASB include paragraphs in bold italic type and plain type, which have equal authority. Paragraphs in bold italic type indicate the main principles. An individual Standard should be read in the context of the objective stated in that Standard and this Preface.

(7) The ASB may consider any issue requiring interpretation on any Accounting Standard. Interpretations will be issued under

¹ With the issuance of this revised Preface, General Clarification (GC) – 12/2002, Applicability of Accounting Standards to Co operative Societies, issued by the Accounting Standards Board in October 2002, stands superseded.

² With the issuance of this revised Preface, Announcement on 'Applicability of Accounting Standards to Charitable and/or Religious Organisations', approved by the Council [published in 'The Chartered Accountant', September 1995 (page 79)], stands superseded.

the authority of the Council. The authority of Interpretation is the same as that of Accounting Standard to which it relates.

5. Procedure for Issuing an Accounting Standard

Broadly, the following procedure is adopted for formulating Accounting Standards:

(1) The ASB determines the broad areas in which Accounting Standards need to be formulated and the priority in regard to the selection thereof.

(2) In the preparation of Accounting Standards, the ASB will be assisted by Study Groups constituted to consider specific subjects. In the formation of Study Groups, provision will be made for wide participation by the members of the Institute and others.

(3) The draft of the proposed standard will normally include the following:

- (a) Objective of the Standard,
- (b) Scope of the Standard,
- (c) Definitions of the terms used in the Standard,
- (d) Recognition and measurement principles, wherever applicable,
- (e) Presentation and disclosure requirements.

(4) The ASB will consider the preliminary draft prepared by the Study Group and if any revision of the draft is required on the basis of deliberations, the ASB will make the same or refer the same to the Study Group.

(5) The ASB will circulate the draft of the Accounting Standard to the Council members of the ICAI and the following specified bodies for their comments*:

- (i) Department of Company Affairs (DCA)
- (ii) Comptroller and Auditor General of India (C&AG)
- (iii) Central Board of Direct Taxes (CBDT)
- (iv) The Institute of Cost Accountants of India (ICAI)
- (v) The Institute of Company Secretaries of India (ICSI)
- (vi) Associated Chambers of Commerce and Industry (ASSOCHAM), Confederation of Indian Industry (CII) and Federation of Indian Chambers of Commerce and Industry (FICCI)
- (vii) Reserve Bank of India (RBI)
- (viii) Securities and Exchange Board of India (SEBI)
- (ix) Standing Conference of Public Enterprises (SCOPE)
- (x) Indian Banks' Association (IBA)
- (xi) Any other body considered relevant by the ASB keeping in view the nature of the Accounting Standard

(6) The ASB will hold a meeting with the representatives of specified bodies to ascertain their views on the draft of the proposed Accounting Standard. On the basis of comments received and discussion with the representatives of specified bodies, the ASB will finalise the Exposure Draft of the proposed Accounting Standard*.

(7) The Exposure Draft of the proposed Standard will be issued for comments by the members of the Institute and the public. The Exposure Draft will specifically be sent to specified bodies (as listed above), stock exchanges, and other interest groups, as appropriate.

(8) After taking into consideration the comments received, the draft of the proposed Standard will be finalised by the ASB and submitted to the Council of the ICAI.

(9) The Council of the ICAI will consider the final draft of the proposed Standard, and if found necessary, modify the same in consultation with the ASB. The Accounting Standard on the relevant subject will then be issued by the ICAI.

(10) For a substantive revision of an Accounting Standard, the procedure followed for formulation of a new Accounting Standard, as detailed above, will be followed.

(11) Subsequent to issuance of an Accounting Standard, some aspect(s) may require revision which are not substantive in nature. For this purpose, the ICAI may make limited revision to an Accounting Standard. The procedure followed for the limited revision will substantially be the same as that to be followed for formulation of an Accounting Standard, ensuring that sufficient opportunity is given to various interest groups and general public to react to the proposal for limited revision.

6. Compliance with the Accounting Standards

(1) The Accounting Standards will be mandatory from the respective date(s) mentioned in the Accounting Standard(s). The mandatory status of an Accounting Standard implies that while discharging their attest functions, it will be the duty of the members of the Institute to examine whether the Accounting Standard is complied with in the presentation of financial statements covered by their audit. In the event of any deviation from the Accounting Standard, it will be their duty to make adequate disclosures in their audit reports so that the users of financial statements may be aware of such deviation.

(2) Ensuring compliance with the Accounting Standards while preparing the financial statements is the responsibility of the management of the enterprise. Statutes governing certain enterprises require of the enterprises that the financial statements should be prepared in compliance with the Accounting Standards, e.g., the Companies Act, 2013, and the Insurance Regulatory and Development Authority (Preparation of Financial Statements and Auditor's Report of Insurance Companies) Regulations, 2000.

(3) Financial Statements cannot be described as complying with the Accounting Standards unless they comply with all the requirements of each applicable Standard.

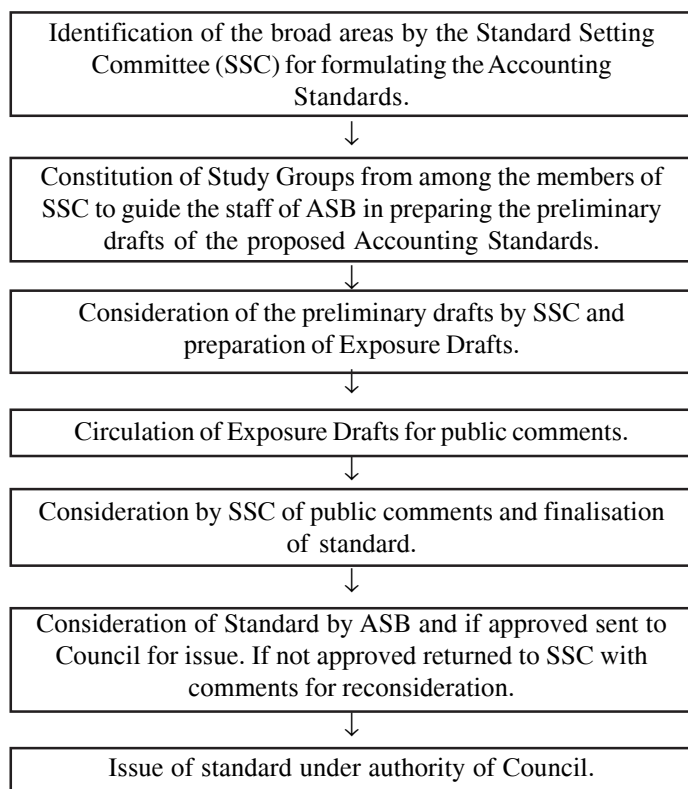
* The Council of ICAI, at its 29th meeting held on December 16, 17, 2009 decided that procedures in paragraph 5 and 6 need not be followed in respect of Accounting Standards issued hitherto.

The Companies Act, 1956 is being replaced by the Companies Act 2013 in a phased manner. Now, as per section 133 of the Companies Act, 2013, the Central Government may prescribe the standards of accounting or any addendum thereto, as recommended by the Institute of Chartered Accountants of India, constituted under section 3 of the Chartered Accountants Act, 1949, in consultation with and after examination of the recommendations made by the National Financial Reporting Authority (NFRA). Section 132 of the Companies Act, 2013 deals with constitution of NFRA.

However, the Ministry of Corporate Affairs has, vide clarification dated 13th September, 2013, announced that the existing Accounting Standards notified under the Companies Act, 1956 shall continue to apply till the Standards of Accounting or any addendum thereto are prescribed by Central Government in consultation and recommendation of the National Financial Reporting Authority.

The Advisory Group on Accounting and Auditing set up by Reserve Bank of India in its report (January 2001) has proposed the following procedure for standard setting in India.

Proposed Standard Setting Procedure of the Accounting Standards Board



Existing Standards

In India, the Accounting Standards Board (ASB) of the Institute of Chartered Accountants of India (ICAI) is responsible for setting Accounting Standard (AS). The ASB comprises members of the Central Council of ICAI as well as certain members from the professional, industry and various other segments and government agencies.

The ASB of ICAI has issued 32 accounting standards so far. The list of accounting standards issued is given hereunder:

1. AS-1 Disclosure of Accounting Policies. (Revised standard titled as 'Presentation of Financial Statements')
2. AS-2 (Revised), Valuation of Inventories.
3. AS-3 (Revised) Cash Flows Statements.
4. AS-4 (Revised) Contingencies and Events Occurring after the Balance Sheet Date. (Revised standard titled as Events Occurring After the Balance Sheet Date)
5. AS-5 (Revised) Net Profit or Loss for the Period, Prior Period Items and Changes in Accounting Policies. (Revised standard titled as Accounting Policies Changes in Accounting Estimates and Errors)
6. AS-6 (Revised) Depreciation Accounting.
7. AS-7 (Revised) Accounting for Construction Contracts.
8. AS-8 Accounting for Research and Development. (Withdrawn and included in AS26)
9. AS-9 Revenue Recognition.
10. AS-10 Accounting for Fixed Assets. (Revised standard to be titled as Property, Plant and Equipment)
11. AS-11 (Revised) Accounting for the effects of changes in Foreign Exchange Rates.
12. AS-12 Accounting for Government Grants. (Revised standard titled as Accounting for Government Grants and Disclosure of Government Assistance)
13. AS-13 Accounting for Investments.
14. AS-14 Accounting for Amalgamations.
15. AS-15 Employee Benefits (Revised) 2005.
16. AS-16 Borrowing Costs.
17. AS-17 Segment Reporting.
18. AS-18 Related Party Disclosures.
19. AS-19 Leases.
20. AS-20 Earnings Per Share.
21. AS-21 Consolidated Financial Statements.
22. AS-22 Accounting for Taxes on Income.
23. AS-23 Accounting for Investments in Associates in Consolidated Financial Statements.
24. AS-24 Discontinuing Operations.
25. AS-25 Interim Financial Reporting.
26. AS-26 Intangible Assets.
27. AS-27 Financial Reporting of Interest in Joint Venture.
28. AS-28 Impairment of Assets.
29. AS-29 Provisions, Contingent Liabilities and Contingent Assets.

30. AS-30 Financial Instruments: Recognition and Measurement.
31. AS-31 Financial Instruments: Presentation.
32. AS-32 Financial Instruments: Disclosures.

Guidance Notes

The ICAI has also issued some Guidance Notes.

Guidance Notes are primarily designed to provide guidance to members of ICAI on matters which may arise in the course of their professional work and on which they may desire assistance in resolving issues which may pose difficulty. Guidance Notes are recommendatory in nature. A member should ordinarily follow recommendations in a guidance note relating to an auditing matter except where he is satisfied that in the circumstances of the case, it may not be necessary to do so.

In a situation where certain matters are covered both by an Accounting Standard and a Guidance Note, issued by the Institute of Chartered Accountants of India, the Guidance Note or the relevant portion thereof will be considered as superseded from the date of the relevant Accounting Standard coming into effect, unless otherwise specified in the Accounting Standard.

The following is the list of applicable guidance notes on accounting aspects:

1. GN(A) 5 (Issued 1983) Guidance Note on Terms Used in Financial Statements
2. GN(A) 6 (Issued 1988) Guidance Note on Accrual Basis of Accounting
3. GN(A) 9 (issued 1994) Guidance Note on Availability of Revaluation Reserve for Issue of Bonus Shares
4. GN(A) 11 (issued 1997) Guidance Note on Accounting for Corporate Dividend Tax
5. GN(A) 12 (Revised 2000) Guidance Note on Accounting Treatment for Excise Duty
6. Guidance Note on Accounting Treatment for MODVAT/ CENVAT
7. GN(A) 18 (Issued 2005) Guidance Note on Accounting for Employee Share-based Payments
8. GN(A) 22 (Issued 2006) Guidance Note on Accounting for Credit Available in Respect of Minimum Alternative Tax under the Income Tax Act, 1961
9. GN(A) 24 (Issued 2006) Guidance Note on Measurement of Income Tax Expense for Interim Financial Reporting in the Context of AS 25
10. Guidance Note on Applicability of Accounting Standard (AS) 20, Earnings per Share.
11. Guidance Note on Remuneration paid to key management personnel whether a related party transaction.
12. Guidance Note on Applicability of AS 25 to Interim Financial Results.

13. Guidance Note on Turnover in case of Contractors.
14. Guidance Note on the Revised Schedule VI to the Companies Act, 1956 (Now Schedule III to the Companies Act, 2013)

MOVE TOWARD GLOBAL CONVERGENCE

Recent activities have moved the goal of one set of universally accepted financial reporting standards out of the theoretical sphere and closer to reality. IFRS have been or are in the process of being adopted in many countries. Other countries maintain their own set of standards but are working with the LASB to converge their standards and IFRS.

In India, Government of India (Ministry of Corporate Affairs) has notified Companies (Indian Accounting Standards) Rules, 2015 on 16th February 2015. Indian Accounting Standards (Ind AS) are accounting standards prescribed under section 133 of the Companies Act, 2013. These accounting standards are exhibited in Figure 11.3 below.

Notification	Description
G.S.R dated 16 Feb 2015	The Companies (Indian Accounting Standards) Rules, 2015.
Indian Accounting Standard (Ind AS) 101	First-time Adoption of Indian Accounting Standards
Indian Accounting Standard (Ind AS) 102	Share-based Payment
Indian Accounting Standard (Ind AS) 103	Business Combinations
Indian Accounting Standard (Ind AS) 104	Insurance Contracts
Indian Accounting Standard (Ind AS) 105	Non-current Assets Held for Sale and Discontinued Operations
Indian Accounting Standard (Ind AS) 106	Exploration for and Evaluation of Mineral Resources
Indian Accounting Standard (Ind AS) 107	Financial Instruments: Disclosures
Indian Accounting Standard (Ind AS) 108	Operating Segments
Indian Accounting Standard (Ind AS) 109	Financial Instruments
Indian Accounting Standard (Ind AS) 110	Consolidated Financial Statements
Indian Accounting Standard (Ind AS) 111	Joint Arrangements
Indian Accounting Standard (Ind AS) 112	Disclosure of Interests in Other Entities
Indian Accounting Standard (Ind AS) 113	Fair Value Measurement
Indian Accounting Standard (Ind AS) 114	Regulatory Deferral Accounts
Indian Accounting Standard (Ind AS) 115	Revenue from Contracts with Customers

Indian Accounting Standard (Ind AS) 1	Presentation of Financial Statements
Indian Accounting Standard (Ind AS) 2	Inventories
Indian Accounting Standard (Ind AS) 7	Statement of Cash Flows
Indian Accounting Standard (Ind AS) 8	Accounting Policies, Changes in Accounting Estimates and Errors
Indian Accounting Standard (Ind AS) 10	Events after the Reporting Period
Indian Accounting Standard (Ind AS) 12	Income Taxes
Indian Accounting Standard (Ind AS) 16	Property, Plant and Equipment
Indian Accounting Standard (Ind AS) 17	Leases
Indian Accounting Standard (Ind AS) 19	Employee Benefits
Indian Accounting Standard (Ind AS) 20	Accounting for Government Grants and Disclosure of Government Assistance
Indian Accounting Standard (Ind-AS) 21	The Effects of Changes in Foreign Exchange Rates
Indian Accounting Standard (Ind AS) 23	Borrowing Costs
Indian Accounting Standard (Ind AS) 24	Related Party Disclosures
Indian Accounting Standard (Ind AS) 27	Separate Financial Statements
Indian Accounting Standard (Ind AS) 28	Investments in Associates and Joint Ventures
Indian Accounting Standard (Ind AS) 29	Financial Reporting in Hyperinflationary Economies
Indian Accounting Standard (Ind AS) 32	Financial Instruments: Presentation
Indian Accounting Standard (Ind AS) 33	Earnings per Share
Indian Accounting Standard (Ind AS) 34	Interim Financial Reporting
Indian Accounting Standard (Ind AS) 36	Impairment of Assets
Indian Accounting Standard (Ind AS) 37	Provisions, Contingent Liabilities and Contingent Assets
Indian Accounting Standard (Ind AS) 38	Intangible Assets
Accounting Standard (Ind-AS) 40	Investment Property
Indian Accounting Standard (Ind AS) 41	Agriculture

Figure 11.3: List of Ind-AS3

Source: www.mca.gov.in/ministry2/stand.html

Timelines have been released by the Ministry of Corporate Affairs (MCA) for adoption of Indian Accounting Standards (Ind AS), which are converged with the International Financial Reporting Standards (IFRS).

All companies with a net worth of Rs 500 crore or more will have to apply the new Ind-AS from April 1, 2016. Comparative information of the earlier year also has to be provided. Even the holding, subsidiary, joint venture or associate company will have to follow suit. In a phased manner, Ind-AS will be made mandatory for other companies (Figure 11.4).

Companies, at their option, can adopt Ind-AS for the accounting period beginning April 1, 2016 this year. These timelines do not apply to banks, insurance companies and non-banking finance companies.

Indian companies will not be adopting in full the internationally accepted accounting standards. But Ind-AS is being viewed as closer to the international norms. This could make it easier for Indian companies to attract foreign investments.

PARAMETER	MANDATORY ADOPTION
● All companies with net worth of ₹ 500 cr or more (whether listed or unlisted)	● Fiscal beginning on or after April 1, 2016
● Listed companies or those which are being listed (in India or outside) and having net worth of less than ₹ 500 cr	● Fiscal beginning on or after April 1, 2017
● Unlisted companies having net worth of ₹ 250 cr or more but less than ₹ 500 cr	● Fiscal beginning on or after April 1, 2017

Figure 11.4 : ADOPTING IND-AS

Note: Timeline also applies to holding, subsidiary, JV or associate company of such companies.

Ind-AS is the convergence of the current accounting standards with the globally accepted International Financial Reporting Standards (IFRSs). However, Ind ASs are not fully compliant with IFRSs. It should be noted that Indian companies with an international presence already prepare one set of IFRS – compliant accounts for overseas regulators and thus such companies will find the transition easier.

Attempts Made by Organizations in India toward Convergence

In India, many bodies are actively participating and encouraging convergence to comply with IFRS. Some of these organization are as follows:

1. Securities and Exchange Board of India (SEBI)

SEBI has been proactively involved in the process of convergence of Indian Accounting Standards with IFRS. As a step towards encouraging convergence with IFRS, listed entities

having subsidiaries have been allowed an option to submit consolidated accounts as per IFRS.

2. Different Industry Associations

Industry associations such as Federation of Indian Chambers of Commerce and Industry (FICCI), Associated Chambers of Commerce (Assocham) and Confederation of Indian Industries (CII) can also play an important role in preparing their constituents for the adoption of the IFRSs in the following ways:

- (i) Holding discussions on the Exposure Drafts of the IFRSs so that the views of the Association can be sent to the IASB/ICAI.
- (ii) Conducting seminars/workshops on IFRSs for the industry participants to provide them appropriate training.
- (iii) Provide industry-specific forums to their constituents to discuss the industry specific issues in implementation of IFRSs.

3. The Institute of Chartered Accountants of India (ICAI)

The governments of India is keen to promote convergence and in this process, the Ministry of Corporate Affairs has committed itself for convergence of Indian entities with IFRS. ICAI was given the responsibility of formulating the convergence process and ensure smooth convergence. For this purpose, the Accounting Standard Board (ASB) of ICAI constituted a Task Force in the year 2006 to explore the approach for convergence with IFRS and lay down the road map for convergence with IFRS. Since then, ICAI has been relentlessly making extensive analysis of various phases the convergence process would go through. It has identified the legal and regulatory requirements arising out of convergence with IFRS. ICAI has also recommended changes in the respective Acts, guidelines and other regulatory provision related to RBI, SEBI, NACAS and IRDA and has submitted its recommendations to the respective authorities.

The ASB of ICAI developed a Concept Paper to discuss all issues relating to convergence and lay down a strategy for convergence with IFRS.

The ICAI is also playing the role of educator/trainer to prepare its members for adoption of IFRSs, holding continuing professional education workshops, and preparation of educational material. ICAI had revised the curriculum of Chartered Accountancy Course to acquaint their students about convergence and IFRS. ICAI initiated dialogue with the Government and regulators to bring about changes in laws and regulations to make Indian financial statements IFRS-compliant.

Although, the focus of ICAI has always been on developing high quality standards, resulting in transparent and comparable financial statements, deviations from IFRSs were made where it was considered that these were not consistent with the laws and business environment prevailing within the country.

REASONS FOR SLOW PROGRESS MADE BY ASB IN INDIA

The Indian ASB's efforts in respect of accounting standards, although commendable, are not very satisfactory taking into account the work done in this area in USA, UK and other countries. Many factors are responsible for the slow progress of ASB in standards setting. Some such factors are as follows:

1. *Indifference Attitude* — The Institute of Chartered Accountants of India is expected to carry on two basic activities: (a) conducting chartered accountancy examination and preparing CAs to perform accounting and auditing function and (b) formulating accounting and auditing standards. The ICAI has, in the past, devoted its major time in former activity and had not given required attention to the latter accounting activity. The ICAI has been evaluating its performance largely in terms of how ably it has succeeded in producing a large number of chartered accountants. As a result of it, the ASB could not act earlier as an efficient accounting body and could not speed up the process of standards setting.
2. *Lack of Openness in Standard Setting* — The standards setting programme of India has not had a tradition of encouraging critics who are free to indulge in even handed criticism of its performance. A profession or a standards setter whose effectiveness depends on public confidence has a special obligation to retain that confidence through a conscious and deliberate effort to open itself to the public and acknowledge mistakes. In standards setting, concerned parties have to know what is happening. It is for better to be involved in an open system than in one where there is uncertainty as to what is being done and what arguments are most persuasive.
3. *Accountants' and auditors' preference for status quo* — It has been noticed that the accounting profession and the persons involved in it do not like changes for the sake of preserving the *status quo*, although some proposals may appear to change for the sake of change. This is true not only of the accounting profession but other professions as well. However, there are some truths, which the accounting profession should accept such as (a) change is the order of time. Even if we were inclined to hold the past, it would be unrealistic to try it. (b) profession has to change and adopt with developments in the larger economic and social worlds of which it (profession) is a part. (c) inevitably there will be changes we do not like, but the accounting profession should be prepared to practise under conditions that are less favourable. The function performed by accounting profession is useful to society and serve the public interest.
4. *Government intrusion in financial reporting area* — In India, there is found more government intrusion not only in business matters but in laws relating to company

accounts and reporting. Government intervention has been justified as the accounting profession has failed to provide accounting leadership. Accounting profession needs people who can give political and technical leadership. Accounting leadership does not mean only reacting and resisting but exercising leadership and recognising leadership responsibilities.

5. *Accounting Research*—In India, in the past, not much accounting research has been conducted and recently, whatever accounting researches have been done, have not been seriously considered by the standard setter in India.

Some may question the role of research in standard setting. Many academicians comment that the route from research findings to accounting policymaking is quite confusing and often impossible. On the other hand, many practitioners claim that the research findings are inapplicable to important practical problems. These critics tend to be intolerant of any research that be used in dealing with the next day's problem. Goldberg²⁴ observes on the limitations of empirical research in accounting:

“...(it) should serve to emphasise the limitations of much of the so-called empirical research in accounting that has been carried out in recent decades and has occupied so many columns of accounting literature with its reports. Many of these researchers give the impression of having mastered an investigating technique, usually borrowed from some other discipline, and then having sought a topic in or related to the field of accounting in order to apply it. In their findings, negative and tentative outcomes abound. It is as if an army of research technicians have been limping around in circles waving their intellectual armoury in a frenzied display of futile offensives against an imaginary foe”.

“Accounting researchers may aspire to act as natural scientists act—and it has become a fashion for many in recent years to claim to do this—but while they apply what seems to them the methods of science, they themselves seem not to realise that what they are exploring is the activity of human beings whose statistical uniformity is one of artificial (= non-natural) categorisation. Much research has, indeed, now been done in behavioural aspects of accounting, frequently based on techniques used in the behavioural sciences. The question of the significance of the behaviour of the selected subjects has not often been raised specifically”.

“There are important distinctions between the science of nature and the social sciences of human activity. For one thing, natural scientists often assume an inherent uniformity in the subject matter of their observations, and can either ignore or explain

away departures from uniform application of a hypothesis. When departures from uniformity are seen to be serious enough to command attention, a fresh hypothesis is needed. Under such a regime as this, knowledge of our natural environment has expanded enormously and at a continually accelerated rate in the last three or four centuries”.

“There seems to be unavoidable differences when human activity is under observation. As human beings themselves, observers cannot avoid being aware that the objects of their attention are capable of self-awareness and can and often do act as having some freedom of will as well as ingrained instincts. While some human activity results from and depends on instinctive responses, much depends on the exercise of reasoning—rational and rationality may vary between people. To arrive at a satisfying explanation of human activity, we surely need to recognise this variability in the perception and, in some cases, the concept of rationality in human activity”.

However, accounting research can contribute effectively to standards setting. There are many researchers and studies which have recognised the importance of accounting researches in standards setting.

*According to Beaver and Demski*²⁵:

“...research plays at least two roles: (1) to provide evidence on various aspects of Vi(the value of various financial reporting alternatives)... and (2) to provide evidence on the consequences of various mappings from VI to V (the preferred alternative)... Of course, none of this research will—in and of itself—resolve the fundamentally ethical question of how preferences should be weighed across individuals in determining financial reporting policies. We are, however, hopeful it will provide some information on what the consequences of alternative choices may be.”

*According to Mautz*²⁶

“Accounting research has a twofold function. First, it must discover as best it can and taking into account all available information, the theoretically preferred solution to the issue at hand. This requires development of an overall structure of theory so that the specific issue can be placed in perspective; it also requires identification and evaluation of the various ways in which the specific issue might be resolved. Second, and this is an indispensable part of applied research, steps must be taken to determine just how far in the direction of that preferred solution a standard can go and still be acceptable to a majority of those concerned. What are the various interests? What impact will alternative solutions have upon them? Of the various solutions that can be reconciled with the overall theory, which provide the greatest total benefit at least cost?”

Beaver²⁷ comments:

“Our role (as academicians) is to provide information for policy decisions.. concerning:

- (a) What issues ought to be raised in considering a given financial reporting topic, and
- (b) What the potential consequences are, given the existing research.

....For example, while our colleagues in economics may not have a comparative advantage in recommending the socially optimal form of minimum wage legislation, they may have a comparative advantage in communicating research regarding the potential consequences or effects of minimum wage legislation on unemployment.”

A FEW SUGGESTIONS

As stated earlier, there are many problems in standards setting tasks. It is difficult to prepare a complete list of all possible measures to strengthen the process of setting accounting standards and remove the weaknesses in the existing framework. However, some measures are suggested here. These suggestions are only tentative and are generally based on an accounting theory perspective and analysis of environmental variables. These deserve further analytical and empirical investigation. A continuous enquiry is also needed to suggest other and alternative reforms.

1. The Institute of Chartered Accountants of India should recognise more the importance of standards setting and give it much more recognition and place among its diverse activities.
2. The ASB should undertake and/or commission a research study of the existing literature prior to undertaking a study of an accounting issue. This comprehensive research study should prepare and collect all arguments in favour of all related issues and sides. Since standards setting is a continuous programme, the ASB should make a time table for research studies for a longer time period with a lead time sufficient not to delay the ASB's deliberations.
3. The standards setting requires consensus to satisfy all concerned parties through subsequent standards and statements. There are many difficulties in achieving consensus such as lack of intellectual and analytical analysis, permitting many solutions (some of which may not be desirable) to a given problem, causing deal in standards setting which results in a longjam of accounting issues to be solved. This necessitates that the criteria of 'consensus' in standards setting should be used with proper understanding and within defined limits. In a democracy, one must operate broadly within a consensus, but that does not mean that on every issue one must count the votes. Unanimity is not required for standards setting or policy making. Actions do have to

be within the boundaries of a broad consensus, but that does not mean they cannot be near the boundaries:

4. The enforcement of accounting standards is a difficult problem and requires proper investigation. It is argued that standards should have legal backing. In absence of legal mandate, business firms may not feel encouraged to follow standards.
5. The ASB should, in future, act as 'accounting reader' in standards setting area. In our country, this task cannot be given to private sector standard setting body. Also, the government cannot handle this job with speed, flexibility and purposefulness. It seems that there will be no drastic changes in the current set up and the present method will continue. A body like Accounting Standards Board (ASB) can use the technical expertise of the whole accounting and auditing profession and therefore its technical solutions to accounting problems are likely to be better than those arrived at by civil servant experts. The ASB can easily and promptly maintain flexibility in accounting and reporting, whereas there could be too much delay on the part of government as financial reporting is not considered a hot political issue.
6. Accounting Standards Board should be reorganised and strengthened. As a better alternative, ASB should be made a separate organisation and authority and should not work under the supervision and control of ICAI. This will ensure adequate attention toward standards setting and 'a free from bias' functioning which is necessary in standards setting.
7. A review committee should be set up to make an appraisal of standards after they have been formulated, to ensure that these standards are generally beneficial to the wider society and have been issued only after following a due process procedure. Review should not be done by the ASB itself. A separate body would allow the ASB to properly concentrate more on the technical and detailed aspects of preparing standards. The Review Committee would accept standards or refer them back to ASB. The Review Committee would thus act as a check and balance on ASB. If the ASB and the Review Committee, after negotiation, could not agree, a joint sitting should be held and the matter should be resolved in the joint meeting.
8. A suggestion has recently emerged in accounting literature to establish an 'Appeal Court' for those who believe that standards issued are against the accepted 'true and fair' philosophy. It is said that standards which involve social and political choices cannot be justified solely using either theory or empirical evidence. Such an appeal system would be directly in an area which so far, at least has been left to the profession. More importantly, it would help to ensure that the whole compass of accounting standards is either consistent or that concepts used for one standard could be

reasonably distinguished and any difference from other seemingly similar standards explained.

*Bromwich*²⁸ argues:

“Such a mechanism would provide some authoritative monitoring of accounting standards and would document to some degree any learning experience concerning standards. This experience is not presently recorded in any formal way. This process would allow ‘case’ law to be built up without it becoming a burden on accounting policy makers. Such case law could, if necessary, always be overruled. Of greater importance, would be the ‘Court’s’ insistence on consistent reasoning between standards. This would allow a type of conceptual framework to be built up. Concepts found useful for one standard could on a priori be expected to be used in similar settings with other standards. This should mitigate the tendency of accounting policy makers to approach each accounting problem in isolation from their deliberations over other standards. It would, for example, be of interest to consider the implications for other standards of applying to them the same concepts as used for the foreign exchange and the current cost accounting standard. Some possible conditions which allow the choice of an accounting standard for a given accounting problem to be made without considering the interaction with other standards on the welfare of the business community are known. They are, however, fairly restrictive.”

Goldberg²⁹ commenting on accounting regulation says that the way to more, socially sound regulation lies as:

- clear indication of the need for and purpose of each regulation (in, whatever form).
- clear expression of the prescribed or proscribed activity.
- protection of the victim of any misfeasance or malfeasance together with compensation of victims by the perpetrators or beneficiaries of any departure from the regulation.
- ensuring that penalties and/or punishment shall be imposed on the individual human beings responsible (whether as instigators or perpetrators).

Conclusion

Accounting Standards are essential to the efficient functioning of the economy because economic decisions, which influence allocation of resources, rely heavily on credible, concise and understandable financial information. Ideally, such information should make it possible for investors to evaluate the investment opportunities offered by different firms and allocate or ration scarce resources to the most efficient ones. Financial information about the operations and financial position of individual entities is also used by the public in making various other kinds of decisions. This process results in the optimal distribution of scarce resources within the economy and maximises, in turn potential benefits to society.

There is a need for continued improvement in accounting standards and disclosure rules to resolve various accounting aspects and to simplify, to a greater extent, the financial reporting system. Accounting bodies, accountants associations and governmental agencies in different countries of the world have made progress in reducing accounting alternatives and producing standards that, in most cases, reflect objective accounting measurements and thus are closer to the users’ perception of economic reality. These standards setters are working through a backlog of accounting issues but, with many forthcoming standards, many of the major accounting problems of present concern to investors will be resolved.

The need for a speedy integration of the Indian Accounting Standards with the International Financial Reporting Standards cannot be overemphasised. India today enjoys a very small share of the international funds earmarked for emerging markets. There is a growing realisation that these funds will increasingly flow to those markets which are strongly regulated and which have an ethical base. Assurance that financial statements are prepared in accordance with internationally accepted accounting standards and audited on a basis comparable with international practice is a key plank in the system of regulation. Apart from this, international investors and lenders will be willing to provide funds only to those enterprises whose financial statements are prepared on lines with which they are familiar. But regulation alone cannot achieve the desired goal. If international financial reporting standards are to be speedily introduced and implemented in this country, what is needed is the voluntary acceptance of such standards by the preparers of financial statements, the users of those statements, the accounting profession, the regulators and the various departments of the Government responsible for corporate and fiscal legislation. Each of these must be prepared to make the individual sacrifices which will ultimately result in the common good.

REFERENCES

1. David Solomons, *Making Accounting Policy*, New York: Oxford University Press, 1986, p. 42.
2. American Institute of Certified Public Accountants, *Establishing Financial Accounting Standards: Report of the Study on Establishment Accounting Principles*, New York: AICPA, March 1972, p. 19.
3. A.C. Littleton, *Structure of Accounting Theory*, American Accounting Association, 1953, p. 143.
4. Michael Bromwich, *The Economics of Accounting Standards Setting*, Englewood Cliffs: Prentice Hall International, 1985, p. 1.
5. R.I. Ticker, Corporate Responsibility, Institutional Governance and the Roles of Accounting Standards,” in Michael Bromwich and Anthony G. Hopwood (Eds.), *Accounting Standards Setting, An International Perspective*, London: Pitman Books Ltd., 1983, p.27.
6. David Solomons, “The Political Implication of Accounting and Accounting Standards Setting,” *Accounting and Business Research* (Spring 1983), pp. 107-118.

7. George J. Benston, "The Establishment and Enforcement of Accounting Standards: Methods, Benefits and Costs," *Accounting and Business Research* (Winter 1980), p.56.
8. George J. Benston, "An Analysis of the Role of Accounting Standards for Enhancing Corporate Governance and Social Responsibility" in Michael Bromwich and Anthony G. Hopwood (Eds.) *Accounting Standards Setting*, London: Pitman Books, 1983, p. 19.
9. Peter E.M. Standish, "The Rationale for Accounting Standards Setting", in MJR Graffin (Ed.), *Contemporary Accounting Thought*, Sydney: Prentice Hall of Australia, 1984, p.33.
10. Ross L. Watts and Jerold L. Zimmerman, "Toward a Positive Theory of the Determination of Accounting Standard," *The Accounting Review* (January 1978), p. 132.
11. David Solomans, *Ibid.*, p. 241.
12. Joshua Ronen, "The Dual Role of Accounting: A Financial Economic Perspective" in James L. Bicksler (ed.), *Handbook of Financial Economics*, Amsterdam: North Holland, 1979, p. 426.
13. Michael Bromwich, *Ibid.*, pp. 9596.
14. David Mosso, "Self Regulation as a Prerequisite to the Development of Accounting Theory," *Accounting Research Convention*, University of Alabama, USA, 1979.
15. George J. Bentson, *Corporate Financial Disclosure in the UK and USA*, London: ICAEW, 1976, pp. 241253.
16. Michael Bromwich, *Ibid.*, p. 103.
17. Charles T. Horngreen, "The Marketing of Accounting Standards," *Journal of Accountancy* (Oct. 1973), p. 61.
18. David Tweedie and Geoffrey Whittington, *The Debate on Inflation Accounting*, Cambridge: University Press, 1984, p. 318.
19. David Tweedie and Geoffrey Whittington, *Ibid.*, pp. 328329.
20. Charles T. Horngreen, *Accountancy in the 1980s Some Issues, Proceedings of Arthur Young Professors Round Table 1976*, p. 180.
21. Financial Accounting Standards Board, *Facts About FASB*, October, 1985, p. 1.
22. George J. Benston, "The Establishment and Enforcement of Accounting Standards: Methods, Benefits and Costs," *Ibid.*, p. 60.
23. Louis Harris, *A Study of the Attitudes Toward an Assessment of the FASB*, Stamford, FASB, 1985.
24. Louis Goldberg, *A Journey into Accounting Thought*, Routledge, 2001, pp. 43-44.
25. W. Beaver and J. Demski, "The Nature of Financial Accounting Objectives: A Summary and Synthesis", in *Studies on Financial Accounting Objectives*, University of Chicago, Chicago, 1974.
26. R.K. Mautz, "The Other Accounting Standards Board" *Journal of Accountancy* (February 1974), Pp 5660.
27. W. Beaver, Proposed Role of the Committee, American Accounting Association, Committee on Financial Accounting Standards (September, 1975).
28. Michael Bromwich, *The Economics of Accounting Standards Setting*, Prentice Hall International, 1985, p. 120.
29. Louis Goldberg, *Ibid.*, p. 318.

QUESTIONS

1. Define the term standards. What factors are responsible for the standardisation programme in many countries of the world?
2. "Accounting Standards aim to protect users of financial reports by providing reliable and comparable financial statements." Do you agree with this statement? Give reasons.
3. How are setting accounting standards useful to accountants and auditors?
4. "USA seems to be a leader in setting accounting standards among the world countries." Examine this statement and discuss the progress made by USA in this area.
5. Evaluate Financial Accounting Standards Board as a standard setter in USA.
6. "While the Securities and Exchange Commission (SEC), (USA) has maintained its general policy of reliance on the accounting profession for accounting standards setting, it has nevertheless not adopted a totally passive role." In the light of this statement, bring out clearly the relationship between SEC and Financial Accounting Standards Board with regard to framing accounting standards and disclosure rules.
7. Compare and contrast USA and UK with regard to procedure for establishing accounting standards.
8. "It is not likely that a (governmental) agency will or even can determine the optimal set of information to be disclosed or 'the best' accounting standards to be followed." (George J. Benston). Do you support the above statement. Give your opinion about the role of a Government in standard setting in a country like India.
9. Evaluate the standards setting programmes of Accounting Standards Board in India.
10. "India has not made significant progress in accounting standard setting." Give reasons for slow progress made by ASB (India) in the light of this statement. (M.Com., Delhi, 1996)
11. Give your opinion as to whether standards should be set by Government or a private sector accounting body? (M.Com., Delhi, 2013)
12. What difficulties are being faced by standard setters in establishing accounting standards?
13. "Accounting standard setting is certainly a political process, responding to pressures from the economic environment, and compromising between the conflicting interests of different parties." Explain this statement.
14. Offer your suggestions to be considered by a standard setter before establishing accounting standards.
15. Explain the role of management in standard setting.
16. State the salient features of Accounting Standards (AS) No. 12 issued recently by the Institute of Chartered Accountants of India (ICAI). Is it mandatory? (M.Com., Delhi, 1992)
17. Describe the major considerations governing the selection and application of accounting policies as laid down in AS No. 1 issued in 1979 by the ICAI. (M.Com., Delhi, 1992, 1997)
18. Distinguish between standards and principles. (M.Com., Delhi, 1991)
19. Distinguish between accounting standards and concepts. (M.Com., Delhi, 1993)

20. Discuss the pros and cons of the free market and regulatory approaches to standard setting. (*M.Com., Delhi, 1995*)
21. Discuss the purpose underlying the issue of an accounting standard. Whether it is mandatory for companies to follow the accounting standard in India? (*M.Com., Delhi, 1997*)
22. What is the status of accounting standards that have been issued in India? In case of noncompliance of an accounting standard, what remedy, if any, is available to investors? (*M.Com., Delhi, 1998*)
23. Discuss in brief the main features of Accounting Standard (AS-3). What changes have been made in this standard? (*M.Com., Delhi, 1998*)
24. Discuss briefly the salient features of Accounting Standard 3 (AS3) issued by the ICAI. What changes, if any, have been made in the revised standard? Give examples. (*M.Com., Delhi, 20001*)
25. Describe the major considerations governing the selection and application of accounting policies as laid down in Accounting Standard-1, issued by the ICAI. Is it mandatory? (*M.Com., Delhi, 1999*)
26. (a) "Accounting standards are something less than the law but more than the professional guidelines." Elaborate the statement indicating:
 - (i) Meaning of accounting standards
 - (ii) Importance of accounting standards
 - (iii) Procedure for formulating accounting standards in India.
 (b) Are accounting standards mandatory under the Companies Act, 1956 as amended upto date? Elaborate. (*M.Com., Delhi, 2003*)
27. (a) Is there any need to exempt small and medium sized companies from the compliance of certain accounting standards issued by the ICAI? If so, identify some of the standards where such exemption may be allowed.
 (b) In what respects is AS3 (Revised) is an improvement over AS3 (Old)? Is it permissible that a company follows the requirements of both the standards simultaneously? (*M.Com., Delhi, 2002*)
28. Critically evaluate progress made by ASB (India) in standard setting.
29. How far accounting research contributes to the development of accounting theory and standards in a country?
30. Discuss the impact of IASs on Indian Accounting Standards?
31. Explain the linkage between Indian Accounting Standards and IAS.
32. How are Indian Accounting Standards made enforceable?
33. What are the duties of auditor with regard to compliance of Indian Accounting Standards?
34. "If standards are not acceptable, if they are not enforceable and if they are not enforced, then they are not standards in any meaningful sense of the word." Comment on the statement.
35. How is the compliance of accounting standards in India ensured? What are the provisions in case Indian Companies do not follow the accounting standards?
36. Define the term standard? Explain the advantages associated with accounting standards. Also, discuss difficulties in setting accounting standards. (*M.Com., Delhi, 2007*)
37. Define the term 'Accounting Standards'? What is its importance in financial accounting and reporting? (*M.Com., Delhi, 2008*)
38. What are the benefits of accounting standards for business enterprises? What is the procedure of setting accounting standards in India? Also, explain the provisions about compliance of accounting standards in India. (*M.Com., Delhi, 2010*)
39. How are accounting standards set in India? What are the rules on compliance with accounting standards in India? (*M.Com., Delhi, 2012*)
40. What is the organizational structure of FASB (USA)?
41. How are standards set by FASB (USA)?
42. Explain the role of SEC in accounting rule making.
43. What is the relationship between FASB and SEC over making accounting rules?
44. Explain status of enforcement of standards in USA.
45. What are Ind ASs. What are their objectives?
46. How many Ind ASs have been notified by Ministry of Corporate Affairs?
47. Do you think Ind ASs are closer to IFRSs.
48. What is the obligation of Indian companies with regard to Ind ASs?



Global Convergence and International Financial Reporting Standards (IFRSs)

NATURE OF HARMONISATION

Harmonisation means maintaining uniformity in financial accounting principles and practices at the international level. It implies international harmony in transactional financial reporting. It aims to narrow the areas of difference and to eliminate undesirable alternative practices in financial reporting. It is process of blending and combining various practices into an orderly structure, which produces synergistic result¹

Harmonisation refers to the degree of coordination or similarity among the various sets of national accounting standards and methods and formats of financial reporting. Harmonization is broken down into two aspects: (1) Material harmonisation (also called *de facto* harmonisation) refers to harmonization among accounting practices of different enterprises whether or not stemming from regulations, and (2) formal harmonization (also called *de jure* harmonization) refers to the process or degree of harmonization present among the accounting rules or regulations of different countries or groups.

Harmonisation involves examining and comparing the different accounting systems in order to note points of agreement and disagreement, and then working towards bringing these different systems together. Those who believe that uniformity is desirable, would, as a first step, need to compare the different systems, then they would need to persuade others that some measure of agreement would be advantageous. They would then work towards harmonisation, seriously attempting to remove differences. They would be working towards the acceptance of some authorised model, a set of standards. When this has been achieved, there would be uniformity. The steps in the harmonisation process, generally speaking, appear to be: comparison move towards harmonisation producing agreed standards and then uniformity in this order. It is possible, of course, to stop at any point in this process².

CONVERGENCE OF ACCOUNTING STANDARDS

The terms 'Harmonisation' and 'Convergence' are often used interchangeably with reference to financial reporting. Both aim at importing worldwide financial reporting and to make the financial information contained in the financial reports comparable, reliable

and transparent. Both aim to build a global financial reporting structure for better evaluation of companies and easing the burden of preparers and users of financial statements.

Convergence means that all standard-setters around the world should agree on a single, high-quality accounting standards. Convergence can be achieved in two ways: either adopt International Financial Reporting Standards (IFRSs) or adapt IFRS to formulate the country's own standards.

Standardisation and Harmonisation

Standardisation involves

- (i) more uniform application of accounting concepts, principles and rules, reporting procedures and legislation;
- (ii) adherence to more unified charts of accounts and statements, which specify the classification categories by economic units, industries and sectors, and which preferably are applicable on an international scale; and
- (iii) greater systematisation of all accounting activities, particularly standardised plans of accounts (this would not only include the classification charts but also the quantitative and qualitative aspects of data)³.

Thus, the term 'harmonisation' is not the same thing as 'standardisation'. Nobes⁴ distinguishes these two terms clearly:

"Harmonisation is a process of increasing the compatibility of accounting practices by setting bounds to their degree of variation. 'Standardisation' appears to imply the imposition of a more rigid and narrow set of rules. However, within accounting, these two words have almost become technical terms, and cannot rely upon normal difference in their meanings."

ARGUMENTS FOR HARMONISATION AND GLOBAL CONVERGENCE

There are strong pressures in favour of greater international harmonisation, and virtually all of the countries in the world now support International Accounting Standards Board (IASB) efforts to develop a set of international accounting standards. The fact that so many different international organisations are now engaged

in international harmonisation, is a clear evidence that the need for such harmonisation has become widely recognised.

There are many interest groups (beneficiaries) such as investors, multinational companies, large international accounting firms, regional economic groups, and developing countries who would benefit from harmonisation and who have contributed towards harmonisation.

1. Growth in International Business—The main stimuli for harmonisation comes from the enormous expansion that has taken place in world trade and in international investment since the end of World War II. As international business and investment multiplies, accounting's international dimension broadens, international financial reporting has become more important as the tool of communication among businessmen, entrepreneurs, financiers and investors. At the same time, variations are evolving in accounting principles, audit practices, financial statement presentations and professional standards. If accounting reports are to become a universal means of communication, action must be taken to harmonise worldwide efforts to meet the international users' needs. John C. Burton at 1980 Proceedings of Arthur Young Professors Round Table on "The International World of Accounting and Challenges and Opportunities" remarked:

"...today, as more business is done internationally, as more capital crosses borders, as more investors seek investment opportunities in other countries, as more managers of international business attempt to better understand performance of foreign subsidiaries, the problem of diverse accounting standards becomes more acute.... There is also the argument for a common need to communicate—a common language problem that suggests that it is useful if we talk in the same terms. The world is too small today to have national boundaries create many bases for totally different principles of economic environment."

Robert L. May, President of International Federation of Accountants, in his speech (1986) delivered at Australian Accountants Centenary Congress, Sydney, observes:

"There is a greater need than ever before for comparability of international financial data. Government, lenders, businesses, shareholders everywhere—they all need information in a form that is reliable, that is understandable, and that will encourage the flow of international investing rather than inhibit it. In a world where finance and trade are international, it seems utterly incongruous that the accounting standards are not. In a world where the world 'multinational' is almost a cliché, it seems strange that it has had so little application to accounting. In a world where national economies are so linked together that crisis in one can send shock waves rolling into every corner of the universe, it seems entirely against logic that accountancy professionals must heed the out of date doctrines of separatism."

2. Globalization of Capital Markets—Nowadays, investors seek investment opportunities all over the world. Similarly companies seek capital at the lowest price anywhere. The problem

that this creates for investors, of course, is that accounting differences can completely obscure the comparisons and other analyses that they must make in order to assess various investment opportunities.

Paul Volcker, Chairman of International Accounting Standards Committee (IASC) Foundation Board of Trustees, said:

"If markets are to function properly and capital is to be allocated efficiently, investors require transparency and must have confidence that financial information accurately reflects economic performance. Investors should be able to make comparisons among companies in order to make rational investment decisions. In a rapidly globalising world, it only makes sense that the same economic transactions are accounted for in the same manner across various jurisdictions."

3. Investors—A strong case for increased harmonisation can be made from the viewpoint of the users of accounting and financial information mainly the investors who wish to invest outside their own country, that is, both transnational companies investing directly and individual investors wishing to invest part of a portfolio of funds. If comparability of accounting standards helps economic decision making and the efficient allocation of economic resources within a nation, the same can be said about economic decision making and economic resource allocation on a worldwide bases. Without worldwide accounting, and auditing standards, it is difficult, if not impossible, to assess the relative merits of alternative investment opportunities, or to make valid comparisons of the financial performance of companies in different countries.

Harmonisation, thus, could lead to improvements in the allocation of financial resources. It would help to avoid confusion and possible misallocation of resources by bringing uniformity in accounting standards and practices. Cummings and Chetkovich⁵ comment that "it is obvious that there is a need to harmonise accounting and reporting standards". They recognise that it "may not always be possible to achieve universal acceptance of a single method of accounting and reporting, the fact is that the promulgation of an international standard reduces the alternatives available under varying circumstances and that the required disclosures facilitate understanding and comparison"

Although international harmonisation would make financial statements easier, with not so many adjustments being required, it has also been argued that international investment and business has and still does go on without standardisation, and harmonisation. It has, in fact, not been found that the variety of systems really act as a restraint on international investment and international business⁶.

4. Multinational Companies—A major force in the movement toward international harmonisation has been the economic self-interest of multinational companies. Multinational firms are the preparers of financial information. With diversity in accounting standards from country to country, these firms face a myriad of accounting requirements from the countries in which

they operate. The burden of this financial reporting would be lessened with increased harmonisation which would simplify the process of preparing individual and group financial statements⁷.

Multinational companies would benefit from harmonisation on the following counts:

- (a) Consolidation of overseas subsidiaries would be easier due to harmonisation as financial statements from all around the world would be prepared on the same basis.
- (b) Many large companies want to raise money in more than one country and in international markets, and so need to produce accounts which can easily be understood by investors in many countries. For this reason, the World Federation of Stock Exchanges is said to be encouraging the acceptance of international accounting standards.
- (c) The task of preparing comparable internal information for the appraisal of the performance of subsidiaries in different countries would be made much easier. Many aspects of investment appraisal, performance evaluation and other decision making uses of management accounting information would benefit from standardisation. Management control would be more easily accomplished. The appraisal of foreign countries for potential takeovers would also be greatly facilitated. Multinational companies would also find it easier to transfer accounting staff from one country to another.

5. International Auditing Firms—Another major force in the movement toward international harmonisation was the economic self interest international auditing firms have in such standards, so that they can sell their services as experts in many different parts of the world. McComb⁸ points out that “the thrust of the movement toward the harmonisation of accounting standards on the international level has come mainly from accountants in public practice rather than academic accountants”. It would make life very much easier for them if similar practices existed throughout the world. Many auditing firms have clients (in the form of subsidiary or branch) operating in foreign countries. The preparation, consolidation and auditing of these companies’ financial statements would become less onerous if accounting practices were standardised. The international auditing firms would also like to be able to quote international accounting standards to clients, to give them backing for recommending certain ways of reporting.

6. Developing Countries—There is an argument that countries that do not have any domestic accounting standards would benefit from international standards in that it would enable them to adopt a ready-made system. They would not have to produce their own, they could adopt (perhaps with some slight modification) the international standards. If this were possible it would of course save them a great deal of time and expense.

Many developing nations do take a great interest in international standards. Nigeria, for example, one of the developing countries who are members of IASC has adopted these standards,

and companies over a certain size are required to produce accounts that conform to such standards.

7. Other Interest Groups—One group who it is said would benefit from a greater degree of harmonisation would be tax authorities. They would find their work less complicated when dealing with foreign income. It must be said, however, that it is taxation rules that are responsible for many of the differences that do exist in accounting practices. Tax is and will remain a national matter. Accounting measurement may be harmonised, but it would need to be recognised that standardised accounting practices may need to be adjusted for national tax purposes.

At the Twelfth International Congress of Accountants in Mexico City in October 1982, John N. Turner, former Minister of Finance, Minister of Justice and Attorney General of Canada, and first Chairman of the Interim Committee of the International Monetary Fund, cited these advantages of “universally applicable standards”.

“The greatest benefits that would flow from harmonisation would be the comparability of international financial information. Such comparability would eliminate the current misunderstanding about the reliability of ‘foreign’ financial statements and would remove one of the most important impediments to the flow of international investment....

A second advantage of harmonisation would be the time and money saved that is currently spent to consolidate divergent financial information when more than one set of reports is required to comply with different national laws or practices....

A third improvement from harmonisation would be the tendency for accounting standards throughout the world to be raised to the highest possible level and to be consistent with local economic, legal and social conditions⁹”

INTERNATIONAL ACCOUNTING STANDARDS BOARD (IASB), [EARLIER INTERNATIONAL ACCOUNTING STANDARDS COMMITTEE (IASC)]

The IASC Foundation is an independent body, not controlled by any particular Government or professional organization. Its main purpose is to oversee the IASB in setting the accounting principles which are used by business and other organizations around the world concerned with financial reporting.

The IASC was formed in 1973 through an agreement made by professional accountancy bodies from Australia, Canada, France, Germany, Ireland, Japan, Mexico, the Netherlands, the UK and the USA.

In November 1999, the IASC board itself approved the constitutional changes necessary for its own restructuring. In May 2000, the IFAC unanimously approved the restructuring. The constitution of the old IASC was revised to reflect the new structure. A new IASC Foundation was incorporated (under the laws of the US state of Delaware), and its trustee were appointed. By early 2001, the members of the IASB were appointed, and the

new structure became operational. Later that year, the IASB moved into new quarters in London. The technical staff of the IASB comprises over 20 accounting professionals—roughly quadruple the former IASC's professional staff.

In his testimony before the US Senate Committee on Banking, Housing and Urban Affairs on 14 February, 2002 in Washington, Sir David Tweedie, Chairman of the International Accounting Standards Board, stated that an international standard setter was needed for four reasons:

1. There is a recognised and growing need for international accounting standards.
2. No individual standard setter has a monopoly on the best solutions to accounting problems.
3. No national standard setter is in a position to set accounting standards that can gain acceptance around the world.
4. There are many areas of financial reporting in which national standard setter finds it difficult to act alone.

Preface to IFRSs issued in April 2002 by IASB contains the following:

(1) The International Accounting Standards Board (IASB) was established in 2001 as part of the International Accounting Standards Committee (IASC) Foundation. In 2010, the IASC Foundation was renamed the IFRS Foundation. The governance of the IFRS Foundation rests with twenty-two Trustees. The Trustees' responsibilities include appointing the members of the IASB and associated councils and committees as well as securing financing for the organization. The IASB comprises fifteen full-time members (the IFRS Foundation's Constitution provides for membership to raise to sixteen by 1 July 2012). Approval of International Financial Reporting Standards (IFRSs) and related documents, such as the *Conceptual Framework for Financial Reporting*, exposure drafts, and other discussion documents, is the responsibility of the IASB.

(2) The IFRS Interpretations Committee comprises fourteen voting members and a non-voting Chairman, all appointed by the Trustees. Before March 2010 the Interpretations Committee was called the International Financial Reporting Interpretations Committee (IFRIC). The role of the Committee is to prepare interpretations of IFRSs for approval by the IASB and, in the context of the *Conceptual Framework*, to provide timely guidance on financial reporting issues. The Committee (then called the International Financial Reporting Interpretations Committee) replaced the former Standing Interpretations Committee (SIC) in 2002.

(3) The IFRS Advisory Council is appointed by the Trustees. Before March 2010 the IFRS Advisory Council was called the Standards Advisory Council (SAC). It provides a formal vehicle for participation by organisations and individuals with an interest in international financial reporting. The participants have diverse geographical and functional backgrounds. The Council's objective

is to give advice to the IASB on priorities, agenda decisions and on major standard setting projects.

(4) The IASB was preceded by the Board of IASC, which came into existence on 29 June 1973 as a result of an agreement by professional accountancy bodies in Australia, Canada, France, Germany, Japan, Mexico, the Netherlands, the United Kingdom and Ireland, and the United States of America. A revised Agreement and Constitution were signed in November 1982; The Constitution was further revised in October 1992 and May 2000 by the IASC Board. Under the May 2000 Constitution, the professional accountancy bodies adopted a mechanism enabling the appointed Trustees to put the May 2000 Constitution into force. The Trustees activated the new Constitution in January 2001, and revised it in March 2002. The Constitution was further revised in July 2002, June 2005, October 2007, January 2009, January 2010 and January 2013.

(5) At its meeting on 20 April 2001 the IASB passed the following resolution:

All Standards and Interpretations issued under previous Constitutions continue to be applicable unless and until they are amended or withdrawn. The International Accounting Standards Board may amend or withdraw International Accounting Standards and SIC Interpretations issued under previous Constitutions of IASC as well as issue new Standards and Interpretations.

When the term IFRSs is used in this *Preface*, it includes standards and interpretations approved by the IASB, and International Accounting Standards (IASs) and SIC Interpretations issued under previous Constitutions.

Objectives of the IASB

The objectives of the IASB are:

- (a) to develop, in the public interest, a single set of high quality, understandable, enforceable and globally accepted financial reporting standards based on clearly articulated principles. These standards should require high quality, transparent and comparable information in financial statements and other financial reporting to help investors, other participants in the various capital markets of the world and other users of financial information make economic decisions;
- (b) to promote the use and rigorous application of those standards;
- (c) in fulfilling the objectives associated with (a) and (b), to take account of, as appropriate, the needs of a range of sizes and types of entities in diverse economic settings;
- (d) to promote and facilitate the adoption of IFRSs, being the standards and interpretations issued by the IASB, through the convergence of national accounting standards and IFRSs.

Scope and Authority of International Financial Reporting Standards

(1) The IASB achieves its objectives primarily by developing and publishing IFRSs and promoting the use of those standards in general purpose financial statements and other financial reporting. Other financial reporting comprises information provided outside financial statements that assists in the interpretation of a complete set of financial statements or improves users ability to make efficient economic decisions. In developing IFRSs, the IASB works with national standard-setters to promote and facilitate adoption of IFRSs through convergence of national accounting standards and IFRSs.

(2) IFRSs set out recognition, measurement, presentation and disclosure requirements dealing with transactions and events that are important in general purpose financial statements. They may also set out such requirements for transactions and events that arise mainly in specific industries. IFRSs are based on the *Conceptual Framework*, which addresses the concepts underlying the information presented in general purpose financial statements. Although the *Conceptual Framework* was not issued until September 2010, it was developed from the previous *Framework for the Preparation and Presentation of Financial Statements*, which the IASB adopted in 2001. The objective of the *Conceptual Framework* is to facilitate the consistent and logical formulation of IFRSs. The *Conceptual Framework* also provides a basis for the use of judgement in resolving accounting issues.

(3) IFRSs are designed to apply to the general purpose financial statements and other financial reporting of profit-oriented entities. Profit-oriented entities include those engaged in commercial, industrial, financial and similar activities, whether organised in corporate or in other forms. They include organizations such as mutual insurance companies and other mutual co-operative entities that provide dividends or other economic benefits directly and proportionately to their owners, members or participants. Although IFRSs are not designed to apply to not-for-profit activities in the private sector, public sector or government, entities with such activities may find them appropriate. The International Public Sector Accounting Standards Board (IPSASB) prepares accounting standards for governments and other public sector entities, other than government business entities, based on IFRSs.

(4) IFRSs apply to all general purpose financial statements. Such financial statements are directed towards the common information needs of a wide range of users, for example, shareholders, creditors, employees and the public at large. The objective of financial statements is to provide information about the financial position, performance and cash flows of an entity that is useful to those users in making economic decisions.

(5) A complete set of financial statements includes a statement of financial position, a statement of comprehensive income, a statement of changes in equity, a statement of cash flows, and accounting policies and explanatory notes. When a separate income statement is presented in accordance with IAS 1

Presentation of Financial Statements (as revised in 2007), it is part of that complete set. In the interest of timeliness and cost considerations and to avoid repeating information previously reported, an entity may provide less information in its interim financial statements than in its annual financial statements. IAS 34 *Interim Financial Reporting* prescribes the minimum content of complete or condensed financial statements for an interim period. The term 'financial statements' includes a complete set of financial statements prepared for an interim or annual period, and condensed financial statements for an interim period.

(6) Some IFRSs permit different treatments for given transactions and events. The IASB's objective is to require like transactions and events to be accounted for and reported in a like way and unlike transactions and events to be accounted for and reported differently, both within an entity over time and among entities. Consequently, the IASB intends not to permit choices in accounting treatment. Also, the IASB has reconsidered, and will continue to reconsider, those transactions and events for which IFRSs permit a choice of accounting treatment, with the objective of reducing the number of those choices.

(7) Standards approved by the IASB include paragraphs in bold type and plain type, which have equal authority. Paragraphs in bold type indicate the main principles. An individual standard should be read in the context of the objective stated in that standard and in the *Preface*.

(8) Interpretations of IFRSs are prepared by the Interpretations Committee to give authoritative guidance on issue that are likely to receive divergent or unacceptable treatment, in the absence of such guidance.

(9) IAS 1 (as revised in 2007) includes the following requirement:

An entity whose financial statements comply with IFRSs shall make an explicit and unreserved statement of such compliance in the notes. An entity shall not describe financial statements as complying with IFRSs unless they comply with all the requirements of IFRSs.

(10) Any limitation of the scope of an IFRS is made clear in the standard.

Due Process (of Developing IFRSs)

(1) IFRSs are developed through an international due process that involves accountants, financial analysts and other users of financial statements, the business community, stock exchanges, regulatory and legal authorities, academics and other interested individuals and organisations from around the world. The IASB consults, in public meetings, the Advisory Council on major projects, agenda decisions and work priorities, and discusses technical matters in meetings that are open to public observation. Due process for projects normally, but not necessarily, involves the following steps:

- (a) the staff are asked to identify and review all the issues associated with the topic and to consider the application of the *Conceptual Framework* to the issues;

- (b) study of national accounting requirements and practice and an exchange of views about the issues with national standard-setters;
 - (c) consulting the Trustees and the Advisory Council about the advisability of adding the topic to the IASB's agenda. Beginning no later than 30 June 2011 the IASB is required to carry out a public consultation on its agenda every three years;
 - (d) formation of an advisory group to give advice to the IASB on the project;
 - (e) publishing for public comment a discussion document;
 - (f) publishing for public comment an exposure draft (including any dissenting opinions held by IASB members) approved by at least nine votes of the IASB if there are fewer than sixteen members, or by ten of its members if there are sixteen members;
 - (g) normally publishing with an exposure draft a basis for conclusions and the alternative views of any IASB member who opposes publication;
 - (h) consideration of all comments received within the comment period on discussion documents and exposure drafts;
 - (i) consideration of the desirability of holding a public hearing and of the desirability of conducting field tests and, if considered desirable, holding such hearings and conducting such tests;
 - (j) approval of a standard by at least nine votes of the IASB if there are fewer than sixteen members, or by ten of its members if there are sixteen members; and
 - (k) publishing with a standard (i) a basis for conclusions, explaining, among other things, the steps in the IASB's due process and how the IASB dealt with public comments on the exposure draft, and (ii) the dissenting opinion of any IASB member.
- (2) Interpretations of IFRSs are developed through an international due process that involves accountants, financial analysts and other users of financial statements, the business community, stock exchanges, regulatory and legal authorities, academics and other interested individuals and organisations from around the world. The Interpretations Committee discusses technical matters in meetings that are open to public observation. The due process for each project normally, but not necessarily, involves the following steps:
- (a) the staff are asked to identify and review all the issues associated with the topic and to consider the application of the *Conceptual Framework* to the issues;
 - (b) consideration of the implications for the issues of the hierarchy of IAS 8 *Accounting Policies, Changes in Accounting Estimates and Errors*;
 - (c) publication of a draft Interpretation for public comment if no more than four Committee members have voted against the proposal;
 - (d) consideration of all comments received within the comment period on a draft Interpretation;
 - (e) approval by the Interpretations Committee of an Interpretation if no more than four Committee members have voted against the Interpretation after considering public comments on the draft Interpretation; and
 - (f) approval of the Interpretation by at least nine votes of the IASB if there are fewer than sixteen members, or by ten of its members if there are sixteen members.

Timing of Application of International Financial Reporting Standards

(1) IFRSs apply from a date specified in the document. New or revised IFRSs set out transitional provisions to be applied on their initial application.

(2) The IASB has no general policy of exempting transactions occurring before a specific date from the requirements of new IFRSs. When financial statements are used to monitor compliance with contracts and agreements, a new IFRS may have consequences that were not foreseen when the contract or agreement was finalised. For example, covenants contained in banking and loan agreements may impose limits on measures shown in a borrower's financial statements. The IASB believes the fact that financial reporting requirements evolve and change over time is well understood and would be known to the parties when they entered into the agreement. It is up to the parties to determine whether the agreement should be insulated from the effects of a future IFRS, or, if not, the manner in which it might be renegotiated to reflect changes in reporting rather than changes in the underlying financial condition.

(3) Exposure drafts are issued for comment and their proposals are subject to revision. Until the effective date of an IFRS, the requirements of any IFRS that would be affected by proposals in an exposure draft remain in force.

Language

The approved text of any discussion document, exposure draft or IFRS is that approved by the IASB in the English language. The IASB may approve translations in other languages, provided that the translation is prepared in accordance with a process that provides assurance of the quality of the translation, and the IASB may license other translations.

Today, all major economies have established time lines to converge with or adopt IFRSs in the near future, a clear indicator of its progress to date. Its legitimacy as a credible world standard setter is no longer in question.

In the words of Burggraaff¹⁰ a former Chairman of the International Accounting Standards Committee:

“IASB is a private sector professional exercise. It is meant to remain that way. Not because we feel that others should not be allowed to have a say in standard-setting; on the contrary, we feel that they too should be involved. But it is our experience that only in the profession is there a sufficient body of common knowledge, expertise, independence and mutual understanding—all essential ingredients to achieve our goal; unbiased, workable standards that contribute to improved reliability and understandability of financial statements worldwide.”

Intergovernmental organizations — IASB works closely with a number of intergovernmental bodies. These bodies co-operate with each other and with IASB. Such bodies are:

Intergovernmental Organizations, 2001

EU European Union

European Commission issues Directives which form a basis for national law within each member country. Accounting Directives (Fourth and Seventh) are largely concerned with harmonisation of presentation in financial statements.

OECD Organization for Economic Cooperation and Development

Established by 24 of the world's ‘developed’ countries to promote world trade and global economic growth. Is concerned with financial reporting by multinational companies. OECD has a Working Group on Accounting Standards. Issues guidelines for multinational companies, carries out surveys and publishes reports. Work extends to Central and Eastern Europe, *e.g.*, the Coordinating Council on Accounting Methodology in the CIS (Former Soviet Union).

ISAR Intergovernmental Working Group of Experts on International Standards of Accounting and Reporting

Operates within the United Nations, with a particular interest in accounting and reporting issues of the developing countries. Carries out surveys and publishes reports. Makes recommendations with regard to transnational companies.

Acceptance of IASs by International Organisation of Securities Commission (IOSCO):

Relations with IOSCO

In this present form IOSCO dates from the mid-1980s. Its objectives include:

- the establishment of standards and effective surveillance of international securities transactions

- provision of mutual assistance to ensure the integrity of the markets by a rigorous application of standards and by effective enforcement against offenders.

A working party was established to co-operate with the IASB with a view to identifying accounting standards which security regulators might be ready to accept in the case of multinational offerings. In 1995, the IASB made a significant agreement with IOSCO. The agreement stated that the goal of both IASB and IOSCO was that financial statements prepared in accordance with IASs can be used in cross border offerings and listings as an alternative to national accounting standards.

In May 2000, IOSCO announced completion of its assessment of the accounting standards issued by the IASB. The Presidents Committee of IOSCO referred to the 30 standards and related interpretations evaluated by them (described as ‘the IASB 2000 standards’). It recommended that IOSCO members permit incoming multinational issuers to use the IASB 2000 standards to prepare their financial statements for crossborder offerings and listings, as supplemented where necessary by one or more of three supplemental treatments of reconciliation, disclosure and interpretation.

- Reconciliation means requiring reconciliation of certain items to show the effect of applying a different accounting method, in contrast with the method applied under IASB standards.
- *Disclosure* means requiring additional disclosures, either in the presentation of the financial statements or in the footnotes.
- *Interpretation* means specifying the use of a particular alternative provided in an IASB standard, or a particular interpretation in cases where the IASB standard is unclear or silent.

This resolution confirmed the good working relationship between IASB and IOSCO but left considerable discretion with the separate market regulators who are the members of IOSCO. It is for each securities commission or regulator to decide whether to accept the IOSCO recommendation and whether to apply supplemental treatments. In particular, if the SEC in the USA were to continue requiring reconciliations to US GAAP there is a risk that foreign registrants on US stock exchanges would regard this as too costly and troublesome and would apply US GAAP in preference to IASB Standards.¹¹

The old IASB called its standards International Accounting Standards. The new name for standards issued by the IASB is International Financial Reporting Standards (IFRSs). In one of its earliest actions, the IASB voted to make clear that the IASs issued by the former IASB continue with full force and effect unless and until the IASB amends or replaces them. The IASB announced that the term ‘IFRS’ should be understood to include IAS. Consistent with that announcement, the term IFRS will be used to refer to the entire body of IASB standards, including the old IASs and interpretations. However, the old IASs have not been renumbered. They remain outstanding until replaced by an IFRS.

The IASB has amended some of the old IASs without replacing them, in which case they keep their old IAS number.

IASs and IFRSs

From its inception in 1973 until it was reorganised into the International Accounting Standards Board (IASB) in early 2001, the IASC developed 41 standards, known as International Accounting Standards. Many of those were revised one or more times over the years. Several were superseded or merged in with other standards. Since 2001, the IASB has revised a number of the IASs and has begun a second series of standards known as International Financial Reporting Standards (IFRSs), starting again with number 1.

Typically, the standards issued by the IASB are referred to as IFRS or IFRSs. The term *International Financial Reporting Standard(s)* has both a narrow and a broad meaning. Narrowly, IFRS refers to the new numbered series of pronouncements that the IASB is issuing, as distinct from the International Accounting Standards (IAS) series issued by its predecessor. More broadly, IFRS refers to the entire body of IASB pronouncements, including standards and interpretations approved by the IASB-IFRSs, its Conceptual Framework, Standing Interpretations Committee (SIC) interpretations approved by the predecessor International Accounting Standards Committee, and International Financial Reporting Interpretations Committee (IFRIC) interpretations. So, IFRSs consists primarily of 41 IASs issued from 1973 to 2001 before the renaming of the board and the new series of IFRS standards (Figure 12.1) issued after IASB's formation in 2001. Some IASs have been revised and the old numbers kept. Others have been superseded. Therefore, only 29 of the original 41 IAS numbers are currently referenced as IASB standards.

IFRIC/SIC

Interpretations of IASs and IFRSs are developed by the International Financial Reporting Interpretations Committee (IFRIC). IFRIC replaced the former Standing Interpretations Committee (SIC) in March, 2002. IFRIC's mission (from the IASCF Constitution) is "to interpret the application of International Accounting Standards (IASs) and International Financial Reporting Standards (IFRSs) and provide timely guidance on financial reporting issues not specifically addressed in IASs and IFRSs, in the context of the IASB Framework, and undertake other tasks at the request of the IASB".

BENEFITS OF GLOBAL ACCOUNTING STANDARDS

Among the benefits often cited for a single set of global accounting standards are these:

- easier access to foreign capital market
- increased credibility of domestic capital markets to foreign capital providers and potential foreign merger partners
- increased credibility to potential lenders of financial statements from companies in less developed countries
- lower cost of capital to companies
- comparability of financial data across borders
- greater transparency
- greater understandability—a common financial language
- the need for companies to keep only one set of books
- reduced national standard-setting costs
- ease of regulation of securities markets—regulatory acceptability of financial information provided by market participants
- continuation of local implementation guidance for local circumstances
- lower susceptibility to political pressures than national standards
- portability of knowledge and education across national boundaries
- consistency with the concept of a single global professional credential.

Adoption or convergence with IFRS helps the economy at large, investors, industry as well as the accounting professionals. It benefits the economy by increasing growth of its international business. It facilitates maintenance of orderly and efficient capital markets and also helps to increase the capital formation and thereby economic growth. It encourages international investing and thereby leads to more foreign capital flows to the country.

IASB's required disclosure

This checklist provides a reference to the disclosures common to the financial statements of entities that are complying with International Financial Reporting Standards (IFRS), including those set forth by the International Accounting Standards (IAS) promulgated by the IASC earlier. These disclosures are set forth by IFRS/IAS and IFRIC/SIC and are effective for periods beginning after December 31, 2004. Changes which have been proposed but which have not been promulgated are not addressed in this checklist. Superseded disclosures have also been excluded.

Disclosure Index

General

- A. Identification of Financial Statements and Basis of Reporting
- B. Compliance with International Financial Reporting Standards
- C. Changes in Accounting Policies, Changes in Accounting Estimates and Errors
- D. Related-Party Disclosures
- E. Contingent Liabilities and Contingent Assets
- F. Events After the Balance Sheet Date
- G. Comparative Information
- H. Going Concern

IFRS	IAS	IFRIC	SIC
Preface	IAS 1 Presentation of Financial Statements	IFRIC 1 Changes in Existing Decommissioning, Restoration and Similar Liabilities	SIC 7 Introduction of the Euro
Framework	IAS 2 Inventories	IFRIC 2 Members' Shares in Co-operative Entities and Similar Instruments	SIC 10 Government Assistance – No Specific Relation to Operating Activities
IFRS 1 First-time Adoption of International Financial Reporting Standards	IAS 7 Statement of Cash Flow	IFRIC 4 Determining whether an Arrangement contains a Lease	SIC 15 Operating Leases – Incentives
IFRS 2 Share-based Payment	IAS 8 Accounting Policies, Changes in Accounting Estimates and Errors	IFRIC 5 Rights to Interests arising from Decommissioning, Restoration and Environmental Rehabilitation Funds	SIC 25 Income Taxes – Changes in the Tax Status of an Entity or its Shareholders
IFRS 3 Business Combinations	IAS 10 Events after the Reporting Period	IFRIC 6 Liabilities arising from Participating in a Specific Market – Waste Electrical and Electronic Equipment	SIC 27 Evaluating the Substance of Transactions involving the Legal Form of a Lease
IFRS 4 Insurance Contracts	IAS 12 Income Taxes	IFRIC 7 Applying the Restatement Approach under IAS 29	SIC 29 Disclosure – Service Concession Arrangements
IFRS 5 Non-current Assets Held for Sale and Discontinued Operations	IAS 16 Property, Plant and Equipment	IFRIC 10 Interim Financial Reporting and Impairment	SIC 32 Intangible Assets – Website, Costs
IFRS 6 Exploration for and Evaluation of Mineral Resources	IAS 17 Leases	IFRIC 12 Service Concession Arrangements	
IFRS 7 Financial Instruments: Disclosures	IAS 19 Employee Benefits	IFRIC 14 IAS 19 – The Limit on a Defined Benefit Asset, Minimum Funding Requirements and their interaction	
IFRS 8 Operating Segments	IAS 20 Accounting for Government Grants and Disclosure of Government Assistance	IFRIC 16 Hedges of a Net Investment in a Foreign Operation	
IFRS 9 Financial Instruments	IAS 21 The Effects of Changes in Foreign Exchange Rates	IFRIC 17 Distributions of Non-cash Assets to Owners	
IFRS 10 Consolidated Financial Statements	IAS 23 Borrowing Costs	IFRIC 19 Extinguishing Financial Liabilities with Equity Instruments	

IFRS 11 Joint Arrangements	IAS 24 Related Party Disclosure	IFRIC 20 Stripping Costs in the Production Phase of a Surface Mine	
IFRS 12 Disclosure of Interest in Other Entities	IAS 26 Accounting and Reporting by Retirement Benefit Plans	IFRIC 21 Levies	
IFRS 13 Fair Value Measurement	IAS 27 Separate Financial Statements		
IFRS 14 Regulatory Deferral Accounts	IAS 28 Investments in Associates and Joint Ventures		
IFRS 15 Revenue from Contracts with Customers	IAS 29 Financial Reporting in Hyperinflationary Economies		
	IAS 32 Financial Instruments: Presentation		
	IAS 33 Earnings per Share		
	IAS 34 Interim Financial Reporting		
	IAS 36 Impairment of Assets		
	IAS 37 Provisions, Contingent Liabilities and Contingent Assets		
	IAS 38 Intangible Assets		
	IAS 39 Financial Instruments; Recognition and Measurement		
	IAS 40 Investment Property		
	IAS 41 Agriculture		

IAS 3, 4, 5, 6, 9, 13, 14, 15, 22, 25, 30 and 35 have been superseded.

Figure 12.1: List of IFRS, IAS, IFRIC and SIC As of 1st January 2015

- I. Current/Noncurrent
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- L. First-Time Adoption of IFRS
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- B. Format

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- A. Statement of Changes in Equity

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Disclosures for Banks and Similar Financial Institutions (IAS 30)

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- B. Balance Sheet
- C. Contingencies and Commitments Including Off-Balance Sheet Items
- D. Maturities of Assets and Liabilities
- E. Concentrations of Assets and Liabilities
- F. Losses on Loans and Advances
- G. General Banking Risks
- H. Assets Pledged as Security
- I. Related-Party Transactions
- J. Trust Activities

Insurance Contracts**Agriculture**

- A. General
- B. Additional Disclosure for Biological Assets Where Fair Value Cannot Be Measured Reliably
- C. Government Grants

Source: Barry J. Epstein and Abbas Ali Mirza, *Interpretation and Application of International Accounting and Financial Reporting Standards*, John Wiley and Sons, 2005, pp. 848-849.

This study investigates the European equity market reaction to 16 events associated with the adoption of IFRS in Europe. IFRS adoption resulted in a broad cross-section of firms domiciled in European countries with a variety of domestic accounting standards changing to a common set of standards at the same time. The prospects of IFRS adoption led investors in European firms to assess the implications of potential changes in firms information environments and convergence associated with this change in financial reporting standards. Thus, events leading to IFRS adoption in Europe provide an opportunity to assess investors' expectations about the net benefits or net costs of IFRS adoption.

We find an incrementally positive reaction for European firms with lower pre-adoption information quality and higher pre-adoption information asymmetry. These findings are consistent with investors expecting IFRS to improve the information quality for these firms. We find an even more positive reaction for banks with lower pre-adoption information quality, which is consistent with investors expecting improvements in information quality—including any associated with adoption of the controversial IAS 39—for these firms. We find an incrementally negative reaction for firms domiciled in code law countries, which are likely to have weaker enforcement of accounting standards. Regarding expected convergence benefits, we find a positive reaction to IFRS adoption events even for firms with high-quality pre-adoption information. To the extent investors expect IFRS adoption to affect only minimally the information of these firms, this finding is consistent with investors expecting net benefits associated with convergence from IFRS adoption.

Overall, our findings suggest that investors expected net benefits to IFRS adoption in Europe associated with increases in information quality, decreases in information asymmetry, more rigorous enforcement of the standards, and convergence.

Figure 12.2 : Research Insight

Source: Christopher S. Armstrong, Mary E. Birth, Alan D. Jagolinzer and Edward J. Riedl, "Market Reaction to the Adoption of IFRS in Europe", *The Accounting Review*, Vol. 85, No. 1 (2010), pp. 31-61.

IASB AND HARMONISATION

To date, the IASC appears to be the most influential body involved in the standardisation and harmonisation programmes. International Accounting Standards (IASs), according to IASC, are in the best interest of the users and preparers of financial statements. Prudent investment and managerial decisions in this increasingly complex and internationally oriented world require such standards. Generally Accepted International Accounting Standards mean that investors, bankers, creditors, managers, employees, and governments have less difficulty in understanding and analysing annual and interim reports prepared in countries other than their own, and that they can have confidence in those reports.¹²

The IASC agreement provides that the professional accountability bodies (who are members of IASC) agree to support the standards promulgated by the committee and to use their best endeavours:

1. To ensure that published financial statements comply with these standards or that there is disclosure of the extent which they do not and to persuade governments, authorities controlling securities markets and the industrial and business community that published financial statements should comply with these standards.
2. To ensure (a) that the auditors satisfy themselves the financial statements comply with these standards or, if the financial statements do not comply with these standards, that the fact of noncompliance is disclosed

in the financial statements, (b) that in the event of nondisclosure reference to noncompliance is made in the audit report.

3. To ensure that, as soon as possible, appropriate action is taken in respect of auditors whose audit reports do not meet the requirements of (2) above.¹³

In 1989, the IASC issued a framework which may be regarded as a statement of key principles to be applied in accounting practices (IASC, 1989). The framework is not itself an accounting standard. The purpose of the framework document is to assist:

- the Board in development and review of International Accounting Standards
- the Board in promotion of harmonization by providing a basis for reducing the number of alternative accounting treatments permitted by IASs
- national standard-setting bodies in developing national standards
- preparers of financial statements in applying IASs and dealing with topics on which IASs do not yet exist
- auditors in forming an opinion as to whether financial statements conform to IASs
- users in interpreting financial statements prepared in conformity with IASs
- those interested in the formulation of IASs by providing information about the approach used by the IASC (now IASB).

There is an increasing number of companies now presenting financial statements that conform with IASB standards. Four approaches are found:

1. In some cases, national requirements conform with IASB Standards. In such instances there may be no practical problem from the point of view of the company but it is important for the user of the financial statements to know that this is the case. From 2000, where IASB had developed faster than national standards there are few examples of companies which provide an explicit statement of conformity with IASs as well as national standards.
2. In other cases, IASB Standards are used where national requirements are silent. This gives partial compliance with IASs.
3. Some companies include in the financial report a reconciliation showing the differences between national accounting practices and the requirements of IASs.
4. Other companies present full financial statements in conformity with IASs, either as the main financial statements or in addition to the financial statements complying with national accounting practices.

Despite the substantial progress made by IASC in standards setting tasks, much remains to be done. The 'best

endeavours' mentioned in IASC agreement have not produced uniformly good results in establishing generally accepted international standards.

Alfredson *et al.*,¹⁴ have observed that the IASC suffered from a number of shortcomings, including the following:

- weak relationships with national standard setters
- lack of convergence of IASs and major national GAAP after 25 years of trying
- a full-time workload having to be shouldered by a part-time board
- need for broader sponsorship than provided by the accounting profession
- lack of widespread recognition of its standards by regulators
- shortage of resources

Recognising these problems, in 1998 the committee that was entrusted with overseeing the IASC began a comprehensive review of the IASC's structure and operations. That review was completed in 2000. The principal recommendations of the structure review are shown below:

- The large, part-time IASC should be replaced by a smaller and essentially full-time International Accounting Standards Board.
- The new IASB should operate under a broad-based IASC Foundation (IASCF) with trustees representing all regions of the world and all groups interested in financial accounting.
- The new IASB should have a Standards Advisory Council (SAC) to provide counsel to the board.
- The SIC should continue in a slightly modified form as the International Financial Reporting Interpretations Committee (IFRIC).

PUBLIC SECTOR AND IFRSs

The IASB's preface to the International Financial Reporting Standards notes that IFRSs are designed to apply to the financial reports of all profit-oriented entities. Although IFRSs are not designed to apply to non-for-profit or government activities, non-profit and government entities may find them appropriate'. The Public Sector Committee (PSC) of the IFAC develops International Public Sector Accounting Standards (IPSASs) for financial reporting by governments and other public sector entities. In general, the PSC uses IFRSs as the starting point in developing its standards. Also, the PSC has issued a guideline stating that IFRSs are fully applicable to government business enterprises.

IFRSs: PRINCIPLES-BASED APPROACH

IASs and IFRSs are considered more principle based rather than rules-based. Sir David Tweedie, Chairman of IASB, has noted that one of the biggest obstacles the IASB faces with the

development of international accounting standards is whether to write specific rules or adopt certain principles. Alfredson¹⁵ *et al.*, observe:

"Principles-based standards focus on establishing general principles derived from an underlying conceptual framework, reflecting the recognition, measurement and reporting requirements for the transactions covered by the standards. By following a principles-based approach, IASs tend to include only a limited amount of guidance for applying the general principles to typical transactions, encouraging professional judgement in applying the general principles to other transactions specific to an entity or industry. IASs also tend to include qualitative principles (a lease is a finance lease if its term is for the 'major part of the economic life of the asset') rather than quantitative guidelines (a lease is a finance lease if its term is '75% or more of the estimated economic life of the leased property')."

Rules-based standards are highly detailed, often have many exceptions, require extensive implementation guidance, and often have "bright line" distinctions (e.g., 75% capitalization rules for leases and 50% ownership rules for consolidations). Frequently, the bright line distinction can be subverted by management.

Principles-based standards are shorter than rules-based standards and rely heavily on judgment either by management or the auditor to carry out the intentions of the standard-setting agency in terms of relevance, reliability, or attaining "economic reality". Historical cost depreciation provides an example of a principles-based standard.

Benston, Bromwich, and Wagenhofer¹⁶ believe that the principles-based approach works better in tandem with the revenue-expense orientation than with the asset-liability orientation of SFAC No. 6. Their reason for this view is that with fair value accounting increasingly coming on board, accounting standard setters have an extremely complex mechanism with many rules and guidelines (this point is true relative to SFAS No. 157 Fair Value Measurement). They see the revenue-expense model as being able to produce more reliable and auditable numbers. However, there is an inconsistency between the revenue-expense approach and fair value measurement because fair value is primarily geared to the primacy of the balance sheet.

By taking a principles-based approach, the IASC's standards tend to have far fewer application examples and numerical thresholds than their US counterparts. In addition, very few IASs address industry accounting issues whereas many FASB statements deal with individual industries, and these are supplemented by specialised industry accounting guides developed by industry committees of the American Institute of CPAs. Australian and New Zealand accounting standards tend to be more similar to the IASs than to US GAAP.

However Radebaugh, Gray and Black¹⁷ are of the opinion that both the approaches may be required.

".....principles—based standards are difficult to implement in practice because little guidance exists on how to apply the standards. The more guidance provided on how to apply the

principles, the more the standards appear to be based on rules. As a result, comparability between companies is difficult when reporting is based on principles. Furthermore, many reporters want detailed guidance on how to account for complex transactions.”

The US financial reporting model is based largely on principles, but supplemented by extensive rules and regulations. US GAAP is usually more specific in its requirements and includes detailed implementation guidance, since the FASB’s constituents have asked for detailed and specific standards. Companies want detailed guidance because those details eliminate uncertainties about how transactions should be structured, and auditors want specificity because those specific requirements limit the number of difficult disputes with clients and may provide defence in litigation. In addition, securities regulators want detailed guidance because those details are thought to be easier to enforce. The IASB has indicated that a body of detailed guidance encourages a rulebook mentality of “Where does it say I can’t do this?” In addition, it often helps those who are intent on finding ways around standards, rather than those seeking to apply standards in a way that gives useful information. Therefore, adding the detailed guidance may obscure, rather than highlight, the underlying principle, since the emphasis is often on compliance with the ‘letter’ of the rule rather than on the ‘spirit’ of the accounting standard.¹⁸

IFRSs in USA*

The Financial Accounting Standards Board is the USA’s principal financial reporting rulemaking body. The FASB’s most important function is to issue standards that fine US GAAPs. The accounting principles and practices of the USA are influential beyond the country’s national boundary and have, of themselves, provided a means of harmonisation for those other countries and business enterprises choosing to follow the US lead. Companies listed on the US stock are required to present under an SEC regulation a reconciliation statement providing difference in the profit as arrived at on the basis of the GAAPs of the country of which the company is domiciled and the profit arrived at on the basis of following the US GAAPs.

Financial Accounting Standards in US are greater in volume and more detailed than those of almost any other country of the world but they are set by an independent standardsetting body rattler shall by a law. The evolution of accounting standard setting in US GAAPs has started much earlier as compared to that at the IASB level. As a result of this, US GAAPs had a very strong influence over the rules in other countries, where the rulemakers often adopted rules that are very similar to and are clearly derived from, those of US GAAPs.

But the situation has changed now.

In 2002, the United States Congress enacted the *Public Company Accounting Reform and Investor Protection Act* of 2002, also known as the Sarbanes-Oxley Act. The act requires the SEC to conduct a study on the ‘adoption by the United States financial reporting system of a principlesbased accounting system’, including in s. 108(d)(1)(B):

- the extent to which principlesbased accounting and financial reporting exists in the United States
- the length of time required for change from a rules-based to a principles-based financial reporting system
- the feasibility of and proposed methods by which a principlesbased system may be implemented.
- a thorough economic analysis of the implementation of a principles-based system.

As a result of the act, the FASB has invited comment on a proposal for a principles based approach to US accounting standard setting. The proposal addresses concerns about the increase in the level of detail and complexity in accounting standards.

The SarbanesOxley Act in the US permits the SEC to look to a privatesector accounting standard setter, such as the FASB, provided that the standard setter:

considers, in adopting accounting principles....the extent to which international convergence on high quality accounting standards is necessary or appropriate in the public interest and for the protection of investors (s. 108(b)(1)(A)(v) of the Act).

In October 2002, the International Accounting Standards Board and the US Financial Accounting Standards Board jointly issued a memorandum of understanding (Mou), marketing a significant step towards formalising their commitment to the convergence of US and international accounting standards. Both boards added to their agendas a short-term International Convergence project. The FASB also voted to authorise its staff to expand its research project on international convergence. The FASB has already made a number of changes to its standards in the interests of convergence, and it has proposed others.

The FASB believes the United States will benefit by convergence in the following ways:

- Increasing efficiency of the global capital markets by increasing comparability and transparency from country to country.
- Reducing the administrative burden on MNEs that are currently required to prepare financial statements under several different accounting methods and reconcile them across borders.
- Enabling U.S. companies to access capital markets outside the United States without needing to reconcile U.S. GAAP to International Financial Reporting Standards.

*The section IFRSs in different countries is based on the study conducted by Ernst and Young, 2005, pp., 19-21.

The working of IASB-FASB convergence programme includes Norwalk agreement for eliminating differences in existing standards, SEC road map for eliminating reconciliation requirements and 2006 MOU regarding replacing weaker standards with stronger standards. 11 major projects have been identified under the said MOU and the target date of completion of these major projects is stated to be June 2011. To priorities have been assigned to the following: Revenue Recognition, Fair Value Measurement Guidance, Consolidation Policy, De-recognition, Financial Statement Presentation, Post-Retirement Benefits, Lease Accounting and Financial Instruments. The joint efforts to analyse the respective standards and identify the best have already have some effect on standards. For example, the IASB has incorporated US GAAP rules into some of the international standards, such as accounting for assets held for sale and discontinued operation. The FASB, on the other hand, is about to revise rules concerning changes in accounting policies, exchange of assets, cost of inventories, and earnings per share to the comparable IFRS. Benston, Bromwich, Litan and Wagenhofer comment:

“IASB and the FASB have achieved convergence so far only with respect to minor issues. Currently, over 100 differences between IFRS and FASB standards remain. It is arguable as to which standard is the “better” one to which to converge.”

IFRSs IN EUROPE

In June 2000, the European Commission adopted a Financial Reporting Strategy for the 25 European Union (EU) member states that would require all listed EU companies to prepare their consolidated accounts in accordance with one single set of accounting standards, namely International Accounting Standards (IASs).

To implement this strategy, the Parliament and Council of the European Union have approved an accounting regulation requiring all European companies listed on a stock exchange in the EU to follow IASB standards in their consolidated financial statements starting no later than 2005. EU member states are authorised to extend the IFRS requirement to the consolidated financial statements of non-listed companies and also to the separate statements of parent companies. Most of the EU countries, in fact, have permitted (but not required) the non-listed companies to use IFRSs. Member states were also authorised to exempt certain companies temporarily from the IFRS requirement—but only until 2007—in two limited cases: (1) companies that are listed both in the EU and on a non-EU exchange and that currently use US GAAP as their primary accounting standards; and (2) companies that have only publicly traded debt securities. Several EU countries did, in fact, allow the deferral to 2007 for one or both of those small groups of companies. The IFRS requirement applies not only in the 25 EU countries but also in the three additional European Economic Area (EEA) countries that are not in the EU. There are an estimated 9000 listed companies in these 28 countries (all of which must use IFRSs), and upwards of 5000000 non-listed companies (most of which are permitted, and some even required, to use IFRSs). Also, many large companies in

Switzerland (which is not an EU or EEA member) have long used IFRSs.

Before IASs/IFRSs become officially required under European law, they must be endorsed by an Accounting Regulatory Committee (ARC) of the EC. By July 2004, that ARC had endorsed all of the IASB standards in effect at that time, including both the old IASs (as revised by the IASB), as well as IFRS 1—with the important exceptions of the two standards on financial instruments: IAS 32 and IAS 39. The ARC has the ongoing responsibility to review and ‘endorse for use in Europe’ each new IFRS or revised IAS.

The application of IFRS by listed EU companies is considered to be a crucial element in establishing a single European capital market. The Regulation will help eliminate barriers to crossborder trading in securities by ensuring that company accounts throughout the EU are more reliable and transparent and that they can be more easily compared. This change should increase market efficiency and reduce the cost of raising capital for companies, ultimately improving competitiveness and increasing growth.

IFRSs IN THE ASIA-PACIFIC COUNTRIES

The Asia-Pacific countries are taking a variety of approaches towards the convergence of GAAP for domestic companies with IFRSs.

Bangladesh is the only Asian country that now requires IFRSs in place of national GAAP for all domestic listed companies, just as required in Europe. Both Australia and New Zealand have decided to adopt national GAAP that are generally word-for-word equivalents of IFRSs, but some changes may be made. Australia’s IFRS equivalents take effect in 2005, and New Zealand’s in 2007 although adoption from 2005 is permitted. The auditor’s report is expected to refer to conformity with both IFRSs and national GAAP. Both of those countries have in the past tried to develop a single set of accounting standards that applies not only to business entities but also to government and not-for-profit entities. This broader scope is one of the reasons asserted for the decisions not to replace national GAAP with IFRSs in Australia and New Zealand. Hong Kong, the Philippines and Singapore have also decided to adopt new national standards that are generally word-for-word equivalents of IFRSs, but there is sometimes a time lag and in some instances changes are made to IFRSs. In these three jurisdictions, the auditor’s report refers to the national GAAP, not IFRSs. Certain Chinese companies listed on the stock exchanges in China are required to prepare IFRS financial statements—namely those companies whose shares trade in US dollars and can be purchased by foreign investors. IFRSs are looked to in developing national GAAP to varying degrees in most of the rest of the Asia-Pacific. Virtually all countries will assert that they base their national GAAP on IFRSs but—as the expression goes—the devil is in the details. The major economies of China, Japan and Korea have adopted only a few national accounting standards that can be described as being the

same as the IFRSs. Many of the recent accounting standards in India and Thailand are nearly identical to the IFRSs, although significant differences remain in some of the older standards, and not all IFRSs have been adopted. In Laos and Myanmar, some domestic companies may use IFRSs; and in Australia, Hong Kong, New Zealand, Pakistan, Singapore and Thailand, foreign listed companies may use IFRSs. Japan has also permitted foreign companies to use IFRSs in several cases.

The IFRS Foundation and the Chinese Ministry of Finance have set up a joint working group to explore ways and steps to advance the use of IFRS standards within China, especially for internationally oriented Chinese companies. It has the vision of Chinese accounting standards to become fully converged with IFRS standards, consistent with G-20 endorsed objective of a single set of high quality, global accounting standards.

ACHIEVEMENTS OF IASB*

The IASB started its activities in 2001 and immediately took a number of projects left in the pipeline from its predecessor.

To promote convergence of accounting standards worldwide, the International Accounting Standards Board (IASB) is committed to developing, in the public interest, a single set of high quality, understandable and enforceable global accounting standards that require transparent and comparable information in general purpose financial statements.

The IASB cooperates with national accounting standard setters to achieve convergence in accounting standards around the world. In this direction, the IASB has issued a Draft Memorandum of Understanding on the role of Accounting Standard-setters and their relationship with the IASB. The document is intended to set out a shared vision of the respective roles of national and regional standard-setters and of the IASB in working towards a single set of high quality, understandable and enforceable global accounting standards. It is particularly relevant to standard-setters in jurisdictions that have adopted or converged with IFRSs, or are in the process of adopting or converging with IFRSs. This document also deals with responsibilities of the national standard-setters towards convergence of International Financial Reporting Standards, their use in establishing national standards, issuance of interpretations, etc. The Draft Memorandum proposes to lay down a large number of responsibilities on the standard-setters around the world to promote convergence. For example, (i) accounting standard-setters should take the prime responsibility for identifying and dealing with domestic regulatory barriers to adopting or converging with IFRSs; (ii) accounting standard-setters should encourage national and regional regulators to participate in international convergence efforts in their own regulatory field where this would help to facilitate financial reporting convergence;

and (iii) accounting standard-setters should monitor the implementation of IFRSs in their jurisdictions, identify issues that might require interpretation, and request the International Financial Reporting Interpretations Committee (IFRIC) or the IASB to address the issue.

The following observations have been made by Ernst and Young about the achievements of IASB in its survey 'Apply International Accounting Standards', conducted in 2005:

The standards issued by the IASB in its last few years, and the direction that the IASB has taken in its first few years, allow the following observations to be made about trends in IFRSs:

- The recent IFRSs reflect greater use of 'fair value' in measuring transactions and a movement away from the traditional historical cost basis of measurement. While fair values are somewhat most subjective than a price paid in a past transaction, current values are usually more relevant for economic decision making than past costs. Examples of the use of fair values for measuring profits in recent IFRSs include:
 - financial instruments (required for trading investments and an option to measure all other financial assets and financial liabilities at fair value)
 - assets held for disposal
 - impairment recognition (write-down to fair values)
 - prohibition of pooling of interests (the required purchase method recognises the fair values of assets and liabilities acquired in a business combination)
 - exchanges of similar items of property, plant and equipment
 - changes in fair values of investments in real estate
 - changes in fair values of agricultural crops, orchards, forests, and livestock prior to, harvesting.
- More assets are being reported at fair value rather than at cost, on the balance sheet. In particular:
 - financial instruments (available for sale, investments)
 - investment property, including leases of hand
 - commodity inventories
 - biological assets and agricultural produce.
- Traditionally, IFRSs had not recognised income until an actual sale was made and the buyer had a legal obligation to pay the seller. This has been called the 'realisation principle' for recognising income. More recently, however, as fair values have been recognised in the balance sheet, the accounting standards have considered most, but not all, value changes to be components of income. As a result, performance reporting becomes key. That is, the income statement should separately report the 'realised' components of income and those components of income that result from

* (i) Website www.iasb.org

(ii) Website www.iasplus.com

(iii) Ernst and Young, Apply International Accounting Standards, 2005.

changes in the fair values of assets and liabilities even before they have been disposed of.

- Until the last few years, some IASs were designed to smooth out the volatility of earnings from period to period by means of cost and revenue deferrals and accruals of future costs. As a result, the balance sheet included deferred costs that did not meet the definition of an asset because they would not result in future cash inflows to the company, as well as deferred revenues and provisions that did not meet the definition of a liability because they did not obligate the company to make a future cash payment. Recent accounting standards have rejected income smoothing as an accounting objective by:
 - taking a weakened corridor approach to pensions
 - taking a balance sheet approach to deferred taxes
 - not allowing accruals for future losses and restructurings
 - using rigorous hedge accounting rules.
- In the past, companies were able to keep certain obligations and expenses off their books because no IAS required the company to recognise those obligations and expenses. Sometimes, investors found out about the obligations only when a problem developed. Recent accounting standards have moved off-balance sheet items onto the balance sheet. In particular:
 - special purpose entities
 - derivatives
 - share-based payment.
- Recent IASs have substantially expanded financial statement disclosures, especially about judgements, plans and assumptions:
 - greater disclosure about accounting policy choices made by the company
 - judgements made in applying accounting policies
 - disclosure of key sources of estimation uncertainties in financial statement amounts
 - riskmanagement policies
 - sensitivity analyses.
- Historically, many accounting standards allowed companies to choose between two or more acceptable methods of accounting for the same transaction. Little by little, the IASC and the IASB have eliminated these accounting choices, and the IASB's current projects will eliminate many more.
- Convergence with US GAAP.

INTERNATIONAL FEDERATION OF ACCOUNTANTS (IFAC)

IFAC was set up in 1976. The goals of IFAC are best expressed by the following 12-point program to guide its efforts:

1. Develop statements that would serve as guidelines for international auditing practices.
2. Establish a suggested minimum code of ethics to which it is hoped that member bodies would subscribe and which could be further refined as appropriate.
3. Determine the requirements and develop programmes for the professional education and training of accountants.
4. Evaluate, develop, and report on financial managements and other management accounting techniques and procedures.
5. Collect, analyze, research and disseminate information on the management of public accounting practices to assist practitioners in conducting their practices more effectively.
6. Undertake other studies of value to accountants such as, possibly, a study of the legal liabilities of auditors.
7. Foster closer relations with users of financial statements, including preparers, trade unions, financial institutions, industry, government and others.
8. Maintain close relations with regional bodies and explore the potential for establishing other regional bodies as well as for assisting in their organization and development, as appropriate. Assign appropriate projects to existing regional bodies.
9. Establish regular communication among the members of IFAC and with other interested organizations through the medium of a newsletter.
10. Organize and promote the exchange of technical information, educational materials, and professional publications and other literature emanating from other bodies.
11. Organize and conduct an International Congress of Accountants approximately every five years.
12. Seek to expand the membership of IFAC.

IFAC's governing bodies consist of an assembly comprising one representative designated as such by each member of the IFAC, and a council comprising 15 representatives of member bodies from 15 countries. The agenda of IFAC is set by the following seven standing committees: education, ethics, international auditing practices, international congresses, management accounting, planning, and regional organizations. The International Auditing Practices Committee (IAPC) of IFAC is the most active and most important.

Neither IFAC nor its recognised regional bodies have attempted directly to develop accounting standards at an international level. Instead IFAC accepts that the IASB is the major source of authoritative guidance on standardization of international accounting practices.

THE UNITED NATIONS

The United Nations became interested in accounting and the need for improved corporate reporting when the Group of Eminent Persons appointed to study the impact of multinational corporations advocated the formulation of an international, comparable system of standardized accounting and reporting. It also recommended the creation of a Group of Experts on International Standards of Accounting and Reporting. The group was created in 1976 with the following objectives:

- (a) To review the existing practice of reporting by transnational corporations and reporting requirements in different countries;
- (b) To identify gaps in information in existing corporate reporting and to examine the feasibility of various proposals for improved reporting;
- (c) To recommend a list of minimum items, together with their definitions, that should be included in reports by transnational corporations and their affiliates, taking into account the recommendations of various groups concerned with the subject-matter.

As a result, the group issued a report that included a 34-page list of recommended items to be disclosed by the "enterprise as a whole," that is, consolidated data; and by individual member of companies, including the parent company. Following issuance of the report an Intergovernmental Working Group of Experts on International Standards of Accounting and Reporting was formed with the objective of contributing to the harmonization of accounting standards. It does not function as standard-setting body; its mandate is to review and discuss accounting and reporting standards. The group will consider, among other issues, whether United Nations should promulgate accounting standards. Needless to say, this effort by the United Nations has created mixed international reactions. Most of the concerned institutions have expressed the feeling that accounting standards at the domestic or the international level are best set in the private sector. The same institutions are united in their support for the work of IASB and national accountancy groups.

The developing countries are mostly supportive of the UN actions. While the UN standards efforts are mainly targeting multinationals, there is a greater likelihood that eventually they would be expanded to all the companies in the world.

It is obvious that the success of the UN efforts rests on cooperation from all concerned parties. This assessment is also made as follows:

"The success of the United Nations' efforts in the field of international standards of accounting and reporting depends

on the readiness of governments, professional accountancy bodies, transnational corporation management, and bodies representing business, labour and other groups to cooperate in these efforts. Governments will need to review their existing reporting requirements, identify gaps, participate in the formulation of international standards, and eventually amend their national laws and regulations to implement these standards. The transnational corporations need to review their reporting systems as well as their policies on information disclosure. Many corporations already publish fairly comprehensive data and, if others agreed to improve their reporting to this level, considerable progress could be made towards standardized reporting. With respect to the accounting profession, a re-examination of established standards, especially in the light of the international standards published by bodies such as the International Accounting Standards Committee, may be necessary."¹⁹

THE ORGANISATION FOR ECONOMIC COOPERATION AND DEVELOPMENT (OECD)

The OECD is an organisation whose members include 24 relatively industrialized non-communist countries in Europe, Asia, North America, and Australia. A declaration on International Investment and Multinational Enterprises was issued in 1976, including an annex entitled "Guidelines for Multinational Enterprises," a section of which is subtitled "Disclosure of Information." The major elements suggested to be disclosed are listed below:

Enterprises should publish within reasonable time limits, on a regular basis, but at least annually, financial statements and other pertinent information relating to the enterprise as a whole comprising in particular:²⁰

- the structure of the enterprise, showing the name and location of the parent company, its main affiliates, its percentage ownership, direct and indirect, in these affiliates, including shareholdings between them;
- the geographical areas...where operations are carried out and the principal activities carried on therein by the parent company and the main affiliates;
- the operating results and sales by geographical area and the sales in the major lines of business for the enterprise as a whole;
- significant new capital investment by geographical area and, as far as practicable, by major lines of business for the enterprise as a whole;
- a statement of the sources and uses of funds by the enterprise as a whole;
- the average number of employees in each geographic area;
- research and development expenditure for the enterprise as a whole;

- the policies followed in respect of intragroup pricing;
- the accounting policies, including, those on consolidation, observed in compiling the published information.

The OECD organised a 'Forum on Harmonisation of Accounting Standards' in Paris on April 23-24, 1985. The forum was attended by delegations from 22 countries, by representatives of IASC, UN, EEC, International Coordination Committee of Financial Analysts Federation, Internal Association of Financial Executives Institute, etc. At the Forum, the participants considered the following subjects:

1. The interests and needs of preparers and users of financial statements.
2. Promoting international harmonisation of accounting standards.
3. Institutional issues in the harmonisation of accounting standards
4. Main substantive issues for achieving greater harmonisation of accounting standards.

Throughout the forum there was widespread support for harmonisation, the aim of which is 'comparability', rather than uniformity, of financial statements. It was recognised that the existence of multiple accounting standards around the world results in an inefficient use of preparer's resources. The forum also identified a need for greater Communication. between all those involved in standards setting process. Both users and preparers at the Forum said that IASC should be the focus for efforts to achieve harmonisation.

THE EUROPEAN ECONOMIC COMMUNITY/EUROPEAN COMMUNITY

The EEC/EC has also been active in achieving regional harmonization of accounting principles through a series of directives that, within the treaty of Rome, are not as binding as regulations. The directive anticipates given results but the mode and means of implementation are left to the member countries. The EEC/EC is in fact the first supranational body to have an important authority in the area of financial reporting and disclosure. Its influence is so pervasive that its directives are perceived to have important effects on nonEEC/ECbased multinationals operating in the community. Particularly relevant to international accounting are the fourth, fifth, and seventh directives.

The Fourth Directive

The fourth directive, formally adopted in 1978, deals with the annual financial statements of public and private companies, other than banks and insurance companies.²¹ Its purposes have been summarized as follows:

1. Coordinating national laws for the protection of members and third parties relating to the publication, presentation,

and content of annual accounts and reports of limited liability companies, and the accounting principles used in their preparation.

2. Establishing in the EEC minimum equivalent legal requirements for disclosure of financial information to the public by companies which are in competition with one another.
3. Establishing the principle that annual accounts should give a true and fair view of a company's assets and liabilities, and of its financial position and profit or loss.
4. Providing the fullest possible information about limited companies to shareholders and third parties (with some relief to smaller companies).²²

The major aspects relevant to international accounting were Articles 1 and 2 on types of companies covered by the directive and the general reporting requirements; Articles 327 on the format of annual report; Articles 2839 on the valuation rules; Articles 4450 on publication requirements; and Articles 5152 on the procedural, statutory changes in national laws required for compliance.

The Fifth Directive

The proposed fifth directive, revised in 1984, deals with the structure, management, and external audits of limited liability corporations. In the revised draft, the directive proposes to require a company that employs more than 1,000 workers in the EEC/EC (or is part of a group of companies that employs more than 1,000 workers in the EEC/EC) to allow the employees to participate in the company's decisionmaking structure. In addition, the proposal specifies certain rules concerning annual meetings of shareholders, the adoption of the company's annual financial statements, and the appointment, compensation, and duties of the company's auditors.

The Seventh Directive

The seventh directive, issued in June 1983, addresses the issues of consolidated financial statements and offers some guidelines for more standardization of accounting and reporting. Countries in EEC/EC member countries and non EEC/EC corporations with subsidiaries in a member country are required to file consolidated financial statements in that country. However, each of the ten EEC/EC countries has five years to pass legislation to implement the directive, and annual reports do not have to conform until 1990.

OBSTACLES IN CONVERGENCE AND HARMONISATION

Many difficulties have been faced in the harmonisation programmes commenced by international agencies, especially by IASC (now IASB). These difficulties may be grouped as follows:

- (A) Difficulties in the Development of Standards
- (B) Difficulties in Enforcement of Standards
- (C) Other Difficulties

Difficulties in the Development of Standards

The main difficulties in establishment of an internationally uniform system of accounts and the standardisation of accounting procedures are the following:

1. *Provincialism*—Many countries hold provincial outlook in many spheres. As long as people believe that their own views are superior to those of others, known or unknown, it is hardly possible to reach agreement on a common solution. Although this provincialism is absent among the (IASC) Board members, it is present very often in their countries. This provincialism is found greatly in developed countries, or countries where accounting is most developed. Such countries are reluctant to change their views and listen to others. Arpan and Radebaugh²³ believe that “nationalism, egoism and pride also impede progress: the French would like to have the new global system patterned after the French System...the American, the American. Each country believes its system is the best and is reluctant to adopt a system it perceives to be inferior or unsuitable”.
2. *Differences in Economic and Social Environment*—Harmonisation is adversely affected by the differences in economic and social environment, in which accounting has a role to play. In different countries, there is a different view on what is, or should be, the primary purpose of financial statements. In some countries, and the USA is one of them, the investor and his decisions are considered to be most important. In others, such as Germany, it is the creditor. In France, the information needs of Government play a major role. In some countries, it is believed companies have a public accountability to a great variety of interest groups. These differences in purposes which are in the minds of accountants lead to different views on what is appropriate accounting treatment. Some operate from an environment of extreme conservatism, others from an environment that borders on creative accounting.

Fantl²⁴ argues that “one of the chief and least recognised misconceptions which occurred in international accounting is the assumption that accounting objectives are uniform”. Fantl meant that if we are going to achieve harmonisation, we can only do so when all countries have the same objectives from their accounting systems. It is only if accounting objectives are compatible with one another that there is any real prospect of arriving at meaningful common standards. As McComb²⁵ points out, “if any two national accounting models are irreconcilable, then either one or both must be

fundamentally changed if common standards are assumed to be a primary goal”. Chetkovich²⁶ states “it would make sense that we seek to define international accounting objectives before we attempt to define international accounting standards. Common objectives must necessarily derive from social and economic environments that are similar and thus create similar needs”.

3. *Diverse Accounting Practices*—Another difficulty is that at the present time, there are wide divergences in worldwide accounting practices. Each practice may have its own justification and well be understood in the national environment. Obviously, it is the task of IASC to try and narrow these areas of divergence. However, variations in accounting practices hampers harmonisation. IASC is operating in an environment of conflict between ideals and practicality. The IASC has, first, to outlaw practices that are clearly misleading or allow management too much latitude; and then should try to eliminate options that do not contribute to fairness and usefulness in financial reporting.
4. *Gaps between Developed and Developing Countries*—In many areas, developing countries differ from those of developed. In fact most developing countries had little chance to evolve accounting systems which truly reflected the needs and circumstances of their own societies. Their existing systems are largely extensions of those in developed countries. In this situation, the benefits of their being more deeply integrated into systems that predominantly suit developed countries become questionable. Briston²⁷ comments that instead of recognising the inadequacies of the UK and US system and attempting to make it more relevant and integrated, UK and US accountants are gradually imposing that outmoded system upon developing countries. On the contrary, developing countries must create their own systems before this adverse influence has reached an irreversible stage. Briston has studied the spread of western accounting ideas throughout the world. British influence is very long-standing in many old colonial countries. He points out that once a reporting system and nucleus of an accounting profession has been established, it becomes very difficult to modify the system. The result is that these countries have adopted accounting principles and systems which originally evolved to meet the needs of UK capitalism. Enthoven²⁸ points out that we must not assume that what might be good accounting for the developed countries “will automatically be economically relevant and good for the emerging nations and process of development”. Samuels and Oliga²⁹ argue that differences between countries can be so great that the problem of appropriate accounting standards can assume vastly different conceptual meanings and contextual significance from one country to another.

Bailey³⁰ makes a similar point and says that there may not be an accounting model universally applicable in all countries.

Critics of harmonisation in the developing nations also argue that these (developing) countries have few indigenous private investors. Economic activity is, to a considerable extent, in the hands of government agencies, and financial information should be geared primarily to their needs rather than to the needs of private investors.³¹ When it is said that financial reporting should be useful to investors, this goal is primarily oriented towards indigenous investors.

Difficulties in Enforcement of Standards

After establishment of international standards, difficulties may emerge at enforcement level. These obstacles have to be overcome in order to achieve adoption of and compliance with International Accounting Standards. Such difficulties are listed as follows:

1. *Tax Laws*—Harmonisation faces problems due to differing tax laws. In many countries of the world, enterprise are required to draw up one set of financial statements only serving both tax purposes and financial reporting purposes. Government has an overriding interest in profit as computed for fiscal purposes; tax laws often prescribe in detail how profit should be measured. In this framework, it is unavoidable that business is more concerned about tax saving than it is about accurate determination and reporting of financial performance. And equally unavoidable is the consequence that International Accounting Standards are judged primarily by these tax implications, the government opposing standards that would reduce profits and business opposing standards that would boost profits. Due to these reasons local standards and international standards differ and, where they differ, local standards prevail and international standards tend to be ignored.

Clearly, we cannot hope for improvement and harmonisation of financial statements unless all ties between tax accounting and reporting to the public are cut completely. This would be the single most important contribution that governments are able to provide to the cause of international harmonisation.³²

2. *Disclosure Laws*—Another difficulty is, again, the law—not the tax law but laws regulating financial reports to shareholders and the public. In some countries, this law provides great details both on disclosure and on measurement. In this environment, the notion of ‘true and fair reporting’ loses importance and the primary purpose of preparers and auditors comes to comply with law and regulations. For IASC, this situation means that in such a country International Accounting Standards will not be adopted unless they are incorporated in the

disclosure laws. This requires changing the relevant law which is itself a tiresome and timeconsuming task. In most countries lawmakers are not leaping to their feet to do this job because company reporting is not a hot political issue. And if it is, even worse, because then politicians will handle the issue with strong political overtones.

3. *Existence of local standards*—Difficulties may evolve from the activities of the national standards-setting bodies. In more and more countries, accounting standards have been found established by the profession or government agencies or jointly by both. Seen on the national level, this may have merits. But seen from an international viewpoint, problems arise. If many countries have detailed rules on many subjects, there is bound to arise conflict between these national systems. This is unfortunate for international enterprises who address their reports to users both at home and abroad, and it reduces the credibility of their statements abroad.

At the same time, once there are national standards, it appears to be rather difficult to adopt them to international consensus. As soon as there is a national standard, national positions become entrenched, and it is hard to exchange that position for one that is considered second rate. Apart from that, national standardssetters have to weigh carefully the feelings and environment prevailing in their own countries. That means that often standards-setters are unable to compromise even if they would wish to do so.

4. *Competition among International Standards-Setting Agencies*—There is found a potential competition between international standards-setters. As it is clear, apart from IASB, the UN and the OECD are now engaged in the field of company reporting, especially by multinational enterprises. OECD has made it clear that it does not want to go into setting of standards, but wishes to restrict itself to clarifying the guidelines for disclosure of information, and to energising in some way or other, the process of international harmonisation. In the UN, on the other hand, it is quite clear that a number of countries wish the UN to develop and issue enforceable standards for reporting by multinationals. In such situations, there is a serious danger of incompatible and conflicting sets of international standards. It is also rightly said that the UN exercise has strong political overtones.
5. *Unhelpful Corporate Attitudes*—Standards are basically meant for business enterprises. They are expected to comply with International Accounting Standards, and if they do not, they are an obstacle in getting compliance. Amongst the enterprises that are

reluctant to formally adopt international accounting Standards, two broad categories can be made:

- (a) Those whose affairs are purely domestic, and that hold the view that international standards are none of their business. The vast majority of companies in countries of the world belong to this category.
- (b) Those whose affairs are international, that recognise there is a need for international harmonisation, but are hesitant to back IASB as long as they are not sure IASB is a winning horse.

On the other hand, it should be noted that many companies do comply with International Accounting Standards for the simple reason that these do not require anything that is not already in their national standards.

Other Difficulties

There are many other difficulties which hinder the efforts towards international harmonisation. These difficulties primarily relate to international standardssetting agencies.

Daley and Mueller³³ has analysed country representation on international standards-setting bodies. Of the countries who are represented on at least three of the bodies, seven are western developed nations, only one is from Africa, and none is from the Middle East. They point out that because of the 'western bias' of the IASC many of the developing nations criticise its work for 'being insensitive to their situation and needs'. Daley and Mueller conclude that if private sector standards setting is to continue as at present, with no enforcement powers, then it must become more internationally oriented. That is, more nations must be represented on the international committees than at present; it is then more likely that statements will be acceptable.

Mueller³⁴ gives three major reasons why the IASC may be viewed as an ineffective and inappropriate agency for setting international standards. First, there is the potential conflict between the standards set by IASC and those set by the national bodies. Second, in many countries accounting standards need to be incorporated in law and set by political procedures. Third, there is no political and diplomatic recognition of IASC by national governments or international agreements. The IASC does, however, participate in the discussion on standards by the appropriate UN and OECD groups.

In some ways, the movement toward one global set of financial reporting standards has made the challenges related to full convergence or adoption of a single set of global standards more apparent. Standard-setting bodies and regulators can have differing views or use a different framework for developing standards. This can be the result of differences in institutional, regulatory, business, and cultural environments. In addition, there may be resistance to change or advocacy for change from certain constituents; accounting boards may be influenced by strong industry lobbying groups and others that will be subject to these reporting standards. For example, the FASB faced strong opposition when it first attempted to adopt standards requiring

companies to expense employee stock compensation plans. The IASB has experienced similar political pressures. The issue of political pressure is compounded when international standards are involved, simply because there are many more interested parties and many more divergent views and objectives. In the financial crisis of 2008 and 2009, both the FASB and the IASB faced political pressure to amend the standards related to financial instrument accounting. Political pressure and its influence create tension as the independence of accounting standards boards are questioned and jeopardized.

The integrity of the financial reporting framework depends on the standard-setter's ability to invite and balance various points of view and yet to remain independent of external pressures.

Burggraaff³⁵ discusses the political pressures on IASC. He differentiates between political pressure coming from various interest groups in the private sector and political pressure from government bodies, and government agencies who are interested in international standards. The pressure that the various interest groups, from time to time, bring on the IASB, places the Board in an uncomfortable dilemma. The pressure means that the committee decisionmaking process either has to be based on consensus and compromise or on resorting to underlying concepts.

It is also argued that the IASB (IASC) has no real authority to implement its recommendations and has to rely on the best efforts of individual members which most often are not the accounting standardssetting bodies of these countries.

Benston, Bromwich, Litan and Wagenhofer Study on Global Convergence

Benston, Bromwich, Litan and Wagenhofer³⁶ have surveyed the prospects of global financial reporting standards and IASB as standard setter and issues involved in convergence. They have come out with the following findings:

- (1) Given the efforts put into harmonization, especially by the EU, and into convergence, and the experience gained from any countries, we find it hard to believe that a single set of global standards can eventually evolve and more importantly be sustained in the face of often substantially different national accounting regimes. The potential solutions to specific accounting problems are too different, as are the economic effects that result from applying accounting standards to countries that differ with respect to their fundamental economies. While the desires for convergence of market regulators and preparers and users of the financial reports of international companies appear to be similar worldwide, their relative powers differ widely, as does the political pressure on the national standard setters in the countries who themselves must agree on each worldwide standard.
- (2) Sheer political considerations suggest that the same domestic political interest that were successful in the past in influencing the direction taken by a national standard setter would resist any shift of decision making

to an international body that could not be as easily swayed by the local interests of some national constituencies. There have been instances of heavy lobbying of the IASC and now of the IASB, with mixed success.

- (3) These concerns (lobbying), if they are repeated in the future with another standard, could undermine the IASB's reputation as a (or, the) global standard-setter in the long run, especially as IASB standards themselves have no political authority backing them. Instead, IASB standards have only as much legitimacy in any country (or in the EU) as they are given by a national government, which could withdraw support for specific standards or for all of them. Indeed, the fact that some in the EU already believe the IASB to be strongly Anglo-Saxon and dominated by developed countries does not augur well for the future. Nor does the fact that so far IFRS have been used only on a voluntary basis in commercially developed countries, and it has been shown that often IFRS had not been applied fully or always correctly. The fact is that international standards are still widely untested as national compulsory accounting standards.
- (4) There are countries that have, or believe they have, financial accounting standards that are superior to any potential global standard. Many in the United States, the United Kingdom, and Australia, to mention a few, would claim that their standards are superior to the IFRS. Accepting the global standard would then decrease the quality of their financial reporting systems, a cost that they and others believe would outweigh the benefit of easier international comparability. For example, the SEC's refusal so far to accept IFRS without reconciliation may be a result of its concern that accepting IFRS for foreign listed companies would mislead and misinform investors in U.S. capital markets. Perhaps most importantly, the SEC believes that U.S. accounting standards would be weakened. The SEC also may fear a loss of power, particularly if U.S. investors prefer IFRS or at least do not avoid investments in corporations that use IFRS.
- (5) It is not clear what would happen to national accounting standard-setting bodies if the IASB were to take over standard setting. Of course, the countries could pass the resources they now provide to their national standard setters over to the IASB, but they would thereby lose their influence and potentially expert accounting knowledge in their own countries. The national standard setters in the EU are very much aware that moving to IFRS calls into question their very existence. The IASB wants them to provide input into its projects, to be a mentor of IFRS in their countries, to monitor application of IFRS, and to deal with national peculiarities not captured by IFRS and deal with any national GAAP that remain. However, this list of tasks is not so exciting as to ensure sufficient funding for maintaining national standard setters. Hence, it should not come as a surprise to observe that they are reluctant to give up too much power to the IASB or another global standard-setter.
- (6) But even if a global standard could be developed and globally accepted, there is skepticism about the sustainability of worldwide accounting standards in the long-term. Any worldwide standard must be applied in many different countries with all their peculiarities, and with their different national enforcement bodies that are expected to ensure its uniform application. A need for ongoing interpretation occurs particularly in new and unanticipated situations. Which body or bodies would discharge this function? The situation worsens if the standards are translated into different languages and then applied. Clearly, if national accounting authorities remain in charge, for the purpose of making national interpretations of international accounting standards and for governing reporting by nonlisted companies, any initial set of standards would fragment, at least to some extent, along country lines. Different institutional environments, such as litigation proneness, may induce a demand for more and more detailed rules in one country than in another. Over time, the world could return to where it started, with different standards in different countries, although to be sure the intercountry differences could be smaller than they are now.
- (7) The IASBG could reduce (although not prevent) fragmentation arising out of national differences, if it, and it alone, was responsible for all interpretations of the standards and their subsequent clarifications. However, this solution would mean that nations would have to surrender *permanently* a further part of their "financial sovereignty" to an international organization. In adopting IFRS, the EU was particularly aware of this problem and with the Committee of European Securities Regulators (CESR) it has a body that should coordinate enforcement across European countries. But coordination outside the EU faces substantial difficulties. Ultimately, it is unavoidable that national courts will have to interpret IFRS in cases that involve accounting numbers.
- (8) Beyond politics, vesting one international body with the sole power to interpret and update financial reporting standards runs a major danger of chilling experimentation that can freeze standards in the wrong place. This outcome could be avoided if firms were permitted to choose whether to use U.S. GAAP or IFRS for listed companies, without reconciliation, an option we explore shortly.
- (9) Another threat to a global standard is if countries adopt that standard with qualifications. The EU and some other countries adopted IFRS outright, at least for listed European companies, although with an endorsement mechanism designed to prevent undesirable

developments by the IASB that would be incompatible with EU directives (including ensuring and maintaining EU sovereignty). What looked like just a formal mechanism required for legal reasons may turn out to be the basis for the development of European IFRS if certain IFRS were not endorsed and substituted by some other standards. This possibility may also arise with Australia's endorsement mechanism. Other countries attempt to converge their own standards with those of the IASB or publish exposure drafts of the IASB in their countries. This can easily lead to a "cherry picking" of standards (Japan provides an example with regard to some IFRS) and a situation where it is not clear at all how similar the applied standards are to the global base standard.

- (10) To be sure, a global accounting standard would be useful for companies that use the increasingly international capital markets. The IFRS, like U.S. GAAP and other standards, are strongly geared toward satisfying the information demands of investors in capital markets. They are not necessarily optimal for smaller or privately owned firms. The EU member states currently have accounting systems in place that are applicable for all limited liability companies, including listed companies. Introducing a global standard for listed companies creates a tension as it is not obvious how far it should extend to other limited liability companies. Some countries allow or require other companies to also use IFRS; other do not. Each option has its problems. They range from legal issues (if taxes or dividend distribution depends on financial reports) to comparability across companies located in the same country. Interestingly, the United States seems to live with such differences in financial reporting within the country for listed companies and unlisted firms not subject to the SEC's oversight. Moving to a global standard may thus incur very different costs and benefits to countries. It remains to be seen if the IASB succeeds in developing standards acceptable for companies that are not in the domain of public interest, which includes most small and medium-sized companies.

SUGGESTIONS FOR INCREASED CONVERGENCE AND HARMONISATION

There is no doubt that harmonization of company annual reports would be beneficial to all countries of the world and would achieve the goal of comparability in international financial reporting. Although many international agencies and bodies are working towards harmonisation in financial reporting, the International Accounting Standards Board (IASB), earlier IASC, plays (and would play) an important role in the harmonisation programme. Some suggestions have been given here to enable harmonisation in published company annual reports at the international level.

1. Enlarge representation on IASB. At present, IASB is seen by many as an organisation heavily influenced by Western accounting profession. The effective representation of third world countries is not found in IASB. The IASC has to be 'International' in real terms. That is, more countries, especially the developing countries, must be represented on the IASB than at present. In that situation IASB's statements will have worldwide acceptance and compliance.
2. Avoid political pressures on IASB. Generally political pressures on IASB come from various interest groups in the private sector and government agencies who are interested in international standards. Developing useful international standards requires that all kinds of pressures from any quarter should be eliminated in the decision making process applied in the development of international standards. If international standards are the result of pressures exercised by vested interests, the IASB will not be able to function in an objective and purposeful manner.
3. IASB should publicise standards developed by it and for this should try to get support of the accounting profession, member countries and corporate managements all over the world.

IASB should encourage member bodies to adopt IFRSs or phrase or rephrase their rules in such a way that they are in line with IFRSs.
4. Each country should pass legislation to the effect that as and when an international standard is set or amended by IASB, local standards, if they exist, should be brought into line; if local standards do not exist the IFRS should be adopted. Legislation of this character would enjoy the necessary degree of flexibility.
5. UN should recognise IASB as the body qualified to set up international standards. The UN should then use its authority to hasten universal acceptance of such international standards. IASB should be formally recognised by governments as an international standards setting body.
6. The governing bodies of the accounting profession should formally acknowledge that it is their task, among many others, to apply disciplinary procedures when bad professional work, including the non observance of standards, is brought to their notice.
7. In each country the local stock exchange should cooperate in taking appropriate action against companies which failed to comply with standards.
8. And finally, continuous research is needed to ascertain why the differences arise and to determine what will be the economic effects of some countries changing practices. We should study the reasons for the continued existence of national differences in accounting principles

and practices. Emphasis should be upon investigation, analysis and education rather than upon undue haste in speeding the process of promulgating further International Accounting Standards. Convergence and Harmonisation, in fact, can only be achieved if there is mutual international understanding both of corporate objectives and rankings attached to them. The research results of various studies of economic effects of market reaction to pronouncements can provide feedback to policymakers which will assist them in their deliberations.

*Bromwich, Macve and Sunder*³⁷ observe:

“We have argued that the Boards (IASB) should try to understand the practical of conventions in financial reporting and how and when they might be modified to serve the legitimate interests of interested parties (e.g., by reducing apparent inconsistencies that no longer serve any purpose). However, the corporate structure of these Boards, designed for debating technical issues, may not necessarily equip them to address such challenges. The ultimately political nature of the social welfare issues may be better suited for broader social institutions reflecting social norms of the kind that the idea of generally accepted accounting principles was originally meant to encapsulate. How to construct useful, practicable, and broadly accepted financial reports may require evolution as well as design. Whether it is desirable for the Boards themselves to converge towards becoming one, monopolistic standard-setter remains an open question.”

Conclusion

There is a strong case for convergence and harmonising accounting principles and standards at the international level. This requires a high degree of mutual international understanding about corporate objectives, financial reporting objectives and harmonisation objectives. Harmonisation and convergence involves compromises and therefore, in order to have lasting impact, harmonisation must be worked out with national accounting bodies and standardssetters who not only establish standards in their countries but also are assigned the task of monitoring those standards. Although convergence has many obstacles, accountants and accounting professions all over the world have to overcome them. All accountants—whether in practice or not—have to participate and contribute effectively in achieving convergence. Besides, the other interested parties concerned with financial reporting should also share the huge but necessary responsibility of international harmonisation and convergence. In years to come, international harmonisation efforts will increase as the world needs international accounting standards, to be applied worldwide by business enterprises. The convergence would have significant impact on future developments in corporate financial reporting everywhere. In future, International Accounting standards, especially formulated by IASB, will be of dominating importance in the presentation of company financial statements and related financial disclosure.

Miched Prada, Chairman of the Trustees of the IFRS Foundation, while speaking at Euro Financial Forum on 9 September 2015, outlined the three success criteria for global standards:

- (1) Having a clear and supported purpose,
- (2) Being used widely and consistently around the world, and
- (3) Bringing tangible benefits.

REFERENCES

1. E.L. Miller, *Accounting Problems of Multinational Enterprises*, Mass D.C. Heath, Lexington, 1979.
2. J.M. Samuels and A.G. Piper, *International Accounting: A Survey*, London: Croom Helm, 1985, p. 57.
3. Adolf Enthoven, “Accounting in Developing Countries” in Christopher Nobes and Robert Parker (Eds.), *Comparative International Accounting*, Oxford: Philip Allan Publishers, 1985, p. 196.
4. Christopher Nobes, “Harmonisation of Financial Reporting”, in Christopher Nobes and Robert Parker (Eds.), *Comparative International Accounting*, Oxford: Philips Allan Publishers, 1985, p. 332.
5. J.P. Cummings and M.N. Chetkovich, “World of Accounting Enters a New Era,” *Journal of Accounting* (April 1978).
6. J.M. Samuels and A.G. Piper, *op. cit.*, p. 77.
7. Thomas G. Evans, Martin E. Tayler and Oscar Holzmann, *International Accounting and Reporting*, New York: Macmillan Publishing Company, 1985, p. 86.
8. D. McComb, “International Accounting Standards and EEC Harmonisation Programme: A Conflict of Disparate Objectives”, *International Journal of Accounting* (Spring 1982).
9. John Turnver, “International Harmoniation: A Professional Goal”, *Journal of Accountancy* (January 1983), pp. 58-59.
10. J.A. Burggraaff, “IASC: Obstacles and Opportunities”, Speech given at American Accounting Association Annual Meeting, August 7, 1981.
11. Clare Roberts, Paul Weetman and Paul Gordon, *International Financial Accounting*, Pearson Education, 2002, p. 147.
12. Keith Alfredson *et al.*, *Apply International Accounting Standards*, Ernst and Young, 2005, p. 6.
13. International Accounting Standards Committee, *What is the IASC?* London: IAS.
14. Keith Alfredson *et al.*, *Ibid.*, pp. 14-15.
15. Keith Alfredson, *et al.*, *Ibid.*, p. 12.
16. George Benston, M. Bromudich and A. Wagenhofer, “Principles Versus Rules Based Accounting Standards: The FAAB’s Standard Setting Strategy,” *ABACUS* 42, No. 2 (2006), pp. 165-188.
17. Lee H. Radebaugh, Sidney J. Gray and Ervin L., Black, *International Accounting*, John Wiley and Sons, 2006, p. 179.
18. Eva Jermakowicz and Brian L. McGuire, *Perspective* (Autumn 2002), p. 16.
19. W.J. Brennan (Ed.) *The Internationalisation of the Accounting Profession*, Canadian Institute of Chartered Accountants, 1979, p. 71.

20. OECD, Declaration on International Investment and Multinational Enterprises, *The OECD Observer*, 1976, p. 14.
21. Commission of the European Communities, Amended Proposal for a Fourth Council Directive for Coordination of a National Legislation Regarding the Annual Accounts of Limited Liability Companies, Brussels, 1974.
22. The Fourth Directive, London, 1978. p. 1.
23. J.S. Arpan and L.H. Radebaugh, *International Accounting and Multinational Enterprises*, Warren, Gorham and Lamont, 1981.
24. T.L. Fantl, "The Case Against International Uniformity", *Management Accounting* (May 1971).
25. D. McComb, "The International Harmonisation of Accounting : A Cultural Dimensions", *op. cit.*, (Fall 1979).
26. M.N. Chetkovich, "Unity in Establishing Accounting Standards", *International Journal of Accounting* (Fall 1972).
27. R.J. Briston "The Evolution of Accounting in Developing Countries", *International Journal of Accounting* (Fall 1978).
28. A.J.H. Enthoven, "The Unity of Accountancy in an International Context", *International Journal of Accounting* (Fall 1973).
29. J.M. Samuels and J. Oliga, "Accounting Standards in Developing Countries", *International Journal of Accounting* (Fall 1982).
30. D.T. Baile, "European Accounting History", in H.P. Holzer (Ed.) *International Accounting*, New York: Harper and Row, 1984.
31. David Solomons, *Making Accounting Policy*, New York: Oxford University Press, 1986, p. 62.
32. J.A. Burggraaff, "IASB: Obstacles and Opportunities", Paper presented at American Accounting Association Annual Meeting, August 7, 1981.
33. L.A. Daley and G.G. Mueller, "Accounting in the Arena of World Politics", *Journal of Accountancy* (February 1982).
34. G.G. Mueller, "The Race to Set International Standards for Financial Accounting and Administration", *Annals, School of Business Administration*, Kobe University, No. 25, 1981.
35. J.A. Burggraaff, "The Political Dimensions of Accounting Standards Setting in Europe" in Bromwich and Hopwood (Eds.) *Accounting Standards-Setting* London: Pitman, 1983.
36. George J. Benston, Michael Bromwich, Robert E. Litan and Alfred Wagenhofer, *World Financial Reporting*, Oxford University Press, 2006, pp. 231-236.
37. Michael Bromwich, Macve and Shyam Sunder, Hicksian Income in the Conceptual Framework, *ABACUS* (Vol. 46, No. 3), September 2010, pp. 348-376.
6. Describe the effects of IASC standards on developments in accounting practices in world countries.
7. How can UNO and OECD contribute to development of international standards?
8. Describe the main obstacles in the global convergence and harmonisation of company annual reports at the international level.
9. What are the problem associated with enforcement of international standards?
10. Discuss the steps taken at the international level for convergence and harmonisation of corporate reporting during the past decade. (M.Com., Delhi)
11. Evaluate International Accounting Standards Committee as standards-setter.
12. Explain the importance of International Accounting Standards Board (IASB) as Standard Setter.
13. What are the objectives of IASB?
14. Critically evaluate organisation of IASB.
15. What are different bodies/organisations having relationship with IASB?
16. What suggestions would you make to bring global convergence and harmonisation in published company annual reports in different countries of the world? (M.Com., Delhi)
17. Discuss the factors that have induced the internationalisation of accounting. (M.Com., Delhi)
18. What are the important forces which support the development of international accounting standards? Examine the role of the International Accounting Standards Committee (IASC) and IASB in the field of standards-setting. (M.Com., Delhi)
19. Why is corporate financial disclosure so important in a competitive world economy? (M.Com., Delhi)
20. Discuss the difficulties faced by International Accounting Standards Committee (IASB) in the process of bringing convergence and harmonisation in accounting and reporting. (M.Com., Delhi, 1995, 2013)
21. Discuss the need for harmonisation of financial accounting and reporting. (M.Com., Delhi, 1998, 2001)
22. Make out a case for harmonisation in accounting and reporting.
23. Evaluate the organisational structure of IASB. Do you think change from IASC to IASB will be useful.
24. How are IASs enforced among the member countries?
25. Explain the relationship between IASB and IOSCO.
26. How far IASC (now IASB) has succeeded in bringing convergence and harmonisation in accounting and reporting at the international level?
27. Discuss the role of the following bodies in the harmonisation:
 - (i) International Federation of Accounting (IFAC)
 - (ii) United Nations
 - (iii) Organisation for Economic Cooperation and Development.
28. Explain obstacles in the process of harmonisation and global convergence.
29. What suggestions can you give to promote global convergence and harmonisation in accounting and reporting?
30. How does IASB develop accounting standards?

QUESTIONS

1. What is the concept of Global Convergence of accounting standards?
2. Distinguish between harmonisation and convergence.
3. How has globalisation of capital markets affected global convergence?
4. Define the term 'harmonization'. Distinguish between the terms 'harmonisation' and 'standardisation'.
5. Explain the factors responsible for convergence and greater harmonisation efforts at the international level. (M.Com., Delhi, 2009)

31. Evaluate International Accounting Standards promulgated by IASB.
32. What are the benefits of global accounting standards?
33. Draw a list of items of disclosure required by IASB.
34. Evaluate the attempts made by IASC in bringing harmonisation.
35. Describe the weakness of IASC as standard setter.
36. What are the provisions of IFRS 1 First-time Adoption of International Financial Reporting Standards?
37. How are financial statements prepared when a business enterprise is applying IFRSs first time?
38. Distinguish between principles based and rule-based accounting standards.
39. How are IFRSs influencing standards in the following countries/ regions.
 - (i) USA
 - (ii) Europe
 - (iii) Asia-Pacific Countries.
40. Discuss the efforts made by FASB (USA) and IASB towards global convergence.
41. What is the status of IFRSs in Europe?
42. Explain the attempts made by IASB for global convergence of accounting standards.
43. Explain the role of International Federation of Accountants (IFAC) in promoting global convergence.
44. Discuss the problems in global convergence of accounting standards.
45. Offer your suggestions for enhancing global convergence of accounting standards.
46. Discuss the factors responsible for harmonisation of financial accounting and reporting at the international level. What attempts have been made by IASB (earlier IASC) in this regard?
(M. Com., Delhi, 2007)
47. Explain the factors responsible for greater harmonisation efforts at the international level. Evaluate the efforts made by International Accounting Standards Board in promoting harmonisation and convergence of accounting standards at the international level.
(M.Com., Delhi, 2008)
48. Give arguments in favour of global convergence of accounting standards. Discuss the attempts made by IASB in this regard.
(M. Com., Delhi, 2012, 2011)



PART – FOUR

Corporate Financial Reporting

- Chapter 13: Financial Reporting : An Overview
- Chapter 14: Conceptual Framework
- Chapter 15: Accounting for Changing Prices
- Chapter 16: Fair Value Measurement
- Chapter 17: Segment Reporting
- Chapter 18: Interim Reporting
- Chapter 19: Human Resource Accounting
- Chapter 20: Corporate Social Reporting
- Chapter 21: Value Added Reporting
- Chapter 22: Environmental Accounting and Reporting
- Chapter 23: Financial Reporting in Not-For-Profit and Public Sector Organizations
- Chapter 24: Foreign Currency Translation

Financial Reporting : An Overview

CONCEPT OF FINANCIAL REPORTING

Financial reporting may be defined as communication of published financial statements and related information from a business enterprise to third parties (external users) including shareholders, creditors, customers, governmental authorities and the public. It is the reporting of accounting information of an entity (individual, firm, company, government enterprise) to a user or group of users.¹ Company financial reporting is a total communication system involving the company as issuer (preparer); the investors and creditors as primary users, other external users; the accounting profession as measurers and auditors; and the company law regulatory or administrative authorities.

FINANCIAL REPORTING AND FINANCIAL STATEMENTS

The term 'financial reporting' is not restricted to information communicated through financial statements. Although financial reporting and financial statements have essentially the same objectives, some useful information is better provided by financial statements and some is better provided, or can only be provided, by means of financial reporting other than financial statements. However, it is difficult, if not impossible, to have clear distinction between financial reporting and financial statements. But it is now an accepted fact that financial reporting has a broader scope than the financial statements which are only one of the many means of conveying information about enterprise financial performance. FASB (USA)² has described some major characteristics of financial reporting and financial statements in its Concept No. 1 to highlight the distinction between the two:

1. Financial statements are a central feature of financial reporting. They are a principal means of communicating accounting information to those outside an enterprise. Although financial statements may also contain information from sources other than accounting records, accounting systems are generally organised on the basis of elements of financial statements (assets, liabilities, revenues, expenses, etc.) and provide the bulk of the information for financial statements. The financial statements now most frequently provided are (a) balance sheet or statement of financial position, (b) income or earnings statement, (c) statement of retained earnings, (d) statement of other changes in owners' or stockholders' equity, and (e) statement of changes in financial position (statement of sources and applications of funds) (para 6).

2. Financial reporting includes not only financial statements but also other means of communicating information that relates, directly or indirectly, to the information provided by the accounting system, that is, information about an enterprise's resources, obligations, earnings, etc. Management may communicate information to those outside an enterprise by means of financial reporting other than formal financial statements either because the information is required to be disclosed by authoritative pronouncement, regulatory rule, or custom, or because management considers it useful to those outside the enterprise and discloses it voluntarily. Information communicated by means of financial reporting other than financial statements may take various forms and relate to various matters. News releases, management's forecasts or other descriptions of its plans or expectations, and descriptions of an enterprise's social or environmental impact are examples of reports giving financial information other than financial statements or giving only nonfinancial information (para 7).
3. Financial statements are often audited by independent accountants (auditors) for the purpose of enhancing confidence in their reliability. Some financial reporting by management outside the financial statements is audited, or is reviewed but not audited, by independent accountants or other experts, and some is provided by management without audit or review by persons outside the enterprise (para 8).

OBJECTIVES OF FINANCIAL REPORTING

An evaluation of company financial reporting requires some agreement on its objectives. The financial reports of a company include financial statements and other supplemental disclosures necessary to assess a company's financial position and periodic financial performance. Financial reporting is based on a simple premise. The International Accounting Standards Board (IASB), which sets financial reporting standards that have been adopted in many countries expressed it as follows in its *Conceptual Framework for Financial Reporting 2010 (Conceptual Framework 2010)*³.

"The objective of general purpose financial reporting is to provide financial information about the reporting entity that is useful to existing and potential investors, lenders, and other creditors in making decisions about providing resource

to the entity. Those decision involve buying, selling or holding equity and debt instruments, and providing or settling loans and other forms of credit.”

The objective in the *Conceptual Framework (2010)* differs from the objective of the *Framework for the Preparation and Presentation of Financial Statements (1989)* in a number of key ways. The scope of the objective now extends to financial reporting, which is broader than the previously stated scope that covered financial statements only. Another difference is that the objective now specifies the primary users for whom the reports are intended (existing and potential investors, etc.) while the previously stated objective referred solely to a ‘wide range of users.’ Also, while the *Conceptual Framework (2010)* identifies information that should be reported—including that about financial position (economic resources and claims), changes in economic resources and claims, and financial performance reflected by accrual accounting and past cash flows—it does not list that information within the objective itself, unlike the previously stated objective.

Financial reporting is not an end in itself but is a means to certain objectives. The objectives of financial reporting and financial statements have been discussed for a long time. While there is no final statement on objectives, to which all parties (of financial reporting) have agreed, some consensus has been developing on the objectives of financial reporting. At present, the following may be described as the primary objectives of financial reporting:

- (a) Investment Decision Making
- (b) Management Accountability

Investment Decision Making

The basic objective of financial reporting is to provide information useful to investors, creditors and other users in making sound investment decisions. These decisions concern the efficient allocation of investment funds and the selection among investment opportunities. The Trueblood Committee⁴ stated that “...the basic objective of financial statements is to provide information useful for making economic decisions.” Recently, the FASB (USA) in its Concept No. 1 also concluded that “financial reporting should provide information that is useful to present and potential investors and creditors and other users in making rational investment, credit and similar decisions.”⁵

It is essential to have an understanding of the investment decision process applied by external users in order to provide useful information to them. The investors seek such investment which will provide the greatest total return with an acceptable

range of risk. Investment return is comprised of future interest or dividends and capital appreciation (or loss). The investors while making investment decisions aim to determine the amount and certainty of a company’s future earning power in order to estimate their future cash return in dividends and capital appreciation. Earning power is the ability of a business firm to produce continuous earnings from the operating assets of the business over a period of years, which may differ from accounting net income. The financial statements and other business data are analysed in relation to the enterprise’s environment to project this future earning power. Investors compare returns on alternative investments relative to risk, which (risk) is the degree of uncertainty of future returns. The risk premium is a measure of uncertainty which is defined as the possible variation of the actual from the expected return. The investment decision process may be pictured as a threelegged stool. One leg is the analysis of the company and its securities and of the industry in which it operates. The second is the assessment of the economic environment, including the business outlook, financial markets and interest rates, international trade and finance, and political and regulatory developments. The third is the portfolio decision in which these two streams of information are integrated into an investment appraisal related to the objectives of the investor—individual or fund. Portfolio decisions sort out expected rates of return relative to risk, as the investor (portfolio manager) seeks that combination of securities which will produce the highest total return available within the risk constraints adopted for the portfolio. In this continual winnowing process, investment funds tend to flow toward the most favourably situated companies and industries and away from the weaker and less promising areas.⁶

Investment decision and investment values, both, are comparative, not absolute. In all investment decisions, comparison is made in order to determine the most attractive (greatest) returns in relation to risk first, comparison between one type of security vs. another; second, comparison between one company vs. another within each category; third, comparison within a company over time. Comparison requires uniform standards of measurement. Where different accounting measurements are used in similar situations, investors and financial analysts make their own accounting adjustments to achieve comparability, provided adequate information is available to do so. But the attribute of comparability can be achieved at a lower cost (associated with financial reporting system), and with equal benefit for all investors, by eliminating the alternatives.

SFAC No. 5 “Recognition and Measurement in Financial Statements of Business Enterprises” issued by FASB (USA) in 1984 illustrates the types of information used in investment, credit, and similar decision. (Figure 13.1)

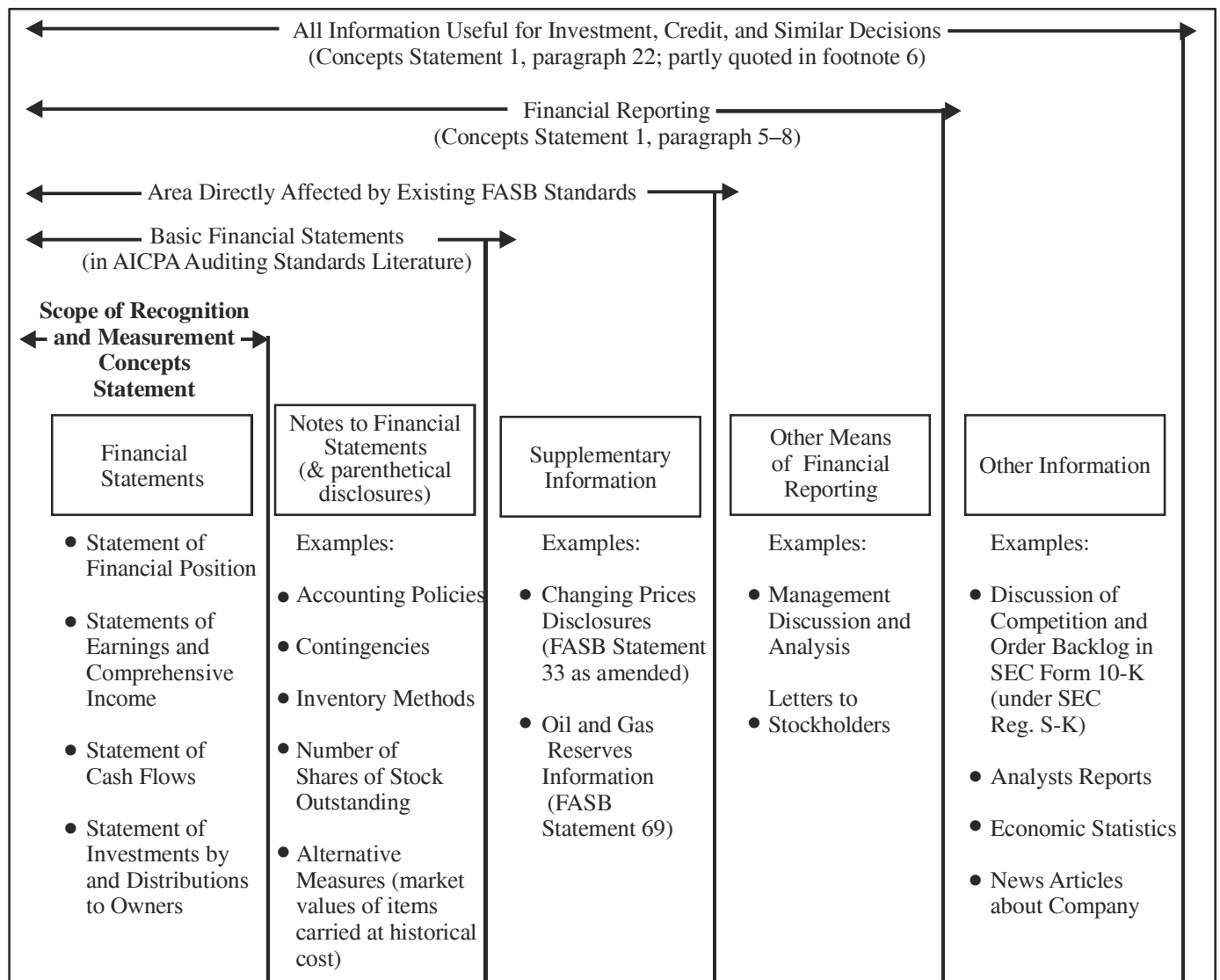


Figure 13.1: Information Used in Investment, Credit and Similar Decisions

Source: SFAC No. 5, Recognition and Measurement in Financial Statement of Business Enterprises, FASB, USA, 1984, p. 8.

Management Accountability

A second basic objective of financial reporting is to provide information on management accountability to judge management's effectiveness in utilising the resources and running the enterprise. Management of an enterprise is periodically accountable to the owners not only for the custody and safekeeping of enterprise resources, but also for their efficient and profitable use and for protecting them to the extent possible from unfavourable economic impacts of factors in the economy such as technological changes, inflation or deflations. Ijiri⁷ observes:

"...accountability presumes a relationship between two parties, namely someone (an accountant) is accountable to someone else (an accountee) for his activities and their consequences. The accountability relationship may be created by a constitution, a law, a contract, an organisational

rule, a custom, or even by an informal moral obligation. A corporation is accountable to its shareholders, creditors, employees, customers, the government, or the public in general based on a variety of relationships created between them. In this sense, it would not be an exaggeration to say that our present society is founded upon accountability networks.

An accountant joins the accountability relationship between an accountant and an accountee as a third party. The term accountant includes not only an actual bookkeeper, but also an auditor and any authoritative body which defines accounting principles, such as the Financial Accounting Standards Board. The primary role of the accountant is to assist the accountant in accounting for his activities and their consequences and, at the same time, provide information to the accountee. Thus, an accountant has a dual relationship, one with the accountant and the other with the accountee."

Management accountability is of very great interest not only to existing shareholders and other users but also to potential shareholders, creditors and users. A company generally offers shares, debentures, etc., to the prospective investing public and therefore it should accept accountability responsibilities to prospective investors also. Certainly, annual and other financial statements is intended to play a major role in this regard.

It should be noted that accountability is a broad term that encompasses stewardship. Stewardship traditionally refers to the safekeeping of resources and the execution of plans for conserving and utilising them. Management accountability extends beyond the element of stewardship involved in the safekeeping of assets entrusted to custody. It covers modern performance issues based on efficiency and effectiveness notions. The management accountability concept includes information about future activities, budgets, forecast financial statements, capital expenditure proposal, etc. Accountability is beyond the narrow limits of companies' legal responsibilities to shareholders (and sometimes debentureholder and creditors). It obviously includes the interests of persons other than existing shareholders. Management is accountable for the values of assets as well as for their costs. In this way, the financial statements not only inform but also protect the various interests of the shareholders and other users.

There is a school of thought which contends that financial accounting and reporting based on 'decision making' may differ from financial accounting and reporting based on 'accountability objective'. This is because decision making objective and accountability objective differ from each other in some respects such as the following:

Firstly, 'economic decision making objective' focus on the contents of financial statements and how the information reported therein are useful to economic decisions. This objective emphasises more the reliability of information than the accounting system used in producing financial statements. For instance, cash balance appearing on a balance sheet, if it reflects actual cash balance, will contribute to the decision making objective and it is immaterial whether cash balance has been determined on the basis of cash book or after mere cash count at the end of an accounting period. On the other hand, 'management accountability objective' mainly emphasises accounting system and procedures used in producing financial statements and other related information. It implies that financial statement figures are supported by adequate documents, records and system.

Secondly, the decision making objective assumes that the accountant should aim at serving the decision makers' informational requirements. That is, his task is to design an information system which is most useful to users in helping them to make sound decisions. The accomplishment of accountability objective involves a conflict of interests between the accountant and the accountee with regard to the extent of disclosure and method of performance measurement. The accounting system, which is stressed in accountability objective, needs to be

evaluated in dual aspects, its relation to the accountant and its relation to the accountee, and the need to resolve the conflicting pressures equitably.

Thirdly, the two objectives—decision making and accountability—influence the accountant's interest differently with respect to information reported, especially information relating to accountant's performance. The decision objective tends to encourage subjective information assuming that it will be unbiased. The accountability objective anticipates the pressure to bias the information and attempts to establish a system that is strong enough to withstand such pressure. Not just unbiased information, but 'unbiasable' information is what ultimately aimed for in the accountability approach.⁸

Contrary to above, there is another school of opinion which does not favour any distinction between the two objectives. A question arises: why distinguish between these functions of accounting and reporting? Are the distinctions superfluous? It would seem that accounting reports on management's fulfilment of their responsibility to outside owners (the old stewardship notion) would have always necessitated considering management's effectiveness and efficiency (the new informativeness role).⁹

Nevertheless' accounting's role in informativeness and efficiency, in a social context, has been increasingly emphasized by the profession. The AICPA¹⁰ frames these relationships in the following way:

"Financial statements are often audited by independent accountants for the purpose of enhancing confidence in their reliability.... Well developed securities markets tend to allocate scarce resources to enterprises that use them efficiently and away from enterprises that use them inefficiently.... Financial reporting is intended to provide information that is useful in making reasoned choices among alternative uses of scarce resources in the conduct of business activities".

These views, reiterated by FASB pronouncement (1978), IASC (July 1989), have formed the basis of accounting objectives, practices, standards, and principles into the 1990s. As is apparent from these statements, the informational role of accounting is regarded as a crucial link in the efficient allocation of society's resources by individuals, enterprises, and government. The recent emphasis on the role of accounting in the efficient allocation of resources has been classified under the user-informativeness approach.

To conclude, the above two basic objectives associated with company financial reporting contribute in making wise economic decisions and determining the economic performance. Both these objectives lead to broader social goals of efficient allocation of investment funds and proper selection among alternative investment opportunities. Thus, accomplishment of these financial reporting objectives influence capital formation and flow of funds and perform a vital role in the successful functioning of an economy.

DEVELOPMENTS ON FINANCIAL REPORTING OBJECTIVES

The subject of financial reporting objectives has been generally recognised as very important in accounting area since a long time. Many accounting bodies and professional institutes all over the world have made attempts to define the objectives of financial statements and financial reporting which are vital to the development of financial accounting theory and practice. This section describes developments in this area at the international level, particularly USA and UK. It can be rightly said that most of the attempts in the area of financial reporting objectives has been made in USA and UK and accounting developments in these countries have great impact on accounting developments and practices in other countries of the world.

USA

1. ASOBAT (A Statement of Basic Accounting Theory, AAA, 1966)

ASOBAT represented an important change in the work of the AAA.. The Executive Committee of the AAA (which developed ASOBAT) diverged from the previous approach by giving the committee a charge of developing “... *an integrated statement of basic accounting theory which will serve as a guide to educators, practitioners, and others Interested in accounting... The committee may want to consider... the role, nature, and limitations of accounting.*”

The committee’s definition of accounting represented a fundamental departure from the past. ASOBAT defined accounting as “....the process of identifying, measuring and communicating economic information to *permit informed Judgments and decisions by users of the information.*”¹¹

The Committee defined theory as “..... a cohesive set of hypothetical, conceptual and pragmatic principles forming a general frame of reference for a field of study.” In applying the definition, it sought to carry out the following tasks:

- (1) To identify the field of accounting so that useful generalizations about it could be made and a theory developed.
- (2) To establish standards by which accounting information might be judged.
- (3) To point out possible improvements in accounting practice.
- (4) To present a useful framework for accounting researchers seeking to extend the uses of accounting and the scope of accounting subject matter as needs of society expand.

ASOBAT has developed the following four objectives of accounting :

- (1) To make decisions concerning the use of limited resources (including the identification of crucial decision areas) and to determine objectives and goals.

- (2) To direct and control an organization’s human and material resources effectively.

- (3) To maintain and report on the custodianship of resources.

- (4) To facilitate social functions and controls.

Four standards for evaluating accounting—relevance, verifiability, freedom from bias, and quantifiability—are at the heart of ASOBAT. These standards, the subsequent guidelines for communicating accounting information, and the objectives could be viewed as part of a metatheory of accounting. Like other parts of ASOBAT, the standards appear to be aimed at evaluating published financial statement information. However, a policymaking body to assess proposed rules could also use them.

In addition to the four standards, ASOBAT presents five guidelines for the communication of accounting information:

- (1) Appropriateness to expected use.
- (2) Disclosure of significant relationships.
- (3) Inclusion of environmental information.
- (4) Uniformity of practice within and among entities.
- (5) Consistency of practices through time.

2. Accounting Principles Board (APB) Statement No. 4

In USA, the APB Statement No. 4 “Basic Concepts and Accounting Principles Underlying Financial Statements of Business Enterprises”, (1970) was the first publication which formulated the objectives of financial statements.¹² These objectives may be summarised as follows:

1. The particular objectives of financial statements are to present fairly, and in conformity with generally accepted accounting principles, financial position, results of operations, and other changes in financial position.
2. The general objectives of financial statements are:
 - (a) to provide reliable information about economic resources and obligations of a business enterprise in order to (i) evaluate its strengths and weakness, (ii) show its financing and investment, (iii) evaluate its ability to meet its commitments, and (iv) show its resource base for growth;
 - (b) to provide reliable information about changes in net resources resulting from a business enterprise’s profitdirected activities in order to (i) show to investors expected dividend return, (ii) show the operation’s ability to pay creditors and suppliers, provide jobs for employees, pay taxes, and generate funds for expansion, (iii) provide management with information for planning and control, and (iv) show its long-term profitability;
 - (c) to provide financial information useful for estimating the earnings potential of the firm;

- (d) to provide other needed information about changes in economic resources and obligations; and
 - (e) to disclose other information relevant to statement users' needs.
3. The qualitative objectives of financial accounting are the following:
- (a) Relevance, which means selecting the information most likely to aid users in their economic decisions.
 - (b) Understandability, which implies not only that the selected information must be intelligible but also that the users can understand it.
 - (c) Verifiability, which implies that the accounting results may be corroborated by independent measurers using the same measurement methods.
 - (d) Neutrality, which implies that the accounting information is directed towards the common needs of users rather than the particular needs of specific users.
 - (e) Timeliness, which implies an early communication of information to avoid delays in economic decision making.
 - (f) Comparability, which implies that differences should not be the result of different financial accounting treatments.
 - (g) Completeness, which implies that all the information that 'reasonably' fulfils the requirements of other qualitative objectives should be reported.
- 3. An objective of financial statements is to provide information useful to investors and creditors for predicting, comparing and evaluating potential cash flows to them in terms of amount, timing and related uncertainty.
 - 4. An objective of financial statements is to provide users with information for predicting, comparing, and evaluating enterprise earning power.
 - 5. An objective of financial statements is to supply information useful in judging management's ability to utilise enterprise resources effectively in achieving the primary enterprise goal.
 - 6. An objective of financial statements is to provide factual and interpretative information about transactions and other events which is useful for predicting, comparing and evaluating enterprise earning power. Basic underlying assumptions with respect to matters subject to interpretation, evaluation, prediction, or estimation should be disclosed.
 - 7. An objective is to provide a statement of financial position useful for predicting, comparing and evaluating enterprise earning power. This statement should provide information concerning enterprise transactions and other events that are part of incomplete earning cycles. Current values should also be reported when they differ significantly from historical costs. Assets and liabilities should be grouped or segregated by the relative uncertainty of the amount and timing of prospective realisation of liquidation.
 - 8. An objective is to provide a statement of periodic earnings useful for predicting, comparing and evaluating enterprise earning power. The net result of completed earning cycles and enterprise activities resulting in recognisable progress towards completion of incomplete cycles should be reported. Changes in values reflected in successive statements of financial position should also be reported, but separately, since they differ in terms of their certainty realisation.
 - 9. An objective is to provide a statement of financial activities useful for predicting, comparing, and evaluating enterprise earning power. This statement should report mainly on factual aspects of enterprise transactions having or expected to have significant cash consequences. This statement should report data that require minimal judgement and interpretation by the compiler.
 - 10. An objective of financial statements is to provide information useful for the predictive process. Financial forecasts should be provided when they will enhance the reliability of users' predictions.
 - 11. An objective of financial statements for governmental and non-profit organisations is to provide information

3. Trueblood Report

To develop objectives of financial statements, a Study Group was appointed in 1971 by American Institute of Certified Public Accountants under the Chairmanship of Robert M. Trueblood. The Study Group solicited the views of more than 5000 corporations, professional firms, unions, public interest groups, national and international accounting organisations and financial publications. The Study Group conducted more than 50 interviews with executives from all sectors of the business and from government. To elicit the widest possible range of views, 35 meetings were held with institutional and professional groups representing major segments of the US economy.

The Study Group submitted its report to AICPA in October 1973. The objectives developed in the Study Group Report¹³ are as follows:

- 1. The basic objective of financial statements is to provide information useful for making economic decisions.
- 2. An objective of financial statements is to serve, primarily, those users who have limited authority, ability, or resources to obtain information and who rely on financial statements as their principal source of information about an enterprise's economic activities.

useful for evaluating the effectiveness of management of resources in achieving the organisation's goals. Performance measures should be qualified in terms of identified goals.

12. An objective of financial statements is to report on those activities of the enterprise affecting society which can be determined and described or measured and which are important to the role of the enterprise in its social environment.

The twelve objectives recommended in the report seem to fall into five tiers as described in Fig 13.2. Tier I is the basic objective which underlies all financial reporting. Tier II objectives identify the financial statement users and their needs. Tier III objectives translate users' needs in terms of enterprise. Tier IV objectives describe information about the enterprise which satisfied or is presumed to satisfy users' needs. Tier V objectives concern skeletal financial statements directed at communicating the information identified by the objectives in Tier IV.

4. SATTA (Statement on Accounting Theory and Theory Acceptance, AAA, 1977)

The unsettled standard setting process in the early 1970s caused the AAA to again consider accounting theory. In 1973, the AAA Committee on Concepts and Standards for External Financial Reports was charged with updating ASOBAT in light of the many changes in accounting that had taken place since it was originally issued. The committee deliberated over a four-year period. Since appointments to the committee were for two years, the committee membership changed during the second two-year period; however, six original members remained on the committee. The committee's report, *Statement on Accounting Theory and Theory Acceptance (SATTA)*, turned out not to be an update of ASOBAT but rather a review of the status of accounting theory and its acceptance.

The committee's rationale for this approach was stated as:

"Fundamental changes have occurred since the publication of ASOBAT. The basic disciplines traditionally utilized by accounting theory have been altered considerably, and accounting researchers have enthusiastically employed their new tools, perspectives, and analytical techniques to explore a wide range of accounting issues from new directions."¹⁴

The committee's conclusion was that a single universally accepted basic accounting theory did not exist.

SATTA first embarked on a review of accounting theories and found that a number of theories explained narrow areas of accounting. The committee noted that while there was general agreement that the purpose of financial accounting is to provide economic data about accounting. The committee entities, divergent theories had emerged because of the way different theorists specified users of accounting data and the environment. For example, users might be defined either as the owners of the accounting entity or more broadly to include creditors, employees, regulatory agencies, and the general public. Similarly, the environment might be specified as a single source of information or as one of several sources of financial information. The committee condensed various approaches to accounting theory into (1) classical, (2) decision usefulness, and (3) information economics.

Classical Approaches

SATTA concisely and efficiently traced and categorized the various valuation systems presented in the literature. Older systems were classified as "classical approaches to theory development." Most of the listings in this group were characterized as primarily normative and deductive and as indifferent to the decision needs of users, even though the developers of the models rationalized that their models were superior for user needs to

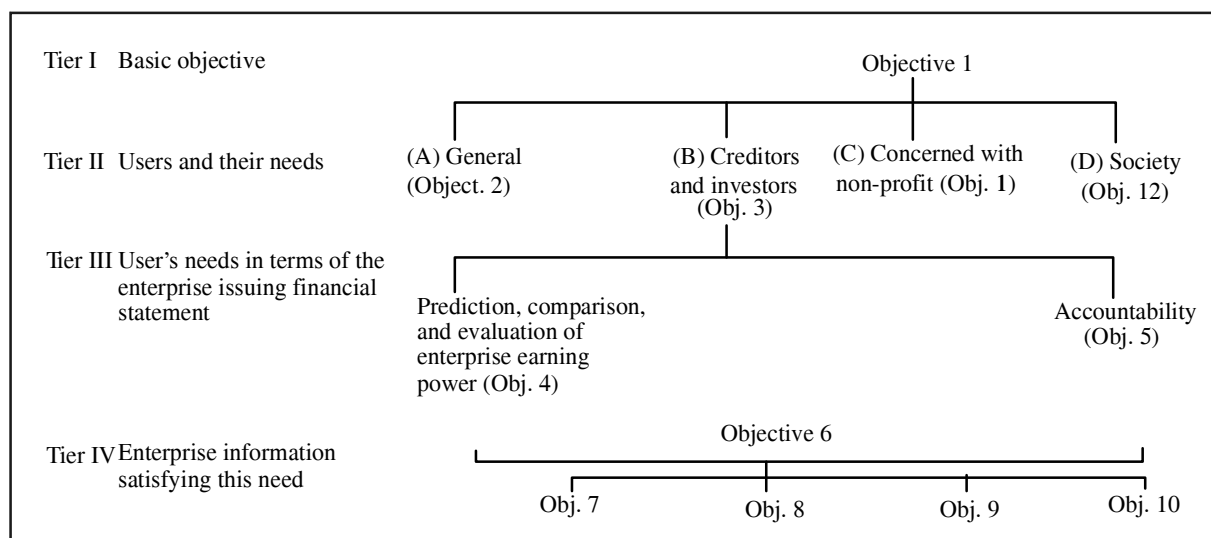


Fig. 13.2: Trueblood Report on Objectives of Financial Statements

Source: Studies on Financial Accounting Objectives 1974, Supplement to *Journal of Accounting Research*, Vol. 12 p. 5.

competing alternatives. In some cases, classical writers used what SATTA called an inductive approach, but “inductive” in a rather special sense—a gleaning from the accounting literature as well as from some observations of practice—instead of the usual sense of a systematic review and analysis of practice, or of another designated population.

Decision-Usefulness Approach

Among the contemporary approaches to accounting theory is the large body of research that concentrates on users of accounting reports, their decisions, information needs, and information-processing abilities. The decision-usefulness approach is then further dichotomized into decision models and decision makers.

Decision-Model Orientation: The metatheoretical frameworks (or parts thereof) developed in ASOBAT and the True blood Report reflect the decision-model orientation. The systems that fall into this category all share the following characteristics:

- They are normative and deductive since the theoretical system must meet, as closely as possible, criteria of a metatheoretical framework.
- Some form of relevance for particular decisions by particular user group or groups is stressed.
- The relevance criterion is instrumental in measuring the selected attributes of assets, liabilities, and income transactions.

Decision-model approaches often stem from formal investment decision models, such as discounted cash flow. Since decision-model approaches are deemed appropriate for communicating extremely relevant information for decision making, a rather unpleasant problem arises if users do not understand or prefer these systems.

Decision maker Orientation: The main point about the decision maker orientation is that it is descriptive rather than normative because it attempts to find out what information is actually used or desired. The assumption is that the information that is desired should be supplied. Hence, in addition to being descriptive, research that falls into the decision maker category is also inductive (empirical).

Although many important “bits” of information have come from the rather extensive research conducted with this approach, questions of relevance versus reliability remain paramount. Nevertheless, since the decision-model approach is normative, it produces advocacy for particular valuation systems and income measurement systems.

Information Economics Approach

Information economics as applied to accounting theory does not deal directly with alternative valuation systems. Instead, it is concerned with the issue of costs and benefits arising from

information production and usage. Hence, accounting information is viewed as an economic good, an outlook that was not previously considered in theory formulation.

SATTA investigated as to why none of the approaches to theory had gained general acceptance, SATTA raised six issues:

(i) *The problem with relating theory to practice.* The real world is much more complex than the world specified in most accounting theories. For example, most theory descriptions begin with unrealistic assumptions such as holding several variables constant.

(ii) *Allocation problem.* Allocation is an arbitrary process. For example, the definition of depreciation as a rational and systematic method of allocation has led to a variety of interpretations of these terms.

(iii) *The difficulty with normative standards.* Normative standards are desired states; however, different users of accounting information have different desired states. As a result, no set of standards can satisfy all users.

(iv) *The difficulties in interpreting security price behavior research.* Market studies (such as the efficient market studies) attempt to determine how users employ accounting numbers. These studies have attempted to control for all variables except the one of interest, but there have been disagreements over whether their research designs have actually accomplished this goal.

(v) *The problem of cost-benefit considerations in accounting theories.* A basic assumption of accounting is that the benefits derived from adopting a particular accounting alternative exceed its costs. However, most existing theories do not indicate how to measure benefits and costs.

(vi) *Limitations of data expansion.* At the time SATTA was published, a view was emerging that more information is preferable than less. Recent research has indicated that users have a limited ability to process accounting information.

SATTA noted that although the evolutionary view of accounting had considerable appeal, the evidence suggests that the existing accounting literature was inconsistent with that view. It suggested that the process of theorizing in accounting was more revolutionary than evolutionary. Kuho¹⁵ suggests scientific progress proceeds in the following order.

- (a) Acceptance of a paradigm
- (b) Working with that paradigm by doing normal science
- (c) Becoming dissatisfied with that paradigm
- (d) Search for a new paradigm
- (e) Accepting a new paradigm

SATTA suggested that accounting theory at that time was in Step 3 because a number of theorists had become dissatisfied with the matching approach to specifying the content of financial reports.

Evaluation of SATTA

If the newly formed Financial Accounting Standards Board was looking for a sense of direction from SATTA, they were undoubtedly disappointed. SATTA's contention that no universally accepted theory of accounting was then in existence in essence left it up to the FASB to develop one. The FASB attempted to respond with its Conceptual Framework.

SATTA's focus on the philosophy of science perspective is not with its detractors. Peasnell (1978) reviewed SATTA and concluded that the theory approaches described in the monograph do not constitute paradigms.¹⁶ That is a paradigm is much more than a set of hypotheses. He also doubted the appropriateness of applying Kuhn's theory to accounting.

"Accounting is not a science, it is a service activity. Accounting therefore, should be equated not with the sciences, but with fields like medicine, technology and law, of which the principal *raison d'être* is an external social need."

Peasnell also criticized SATTA's distinction between the classical and decision usefulness approaches as "artificial". Finally, he suggested that the inability of SATTA to reach a consensus was influenced by the fact that the committee that wrote SATTA was composed of several members who had strong advocacy positions on various approaches to theory development.

5. FASB Concept No. 1 (Objectives of Financial Reporting by Business Enterprises, November 1978.)

Probably the most comprehensive statement on objectives of financial reporting is FASB (USA) Concept No. 1 "Objectives of Financial Reporting by Business Enterprises" issued in November 1978 by US Financial Accounting Standards Board. The objective of financial reporting developed in this statement are the following¹⁷:

Financial reporting should provide information that is useful to present and potential investors, creditors and other users in making rational investment, credit, and similar decisions. The information should be comprehensible to those who have a reasonable understanding of business and economic activities and are willing to study the information with reasonable diligence (para 34).

Financial reporting should provide information to help present and potential investors and creditors and other users in assessing the amounts, timing, and uncertainty of prospective cash receipts from dividends or interest and the proceeds from the sale, redemption, or maturity of securities or loans. The prospects for those cash receipts are affected by an enterprise's ability to generate enough cash to meet its obligations when due and its other cash operating needs, to reinvest in operations, and to pay cash dividends, and may also be affected by perceptions of investors and creditors generally about that ability, which affect market prices of the enterprise's securities. Thus, financial

reporting should provide information to help investors, creditors, and others assess the amount, timing and uncertainty of prospective net cash inflows to the related enterprise (para 37).

Financial reporting should provide information about the economic resources of an enterprise, the claims to those resources (obligations of the enterprise to transfer resources to other entities and owners' equity), and the effects of transactions, events, and circumstances that change resources and claim to those resources (para 40).

Financial reporting should provide information about an enterprise's financial performance during a period. Investors and creditors often use information about the past to help in assessing the prospects of an enterprise. Thus, although investment and credit decisions reflect investors' and creditors' expectations about future enterprise performance, those expectations are commonly based at least partly on evaluations of past enterprise performance (para 42)

The primary focus of financial reporting is information about an enterprise's performance provided by measures of earning and its components (para 43).

Financial reporting should provide information about how an enterprise obtains and spends cash, about its borrowing and repayment of borrowing, about its capital transactions, including cash dividends and other distribution of enterprise resources to owners, and about other factors that may affect an enterprise's liquidity or solvency (para 49).

Financial reporting should provide information about how management of an enterprise has discharged its stewardship responsibility to owners (stockholders) for the use of enterprise resources entrusted to it (para 50).

Financial reporting should provide information that is useful to managers and directors in making decisions in the interests of owners (para 52).

Besides the above objectives, the FASB Concept No. 1 contains the following important highlights:

1. Financial reporting is not an end in itself but is intended to provide information that is useful in making business and economic decisions.
2. The objectives of financial reporting are not immutable—they are affected by the economic, legal, political and social environment in which financial reporting takes place.
3. The objectives are also affected by the characteristics and limitations of the kind of information that financial reporting can provide.
 - (i) The information pertains to business enterprises rather than to industries or the economy as a whole.
 - (ii) The information often results from approximate, rather than exact, measures.

- (iii) The information largely reflects the financial effects of transactions and events that have already happened.
 - (iv) The information is but one source of information needed by those who make decisions about business enterprises.
 - (v) The information is provided and used at a cost.
4. The objectives in this Statement (Concept No. 1) are those of general purpose external financial reporting by business enterprises.
 - (i) The objectives stem primarily from the needs of external users who lack the authority to prescribe the information they want and must rely on information management communicates to them.
 - (ii) The objectives are directed toward the common interest of many users in the ability of an enterprise to generate favourable cash flows but are phrased using investment and credit decisions as a reference to give them a focus. The objectives are intended to be broad rather than narrow.
 - (iii) The objectives pertain to financial reporting and are not restricted to financial statements.
 5. 'Investors' and 'Creditors' are used broadly and include not only those who have or contemplate having a claim to enterprise resources but also those who advise or represent them.
 6. Although investment and credit decisions reflect investors' and creditors' expectations about future enterprise performance, those expectations are commonly based at least partly on evaluations of past enterprise performance.
 7. The primary focus of financial reporting is information about earnings and its components.
 8. Information about enterprises earning based on accrual accounting generally provides a better indication of an enterprise's present and continuing ability to generate favourable cash flows than information limited to the financial effects of cash receipts and payments.
 9. Financial reporting is expected to provide information about enterprises financial performance during a period and about how management of an enterprise has discharged its stewardship responsibility to owners.
 10. Financial accounting is not designed to measure directly the value of a business enterprise, but the information it provides may be helpful to those who wish to estimate its value.
 11. Investors, creditors, and others may use reported earnings and information about the elements of financial statements in various ways to assess the prospects for cash flows. They may wish, for example, to evaluate management's performance, estimate 'earning power',

predict future earnings, assess risk, or to confirm, change, or reject earlier predictions or assessments. Although financial reporting should provide basic information to aid them, they do their own evaluating, estimating, predicting, assessing, confirming, changing, or rejecting.

12. Management knows more about the enterprise and its affairs than investors, creditors, or other 'outsiders' and accordingly can often increase the usefulness of financial information by identifying certain events and circumstances and explaining their financial effects on the enterprise.

6. FASB, SFAC No. 8, Conceptual Framework for Financial Reporting, September 2010

SFAC No. 8 is a replacement of FASB Concepts Statements No. 1 and No. 2.

SFAC No. 8 has two chapters:

Chapter 1: The Objective of General Purpose Financial Reporting

Chapter 3: Qualitative Characteristics of Useful Financial Information.

The following are the highlights of SFAC No. 8

On the Objective of General Purpose Financial Reporting¹⁸

Objective, Usefulness, and Limitations of General Purpose Financial Reporting

(i) The objective of general purpose financial reporting is to provide financial information about the reporting entity that is useful to existing and potential investors, lenders, and other creditors in making decisions about providing resources to the entity. Those decisions involve buying, selling, or holding equity and debt instruments and providing or settling loans and other forms of credit.

(ii) Decisions by existing and potential investors about buying, selling, or holding equity and debt instruments depend on the returns that they expect from an investment in those instruments for example, dividends, principal and interest payments, or market price increases. Similarly, decisions by existing and potential lenders and other creditors about providing or settling loans and other forms of credit depend on the principal and interest payments or other returns that they expect. Investors', lenders', and other creditors' expectations about returns depend on their assessment of the amount, timing, and uncertainty of (the prospects for) future net cash inflows to the entity. Consequently, existing and potential investors, lenders, and other creditors need information to help them assess the prospects for future net cash inflows to an entity.

(iii) To assess an entity's prospects for future net cash inflows, existing and potential investors, lenders, and other creditors need information about the resources of the entity, claims against the entity, and how efficiently and effectively the entity's management and governing board have discharged their

responsibilities to use the entity's resources. Examples of such responsibilities include protecting the entity's resources from unfavorable effects of economic factors such as price and technological changes and ensuring that the entity complies with applicable laws, regulations, and contractual provisions. Information about management's discharge of its responsibilities also is useful for decisions by existing investors, lenders, and other creditors who have the right to vote on or otherwise influence management's actions.

(iv) Many existing and potential investors, lenders, and other creditors cannot require reporting entities to provide information directly to them and must rely on general purpose financial reports for much of the financial information they need. Consequently, they are the primary users to whom general purpose financial reports are directed.

(v) However, general purpose financial reports do not and cannot provide all of the information that existing and potential investors, lenders, and other creditors need. Those users need to consider pertinent information from other sources, for example, general economic conditions and expectations, political events and political climate, and industry and company outlooks.

(vi) General purpose financial reports are not designed to show the value of a reporting entity but they provide information to help existing and potential investors, lenders, and other creditors to estimate the value of the reporting entity.

(vii) Individual primary users have different, and possibly conflicting, information needs and desires. The Board, in developing financial reporting standards, will seek to provide the information set that will meet the needs of the maximum number of primary users. However, focusing on common information needs does not prevent the reporting entity from including additional information that is most useful to a particular subset of primary users.

(viii) The management of a reporting entity also is interested in financial information about the entity. However, management need not rely on general purpose financial reports because it is able to obtain the financial information it needs internally.

(ix) Other parties, such as regulators and members of the public other than investors, lenders, and other creditors, also may find general purpose financial reports useful. However, those reports are not primarily directed to these other groups.

(x) To a large extent, financial reports are based on estimates, judgments, and models rather than exact depictions. The Conceptual Framework establishes the concepts that underlie those estimates, judgments, and models. The concepts are the goal towards which the Board and preparers of financial reports strive. As with most goals, the Conceptual Framework's vision of ideal financial reporting is unlikely to be achieved in full, at least not in the short term, because it takes time to understand, accept, and implement new ways of analyzing transactions and other events. Nevertheless, establishing a goal towards which to strive

is essential if financial reporting is to evolve so as to improve its usefulness.

U.K.

The legal culture in Great Britain has consisted of a strong, unitary company law which has been revised and updated approximately every two decades, but more frequently in recent years. Company directors are required to provide shareholders with annual, audited financial statements, and the auditor is appointed by and reports to the shareholders, even though, in practice, the shareholders almost always endorse the directors' choice of auditor.

The Accounting Standards Steering Committee of the Institute of Chartered Accountants in England and Wales Published 'The Corporate Report' in 1976 as a discussion paper covering the scope and aims of published financial reports, public accountability of economic entities, working concepts as a basis for financial reporting, and most suitable means of measuring and reporting the economic position, performance and prospects of undertakings. The Corporate Report's main findings are as follows¹⁹:

First, the basic philosophy and starting point of The Corporate Report is that financial statements should be appropriate to their expected use by potential users. In other words, they should attempt to satisfy the information needs of their users.

Second, the report assigned responsibility for reporting to the 'economic entity' having an impact on society through its activities. The economic entities are itemised as: limited companies, listed and unlisted; pension schemes, charitable and other trusts, and notforprofit organisation; noncommercially oriented Central Government departments and agencies, partnerships and other forms of unincorporate business enterprises; trade unions and trade and professional association; local authorities, and nationalised industries and other commercially oriented public sector bodies.

Third, the report defined users as those having a reasonable right to information and whose information needs should be recognised by corporate reports. The users are identified as the equity investor group, the loan creditor group, the employee group, the analystadviser group, the business contact group, the government, and the public.

Fourth, to satisfy the fundamental objectives of annual reports set by the basic philosophy, seven desirable characteristics are cited, namely, that the corporate report be relevant, understandable, reliable, complete, objective, timely, and comparable.

Fifth, after documenting the limitations of current reporting practices, the report suggests the need for the following additional statements:

1. A statement of value added, showing how the benefits of the efforts of an enterprise are shared among

- employees, providers of capital, the state and reinvestment.
2. An employment report, showing the size and composition of the work force relying on the enterprise for its livelihood, the work contribution of employees, and the benefits earned.
 3. A statement of money exchange with government, showing the financial relationship between the enterprise and the state.
 4. A statement of transactions in foreign currency, showing the direct cash dealing, between the United Kingdom and other countries.
 5. A statement of future prospects, showing likely future profit, employment, and investment levels.
 6. A statement of corporate objectives showing management policy and mediumterm strategic targets.

Finally, after assessing six measurement bases (historical cost, purchasing power, replacement cost, net realisation value, value to the firm, and net present value) against three criteria (theoretical acceptability, utility, and practicality) the report rejected the use of historical cost in favour of current values accompanied by ;he use of general index adjustment.

Making Corporate Reports Valuable (MCRV) (1988)

Following in the line of *The Corporate Report*, but this time hoping to be successful in stimulating accounting reform, the research committee of The Institute of Chartered Accountants of Scotland (ICAS) contributed its own framework for accounting research in a discussion document, *Making Corporate Reports Valuable*, also known as MCRV. The committee said that it had arrived at two basic conclusions: ‘that all financial reports ought to reflect economic reality’ and that ‘the information which investors need in order to make proper decisions about their involvement with an entity is the same in kind, but not in volume, as the information which management need to run it.’ Referring to the seven external users identified in *The Corporate Report* as having a reasonable right to information concerning the reporting entity arising from its public accountability, the committee said that ‘in corporate reporting we should aim to communicate directly with only four of these groups’: the equity investor group, the loan creditor group, the employee group, and the business contact group. The committee’s list of user needs was ambitious and focused heavily on information about management’s objectives and plans. It included the following need which built on its ‘economic reality’ conclusion: ‘to know what the total wealth of the entity is now as compared with what it was at the time of the last corporate report and the reasons for the change’. The committee affirmed both a stewardship and future-orientated objective:

“Investors in an entity should be interested in the stewardship of the management, but they should also be interested in future prospects. We believe that the corporate

report ought to provide sufficient quantitative and qualitative information to help those users involved with the entity to make assumptions/ predictions about its future performance.”

Accounting Standards Board's (ASB's) Statement of Principles for Financial Reporting (1999)

The Accounting Standards Board (ASB) in 1999 became the first UK accounting standard setter to publish a conceptual framework, called the *Statement of Principles for Financial Reporting*. It was not referred to as a conceptual framework. The ASB (1999)²⁰ drafted its framework in the spirit of international harmonisation:

“It is the Board’s view that a common set of principles is necessary to achieve further harmonization in international accounting practice. For that reason, the Statement of Principles is based on the International Accounting Standards Committee’s ‘Framework for the Preparation and Presentation of Financial Statements’ (the IASC Framework), which was itself derived from the Statements of Financial Accounting Concepts issued in the USA by the Financial Accounting Standards Board.”

The ASB did not refer to any of the previous British frameworks.

In its final form, the Board’s objective of financial statements (not financial reporting) was ‘to provide information about the reporting entity’s financial performance and financial position that is useful to a wide range of users for assessing the stewardship of the entity’s management and for making economic decisions’ (ASB 1999, p. 16).

Following in the footsteps of the IASC’s *Framework*, the ASB enumerated a list of potential users (elaborating on some of their needs) which encompassed present and potential investors, lenders, suppliers and other trade creditors, employees, customers, government and their agencies, and the public. In the discussion of investors as a user class, the ASB said, ‘In its stewardship role, management is accountable for the safekeeping of the entity’s resources and for their proper, efficient and profitable use’. But beyond that, it said, investors are concerned with the ‘risk inherent in, and return provided by, their investments, and need information on the entity’s financial performance and financial position that helps them to assess its cash-generation abilities and its financial adaptability’ [ASB 1999, paragraph 1.3(a)]. Also following the IASC, the ASB finessed the problem of multiple users by advancing ‘the rebuttable assumption’ that

“financial statements that focus on the interest that investors have in the reporting entity’s financial performance and financial position will, in effect, also be focusing on the common interest that all users have in that entity’s financial performance and financial position. (ASB 1999, paragraph 1.11)”

It then proceeded to elaborate on the information required by investors which emerge out of their assessment of financial performance and then of financial adaptability (ASB 1999, paragraphs 1.13-1.22).

The ASB recited the usual qualitative characteristics, which included prudence among them. When discussing prudence, the ASB was careful to say that it meant ‘the exercise of the judgements needed in making the estimates required under conditions of uncertainty’ and that it was not called for when there was no uncertainty (ASB 1999, paragraphs 3.19 and 3.20).

The ASB concluded that a mixed measurement system—either historical cost or current value—should be selected for each category of assets or liabilities (ASB 1999, paragraphs 6.1-6.5). It selected deprival value, favoured by Solomons, as its measure of current value (ASB 1999, paragraphs 6.7-6.9). Also with Solomons, the ASB (1999) supported the financial capital maintenance concept (paragraphs 6.39-6.41). Unlike the FASB, the ASB was able to agree to a single concept of current value.

AUSTRALIA

Barton (1982) prepared a monograph, *Objectives and Basic Concepts of Accounting*, for the Australian Accounting Research Foundation. After surveying the APB’s *Statement No. 4*, the Trueblood Report, and the FASB’s *SFAC No. 1*, as well as other literature, he concluded that

“The major role of published financial reports is to provide equity and loan investors and their advisors, and the capital market generally, information about the company’s operations and its resources and obligations for accountability purposes. A secondary role of published financial reports is to assist investors with forecasting and decision making.”

Statement of Accounting Concepts (SACs) 2 and 3 (1990)

In 1990, the private-sector and public-sector accounting standard-setting bodies issued SAC 2, ‘Objectives of General Purpose Financial Reporting’, their first objectives statement (Australian Accounting Research Foundation (AARF 1990). As Australian standards were sector-neutral, their statements were intended to apply equally to entities in both the private and public sectors. Their overall objective was ‘General purpose financial reports shall provide information useful to users for making and evaluating decisions about the allocation of scarce resources’ (AARF 1990, paragraph 43). A supplementary objective was presented on accountability: ‘Managements and governing bodies shall present general purpose financial reports in a manner which assists in discharging their accountability’ (AARF 1990, paragraph 44). As to the uses of financial information by resource providers in the profit-seeking private sector, they said,

“In the case of investor-owned business entities, investors and other resource providers will want to know whether the entity is operating profitably and generating favourable cash

flows in the process, since their decisions relate to amounts, timing and uncertainties of expected cash flows. (AARF 1990, paragraph 21)”

Hence, the Australian standard-setting boards adopted the decision-usefulness approach.

CANADA

CICA’s Stamp Report

The Canadian Institute of Chartered Accountants (CICA) published a report in June 1980 on ‘Corporate Reporting: Its Future Evolution’ which was written by Edward Stamp. Popularly known as Stamp Report, it mentions the following as the important objectives of company financial reporting:

1. One of the primary objectives of published corporate financial reports is to provide an accounting by management to both equity and debt investors, not only a management’s exercise of its stewardship function but also of its success (or otherwise) in achieving the goal of producing a satisfactory economic performance by the enterprise and maintaining it in a strong and healthy financial position.

2. It is an objective of good financial reporting to provide such information in such a form as to minimise uncertainty about the validity of information, and to enable the user to make his own assessment of the risks associated with the enterprise.

3. It is necessary that the standards governing financial reporting should have ample scope for innovation and evolution as improvements become feasible.

4. The objectives of financial reporting should be taken to be directed towards the need of users who are capable of comprehending a complete (and necessarily sophisticated) set of financial statements or alternatively, to the needs of experts who will be called on by the unsophisticated users to advise them.

The Stamp Report has not found FASB’s Conceptual Framework and objectives on financial reporting suitable and useful for Canada because of the environmental difference between USA and Canada. This is true not only in case of any particular country but applicable equally to other countries as well. Financial reporting—its objectives and scope—are influenced by the economic, legal, political, institutional and social factors prevailing in a country. Therefore, these factors need to be considered before developing financial reporting objectives in any country.

Conceptual issues in standard-setting

In addition to the objectives just outlined, Stamp has identified some complex conceptual issues that accountants must face in formulating their standards:

- *Allocation problems:* Accountants must make periodic measurements of the financial position and performance of an enterprise and in the process, develop systematic and rational methods of allocation. Unfortunately, these allocations are generally arbitrary and incorrigible.

- *Income problems:* Should income be regarded and defined as the result of matching costs against revenues or as the change in the net assets of equity during a period?
- *Reporting focus:* Should the proprietary concept (which looks at the financial affairs of an enterprise through the eyes of its owners) or the entity concept (which looks at the financial affairs of the enterprise from within, as it were) be used?
- *Capital-maintenance concepts:* Which capital-maintenance concept is most suitable?
- *Assets-valuation base:* Which asset-valuation base is to be used — historical cost, replacement cost, net realizable value, or value to the firm?
- *Economic reality:* What is economic reality? Can the balance sheet measure the current worth of an enterprise? As an example, the goodwill problem is presented as it, insolvable. As Stamp states:

The problem of how to account for goodwill, especially internally generated goodwill, is probably the most perplexing problem in accounting, and one that is almost certainly irresolvable. Human talent, technical and other know-how, and many other largely unquantifiable assets are involved, making the measurement task virtually insoluble ... many of the perplexing problems of accounting are indeed irresolvable in the sense that a unique solution is neither possible nor necessary.

Users of corporate reports

Users demand accountability, but a major issue must be resolved to strike the right balance between accountability and the right to privacy. Because accountability is a broader concept in Canada than it is in the United States, the range of users is broader in Canada than the range of users considered by the FASB's conceptual-framework project. The range of Canadian users includes the following fifteen categories:

- shareholders (present and potential);
- long-term creditors (present and potential);
- short-term creditors (present and potential);
- analyst and advisers serving the above (present);
- employees (past, present and potential);
- nonexecutive directors (present and potential);
- customers (past, present and potential);
- suppliers (present and potential);
- industry groups (present);
- labor unions (present);
- governmental departments and ministers (present);
- the public (present);

- regulatory agencies (present);
- other companies, both domestic and foreign (present); and
- standard-setters and academic researchers (present).

Users' needs

After the types of users are determined, the next step is to determine their informational needs. This task is complicated by the difficulties of determining the users' decision models. The "Stamp Report" emphasized that one of the most difficult problems in developing accounting standards arises from our ignorance about the nature of users' decision making processes and about the rational (and often irrational) mental processes that users go through in reaching their decisions. In any case, the following thirteen categories of user needs are proposed:

- assessing performance;
- assessing management quality;
- estimating future prospects;
- assessing financial strength and stability;
- assessing solvency;
- assessing liquidity;
- assessing risk and uncertainty;
- aiding resource allocation;
- making comparisons;
- making valuation decisions;
- assessing adaptability;
- determining compliance with the law or regulations; and
- assessing contributions to society.

Accounting Standards Authority of Canada's (ASAC's) Conceptual Framework (1987)

The Accounting Standards Authority of Canada (ASAC), founded in 1981 issued a booklet, *Conceptual Framework for Financial Reporting*, in 1987.

ASAC said the following information was needed in order to address management stewardship and performance:

"Information which is useful in evaluating how well management has discharged its stewardship responsibilities. Accountability for stewardship is broader when the entity's debt instruments or shares are traded by the public. A satisfactory rate of return on the net resources of the entity is an important indicator of management performance. (ASAC 1987, paragraph 125)"

'Conservatism', ASAC said, 'is an accounting convention, not a quality of accounting information, and is not in the hierarchy of accounting qualities [for implementing the objectives]' (paragraph 270). ASAC associated conservatism with 'deliberate bias', which, it said, 'is not logical in a measurement of discipline.

AcSC's Financial Accounting Concepts (1988)

In 1988, the CICA's Accounting Standards Committee (AcSC) issued a statement of financial accounting concepts (SFAC). This statement is contained in section 1000 of the *CICA Handbook*. Closely following the FASB's conceptual framework (after a time lag of several years) and thus not carrying forward Stamp's ambitious proposals, it stated that the objective of financial statements (not financial reporting) is to communicate information that is useful to investors, creditors, and other users in making resource allocation decisions and/or assessing management stewardship. Consequently, financial statements provide information about':

- (a) an entity's economic resources, obligations and equity;
- (b) changes in an entity's economic resources, obligations, and equity; and
- (c) the economic performance of the entity.

It made a further point that 'Investors also require information about how the management of an entity has discharged its stewardship responsibility to those that have provided resources to the entity'. It then added the usual qualitative characteristics: understandability, relevance, reliability, and comparability. Under the head of relevance, AcSC said that, 'Although information provided in financial statements will not normally be a prediction in itself, it may be useful in making predictions' of 'future income and cash flows'. AcSC included conservatism as a subhead under reliability, saying, 'Use of conservatism in making judgments under conditions of uncertainty affects the neutrality of financial statements in an acceptable manner... However, conservatism does not encompass the deliberate understatement of net assets or net income'

Prior to 1988, the closest approximation in the CICA Handbook to an objective of financial statements was the assertion that 'Financial statements should be prepared in such form and use such terminology and classification of items that significant information is readily understandable'.

INTERNATIONAL ACCOUNTING STANDARDS BOARD, THE FRAMEWORK FOR FINANCIAL REPORTING (SEPTEMBER 2010)

The International Accounting Standards Board is committed to harmonise regulations, accounting standards and procedures relating to the preparation and presentation of financial statements. It believes that further harmonisation can best be pursued by focusing on financial statements that are prepared for the purpose of providing information that is useful in making economic decisions.

The Board believes that financial statements prepared for this purpose meet the common needs of most users. This is because nearly all users are making economic decisions, for example:

- (a) to decide when to buy, hold or sell an equity investment.
- (b) to assess the stewardship or accountability of management.

- (c) to assess the ability of the entity to pay and provide other benefits to its employees.
- (d) to assess the security for amounts lent to the entity.
- (e) to determine taxation policies.
- (f) to determine distributable profits and dividends.
- (g) to prepare and use national income statistics.
- (h) to regulate the activities of entities.

Financial statements are most commonly prepared in accordance with an accounting model based on recoverable historical cost and the nominal financial capital maintenance concept. Other models and concepts may be more appropriate in order to meet the objective of providing information that is useful for making economic decisions although there is at present no consensus for change. This Conceptual Framework has been developed so that it is applicable to a range of accounting models and concepts of capital and capital maintenance.

The objectives of general purpose financial reporting given by IASB in the Framework for Financial Reporting (September 2010) are similar to the objectives stated by Financial Accounting Standards Board, USA in SFAC No. 8, Conceptual Framework for Financial Reporting, issued in September 2010.

USERS IN FINANCIAL REPORTING

As stated earlier, company financial reporting is intended to provide external users information that is useful in making business and economic decisions, that is, for making reasoned choices among alternative uses of scarce resources in the conduct of business and economic activities. Thus, users are potentially interested in the information provided by financial reporting.

Among the potential users are owners, lenders, suppliers, potential investors and creditors, employees, management, directors, customers, financial analysts and advisors, brokers, stock exchanges, lawyers, economists, taxing authorities, regulatory authorities, legislators, financial press and reporting agencies, labour unions, trade associations, business researchers, teachers and students, and the public. Some users—such as owners, creditors, and employees—have or contemplate having direct economic interests in particular business enterprises. Managers and directors, who are charged with managing the enterprise in the interest of owners, also have a direct interest. Some users—such as financial analysts and advisors, regulatory authorities, and labour unions—have indirect interests because they advise or represent those who have or contemplate have direct interests.

Potential users of financial information most directly concerned with a particular business enterprise are generally interested in its ability to generate favourable cash flows because their decisions relate to amounts, timing, and uncertainties of expected cash flows. To investors, lenders, suppliers, and employees, a business enterprise is a source of cash in the form of dividends or interest and, perhaps, appreciated market price,

repayment of borrowing, payment of goods or services, or salaries or wages. They invest cash, goods, or service in an enterprise and expect to obtain sufficient cash in return to make the investment worthwhile. To customers, a business enterprise is a source of goods or services, but only by obtaining sufficient cash, to pay for the resources it uses and to meet its other obligations, can the enterprise provide those goods or services. To managers, the cash flows of a business enterprise are a significant part of their management responsibilities, including their accountability to directors and owners. Many, if not most, of their decisions have cash flow consequences for the enterprise. Thus, investors, creditors, employees, customers, and managers significantly share a common interest in an enterprise's ability to generate favourable cash flows. Other potential users of financial information share the same interest, derived from investors; creditors, employees, customers, or managers whom they advise or represent or derived from an interest in how those groups (and especially shareholders) are fair.

Some of the potential users listed above may have specialised needs but also have the power to obtain the information needed. For example, the information needed to enforce tax laws and regulations are specialised needs. However, although the taxing authorities often use the information in financial statements for their purposes, they also have statutory authority to require the specific information they need to fulfil their functions, and do not need to rely on information provided to other groups. Some investors and creditors or potential investors and creditors may also be able to require a business enterprise to provide specified information to meet a particular need. For example, a bank or insurance company negotiating with an enterprise for a large loan or purchase of securities can often obtain desired information by making the information a condition for completing the loan transaction.

Some users of financial information can obtain more information about an enterprise than others. This is clearly so for managers, but it also holds true for others, such as large scale equity shareholders and creditors. Financial statements are, it is argued, especially important to those who have limited access to information and limited ability to interpret it. The Trueblood Report states:

“An objective of financial statements is to serve primarily those users who have limited authority, ability, or resources to obtain information and who rely on financial statements as their principal source of information about an enterprise's economic activities.”²¹

Financial Accounting Standards Board (USA) does not agree with Trueblood's concept of users for financial reporting. According to FASB, financial reporting information should be comprehensible to those who have a reasonable understanding of business and economic activities and are willing to study the information with reasonable diligence. FASB argues:

“Individual investors, creditors, or other potential users of financial information understand to varying degrees the business and economic environment, business activities, securities markets, and related matters. Their understanding of financial information and the way and extent to which they use and rely on it also may vary greatly. Financial information is a tool and, like most tools, cannot be of much direct help to those who are unable or unwilling to use it or who misuse it. Its use can be learned, however, and financial reporting should provide information that can be used by all—nonprofessionals as well as professionals—who are willing to learn to use it properly. Efforts may be needed to increase the understandability of financial information. Cost benefit considerations may indicate that information understood or used by only a few should not be provided. Conversely, financial reporting should not exclude relevant information, merely because it is difficult for some to understand or because some investors or creditors choose not to use it”. (Concept No. 1, para 36)

In India, the basic purpose of financial reporting (as per Indian Companies Act, 2013) is to provide shareholders of the company, financial statements and other related information. In India, shareholders, especially the existing shareholders, are the primary users of financial reporting. However, there are other potential users also who are equally interested in financial reporting information for making economic decisions. Therefore, the purpose of financial reporting in India should be to serve not only existing investors but prospective investors and creditors, and other external users and stakeholders as well.

GENERAL PURPOSE FINANCIAL REPORTING

Generally speaking, the term ‘financial reporting’ is used to mean general purpose external financial reporting. Often it is said that the purpose of financial reporting is the preparation of general purpose reports for external users. Despite the fact that financial reports are mainly intended (legally) for shareholders, they can be, and are, used by a number of other external users

The users of financial statements include present and potential investors, employees, lenders, suppliers and other trade creditors, customers, governments and their agencies and the public. They use financial statements in order to satisfy some of their different needs for information. These needs include the following:

- (a) *Investors*—The providers of risk capital and their advisors are concerned with the risk inherent in, and return, provided by their investments. They need information to help them determine whether they should buy, hold or sell. Shareholders are also interested in information which enables them to assess the ability of the enterprise to pay dividends.

Investors, whether present or prospective, generally benefit from learning about how their investments have

been and might be used by the managers of their companies. One source of such information is financial reports that managers render to their boards of directors and shareholders. These statements are the principal formal means by which managers convey how they managed the enterprise's resources over a period, usually no longer than a year, and the resultant financial condition of the enterprise at the end of a period, as determined by their accounting records. Prospective investors realize that once they have committed their funds to a company by purchasing new shares directly or from an existing shareholder, they usually have little control over how the company is managed. Non-controlling shareholders, in particular, have reason for concern. Consequently, they usually are interested in how those over whom they have no control have used corporate resources, and the extent to which these controlling persons (including senior managers) have conflicts of interest that might result in costs being imposed on the non-controlling shareholders. Financial reports also help to motivate managers to operate their corporations in the interest of shareholders. Reporting in these areas is called the "stewardship" function of accounting.

In addition to a report of stewardship, investors would want data that help them determine the present and possible future economic value of their investments. If the company's shares are actively traded in a share market, shareholders can obtain unbiased estimates of the economic value of their investments from share prices. But these prices are based, in part, on the information provided in financial reports. If this information were not relevant and reliable, its receipt would not change the value given to shares or provide investors with insights that they want. Hence, prospective investors might have to incur costs to obtain information elsewhere or discount the amount they were willing to pay for the shares, using the information currently available to them. This would make the shares worth less to them. Thus, present shareholders, including those who can exercise some control over the corporation, also benefit from their managers providing potential investors with financial reports that the investors find trustworthy.

- (b) *Employees* — Employees and their representative groups are interested in information about the stability and profitability of their employers. They are also interested in information which enables them to assess the ability of the enterprise to provide remuneration, retirement benefits and employment opportunities.

Employees often find financial information useful for determining the extent to which their employer has prospered and the possibility that they might lose their jobs, or get a promotion or pay raise. Managers' and

other employees' bonuses and other rewards often are partially based on the financial performance of their firms, as measured by financial accounting data reported in financial statements. Thus, their concerns are similar to those of investors, except that the bulk of their wealth (human and financial capital, particularly for senior managers) tends to be tied to their company. Unlike investors, they rarely can hold a portfolio of investments that is sufficiently diversified to offset potential losses with gains, except for very wealthy top managers. They also may have been compensated with share options that could become worthless (or considerably less valuable) if their corporation's share prices decline. Therefore, they are concerned with the impact of accounting figures on the share's price performance in the market. For these reasons, employees and senior managers tend to worry about the possibilities that their firm might appear to have performed badly, resulting in the loss of their positions and investments in company share and retirement plans. Furthermore, those senior managers whose bonuses, job security, and prospects are based on financial accounting data, rather than on share prices, have reason to want financial-accounting reports to present numbers that benefit them.

- (c) *Creditors* — Creditors must determine the likelihood that they will be repaid if they advance funds to the enterprise. They also are well advised to monitor how the funds are being used, that the conditions imposed by loan covenants have been satisfied, and the extent to which the borrowers' ability to repay debt as promised has changed. Creditors tend to be concerned only with the possibilities that the enterprise will not be able to repay its debts or honor its obligations. Because this ability is affected primarily by the enterprise's present and possible future losses rather than by increases in economic value, creditors generally favor conservative accounting rules, or those where all expected losses are recorded and gains are delayed until they are almost certain. They also usually want statements of cash flows, and current asset market or (in situations of financial distress) current liquidation values.
- (d) *Suppliers and other trade creditors* — Suppliers and other creditors are interested in information that enables them to determine whether amounts owing to them will be paid when due. Trade creditors are likely to be interested in an enterprise over a shorter period than lenders unless they are dependent upon the continuation of the enterprise as a major customer.
- (e) *Customers* — Customers have an interest in information about the continuance of an enterprise, especially when they have a long-term involvement with, or are dependent on, the enterprise.
- (f) *Governments and their agencies* — Governments and their agencies are interested in the allocation of resources

and, therefore, the activities of enterprises. They also require information in order to regulate the activities of enterprises, determine taxation policies and as the basis for national income and similar statistics.

- (g) *Public* — Enterprises affect members of the public in a variety of ways. For example, enterprises may make a substantial contribution to the local economy in many ways including the number of people they employ and their patronage of local suppliers. Financial statements may assist the public by providing information about the trends and recent developments in the prosperity of the enterprise and the range of its activities.

While all of the information needs of these users cannot be met by financial statements, there are needs which are common to all users. As investors are providers of risk capital to the enterprise, the provision of financial statements that meet their needs will also meet most of the needs of other users that financial statements can satisfy.

The management of an enterprise has the primary responsibility for the preparation and presentation of the financial statements of the enterprise. Management is also interested in the information contained in the financial statements even though it has access to additional management and financial information that helps it carry out its planning, decision making and control responsibilities. Management has the ability to determine the form and content of such additional information in order to meet its own needs. The reporting of such information, however, is beyond the scope of this framework. Nevertheless, published financial statements are based on the information used by management about the financial position, performance and changes in financial position of the enterprise.

It is still debatable whether a single set of financial statements could serve the interests of all external users. It is possible that some users may find the financial reports more useful than the others. However, it has been forcefully argued and empirically proved that all external users have something in common while making investment decisions and fulfilling their needs. Therefore, although the users may be of different types, they have certain similar information needs. The question of similar information needs of investors and creditors is best understood in terms of their economic decisions, *i.e.*, investment decision and credit decision.

Investment decision concerns the decision to buy, to sell or to hold a share. An investment decision is a complex one because of intervention of investment market. An investor in a buying decision determines the ability of an enterprise to pay dividends, currently, prospectively or even at liquidation. In an investment market share prices rise and fall with changes in investors' expectations about the ability of an enterprise to pay further dividends.

In a credit decision, the lender knows the amount of loan requested and the terms of repayment of principal and interest. The lender receives a definite amount of interest or return. The

lender seeks to determine the borrower's ability to repay principal and interest. The borrower's ability to pay is not subject to precise measurement and in most situations, no single set of information can provide the lender with an assured measure of the borrower's ability to repay. Thus, the credit decisions like other economic decisions, require an assessment of risk. Therefore, adequate information is needed by the lender to be selective among borrowers (to reduce his risk) and to make predictions based on his preferences for amount, timing, and uncertainty of cash returns. Lenders also need information about borrowers to determine the degree of control or influence they wish to impose through such loan provisions.

All investors and creditors measure sacrifices and benefits in terms of the actual or prospective disbursement or receipt of cash. The distinction between an investment and a credit decision, often, is not sharp. Thus, the information needs of creditors and investors are essentially the same. Both groups are concerned with the enterprise's ability to generate cash flows to them and with their own ability to predict, compare, and evaluate the amount, timing, and related uncertainty of these future cash flow.²² The Statement of Financial Accounting Concept No. 1 of FASB (USA) also states that "general purpose external financial reporting is directed toward the common interest of various potential users in the ability of an enterprise to generate favourable cash flows".²³ It is also contended that investors and creditors and their advisers are the most obvious prominent external groups who use the information provided by financial reporting. Their decisions and their uses of information are usually studied and described to a much greater extent than those of other external groups, as their decisions significantly affect the allocation of resources in the economy. In addition, information provided to meet investors' and creditors' needs is likely to be generally useful to members of other user groups who are interested in essentially the same financial aspects of business enterprises as investors and creditors.²⁴

Management as user of information is as interested in information about assets, liabilities, earnings, and related elements as external users are, and need, generally, the same kind of information about these elements as external users. Thus, management is major user of the same information that is provided by external financial reporting. However, management's primary role in external financial reporting is that of communicating information for use by others. For that reason, it has a direct interest in the cost, adequacy, reliability, and, understandability of external financial reporting.

SPECIFIC PURPOSE REPORT

Financial reporting objectives in accounting literature so far has focused on general purpose financial reporting which aims to satisfy the information needs of all potential users. Company law provisions in almost all countries of the world have consistently accepted the utility of general purpose financial reporting. Due to this, the separate (specific) needs of specific users have been largely ignored on the assumption that general purpose reports

can satisfy the information needs of all external users. However, a reasoning has also been made suggesting that the needs of specific users may be better served by presenting specific purpose reports to help them in their separately identifiable decision functions. For instance, financial reports submitted to obtain credit or loans, or government, or financial reports given to trade and industry, may not satisfy other users' needs and expectations.

However, the proposal of specific purpose reports in company financial reporting is criticised on some counts.

Firstly, the cost of the developing specialised reports to satisfy special requirements of specific users may exceed the benefits when the company financial reporting policy is determined in its totality.

Secondly, specialised needs of specific users cannot be ascertained with any degree of certainty.

Thirdly, issuing multiple reports about the financial results of an enterprise can create confusion among various users. Multiple reports increase the perceived complexity of the environment. Such changes in perceived environment complexity induce changes in decision makers' cognitive processing capabilities and, in turn, can decrease the effectiveness of decision making by users.

Fourthly, multiple reports may not be desirable and practicable from the standpoint of information economics.

To conclude, company financial reporting, in future, will continue to adhere to general purpose reporting system to aid investors, creditors, and other external users in their economic decisions. Meanwhile, in order to achieve the objectives of financial reporting (through general purpose reports) there is a continuous need to investigate many vital aspects relating to general purpose financial reports such as identifying potential users and user groups, identifying information needs of such users, determining the feasibility of providing general purpose information to meet these needs, determining the manner of reporting such information, and having a feedback from the users regarding the use and relevance of general purpose information.

SIGNIFICANCE OF COMPANY ANNUAL REPORT

Company Annual Report has become a significant medium of corporate reporting today, although information about a company's affairs can be communicated through other media also, *e.g.*, prospectus, financial press release, interim report, and personal contact with company officials. Prospectuses are made available to expected security buyers and interim reports are sent to shareholders. Besides, external parties establish personal contact with company officials through private meetings, direct correspondence with the company, listening to speeches made by company officials at stock exchanges and attendance at annual meetings. In addition, newspapers, business and industry magazines, investment advisory services and government statistics also provide information about a company.

A typical corporate annual report usually contains a balance sheet, profit and loss account, cash flow and/funds flow statement, and directors' report. Besides, the details of information and additional information are provided in the schedules and notes on accounts, which form parts of financial statements. Annual reports often contain useful supplementary financial and statistical data as well as management comments. Many companies in India now include Management Discussion and Analysis (MD&A) report, corporate governance report, chairman's statement, historical summary, operating positions, highlights of important data, etc.

Any of the above media can form the basis of corporate reporting by a company to the external parties. Despite the existence of different sources of information, the annual report is regarded as the most important source of information about a company's affairs. It is really directed to the community at large, to whomsoever it may have been formally addressed. All groups have access to it; their attitudes may be influenced by it. Its importance looms large not only in companyshareholder relations but also in companysociety relations. Lee and Tweedie²⁵ have found that annual financial report is considered to be the most important of the sources of information.

There are important reasons why a company annual report is regarded a valuable source of information about company's affairs.

Firstly, annual report is relatively more and easily accessible than any other source of information.

Secondly, annual report contains audited information which creates confidence among the public.

Thirdly, annual report includes besides financial statements, some more detailed information such as historical summary, statistical data, important business results, company's plans and policies which are not available in other sources of information.

Fourthly, representing the most commonly available source of information on past performance, annual report and statements therein are used by both amateur and professional investors to predict company's future performance, thereby providing a base for estimating future share prices and the related cash flows to the investors.

Therefore, there is need to make published corporate annual reports more informative so that investors and other users may not have to go to other sources for the information needed by them. The Corporate Report (UK) states that annual financial reports should seek to satisfy, as far as possible, the informational needs of users, and, they should be useful.

BENEFITS OF FINANCIAL REPORTING

The financial reporting, if adequate and reliable, would be useful in many respects. Benefits of financial reporting may be listed as follows:

1. Economic Decision Making

The ultimate goal of any economy is to maximise the social welfare for which an efficient allocation of resources is required. This goal is of particular significance in developing economies where resources are not plentiful. The availability of capital is one of the scarce and major productive factors needed to pursue economic activity and to achieve the goal of efficient allocation of resources. Companies compete in the securities market to obtain their capital as easily as possible. Since owners of capital like business enterprises, attempt to maximise their own wealth and well being, they require information to help them in making sound economic decisions. This process is assumed to lead to the broader social goal of efficient allocation of resources throughout the economy.

Mautz and May²⁶ observe:

“Financial disclosure is essential to the functioning of a free enterprise economy. One aspect of a market oriented economy is the allocation of capital on a market basis. Financial disclosure is required to support a viable capital market. Indeed, without adequate financial disclosure there is a real question whether significant amounts of capital could be found. In addition, a viable capital market is essential to resource allocation within the economy. It is in the capital market that a major portion of the nation’s resources are allocated to those companies which serve customers effectively, and capital is refused to those companies who do not serve customers effectively.”

The two important economic decisions that influence allocation of resources and which external users usually make are (a) security investment (b) credit decision. Sound economic decisions require assessment of impact of current business activities and developments on the earning power of a company. Both economic decisions require detailed information to determine benefits (to be received) in lieu of sacrifices (resources given). Information about economic resources and obligations of a business enterprise is also needed to form judgements about the ability of the enterprise to survive, to adapt, to grow, and to prosper amid changing economic conditions. In this task, financial reporting can provide information important in evaluating the strength and weakness of an enterprise and its ability to meet its commitments. It can supply information about transactions within the business and factors outside the company such as taxation policy, trade restrictions, technological changes, market potentialities, etc., which affect the earning power of a business enterprise.

2. Cost of capital

Adequate disclosure in annual reports is expected, in the long run, to enhance market price of company’s share in the investment market. Higher prices of company shares resulting from the full disclosure will have a favourable impact on the company’s cost of capital. It also enhances the future marketability of subsequent issue of company’s shares. Choi²⁷ argues that if

analysts are kept well informed then, over the long run, an individual company’s shares prices will be relatively higher. Higher security prices would mean that a primary security issue could be priced higher and that the net proceeds from the issue would be higher. Thus the firm would experience larger receipt from a given issue and hence experience a lower cost of capital.

A report for Arthur Anderson and Company stated:

“Consistently good financial reporting should have a favourable long run effect on the company’s cost of capital. Over a period of time, good reporting leads to informed investors who, because they understand the company, will pay a fair price for its securities. Minimum or inconsistent reporting often leads to some loss of investors’ confidence in the quality of company information and, ultimately, in the price they will pay in the market. Credibility is a subtle intangible of great importance to any company, corporate reporting practices have a major effect on it. We have often observed this connection between credibility, corporate reporting, and the cost of capital....Good corporate reporting is a long-term policy applicable to good times and bad.”²⁸

Some empirical evidence which relate information release to the firm’s market value are presented by, for example, Merton²⁹, and Diamond and Verrecchia³⁰. In the Merton model, information asymmetry is modelled as only a subset of investors knowing about each firm. If the firm can increase the size of this subset, say by the voluntary release of information, its market value will rise, other things being equal. In the Diamond and Verrecchia model, voluntary disclosures reduce information asymmetry between the firm and the market which facilitates trading in its shares. The resulting increase in market liquidity attracts large institutional investors who, if they have to do in future, can sell large blocks of shares without lowering the price they receive. The firm’s share price increases as a result of this greater demand. It should be noted that market efficiency, whereby the markets properly interpret the firm’s information, is assumed in this argument.

Thus data expansion would have a favourable effect on the cost of capital. However, some doubts have been expressed about the disclosure regulation (for increased disclosure) resulting in a lower cost of equity capital. It is argued that managers have strong incentives to minimise the possibility of shareholder unrest by controlling the flow of information to eliminate fluctuations in performance measures, thereby misleading shareholders with respect to the relative riskiness of the firm. If managers manipulated, or simply did not publish adverse financial data to hide poor performance from investors, subsequent disclosure of such information due to the passage of some regulation might result in lower market price for the related shares and a higher cost of equity capital. Similarly, if managers attempted to avoid or manipulate disclosure in the hope that this practice would cause investors to perceive the firm to be less risky than it really is, subsequent disclosure might well result in higher risk as perceived by investors. This increase in perceived risk presumably would result in an increase in the cost of equity capital to the firm.

Manipulation and/or misrepresentation, once discovered, will lead to loss of investor confidence in the quality of company information and that, in turn, will lower the price they will for its securities.

Thus, the above discussion implies that a disclosure regulation would be expected to have a favourable effect on the cost of equity capital of the affected firms. Implicit in this discussion is the assumption that a disclosure regulation would result in an improvement in the financial disclosure of the affected firms. A study conducted by Dhaliwal³¹ to examine the impact of disclosure regulations on the cost of equity capital of affected firms concluded that segmental disclosure requirement had a favourable effect on the cost of equity capital because disclosure requirement improved the quality of financial disclosure of affected firms and that, in turn, it reduced uncertainty about their stocks.

3. Equilibrium in Share Prices

Adequate disclosure will tend to minimise the fluctuations in company's share prices. Fluctuations in share prices occur because of the ignorance prevailing in the investment market. Fluctuations show an element of uncertainty in investment decisions. If the securities market are in possession of full information, the ignorance and uncertainty will be reduced and share prices will tend to maintain equilibrium. Besides, increased disclosures would prevent fraud and manipulations and would minimise chances of their occurrences. Additionally, all investors would be treated equally as far as the availability of significant

financial information is concerned. Ethics in disclosure demands that no caste system for release of corporate information—telling the sophisticated first and the general public later or not at all—should be followed by corporate managements.

Miller and Bahnson³² have suggested the following four axioms regarding quality financial reporting.

- Incomplete information creates uncertainty.
- Uncertainty creates risk for investors and creditors.
- Risk makes investors and creditors demand a higher rate of return.
- A higher rate of return of investors and creditors is a higher cost of capital for the firm and produces lower security prices.

In a positive perspective and for positive thinkers, the above four axioms can also be stated in the following different terms.

- More complete information reduces uncertainty.
- Less uncertainty reduces risk for investors and creditors.
- Reduced risk makes investors and creditors satisfied with a lower rate of return.
- A lower rate of return for investors and creditors is a lower cost of capital for the firm and produces higher stock prices.

Figure 13.3 summarizes the axioms and the chain reactions between the information provided to the public and the company's security prices.

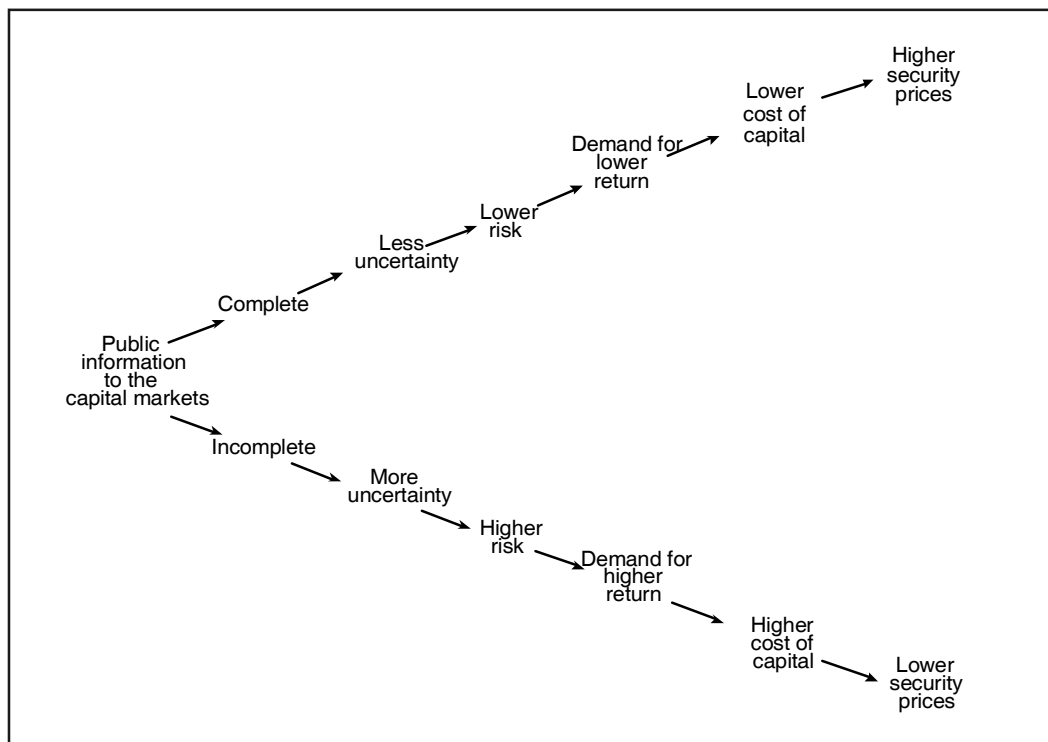


Fig. 13.3: The Links Between Information and Security Prices

Source: Paul B.W. Miller and Paul R. Bahnson, *Quality Financial Reporting*, TMH, 2005, p. 8.

4. Employee Decisions

Employee decisions may be based on perceptions of a company's economic status acquired through financial statements. In particular, prospective and present employees may use the financial reports to assess risk and growth potential of a company and therefore, job security and future promotional possibilities. These decisions affect the allocation of human capital in the economy. Labour unions and individual employees may use financial statement data as a basis for making contractual wage and employment benefit demands. Should this occur, data that incorrectly reflect the economic position and prospects of an enterprise may mislead employees into making or justifying unrealistic demands.

Furthermore, unionised companies showing large increases in earnings are likely to be faced with successfully negotiated demands for large wage increases. Hence, as regards employee decisions, accounting techniques that result in greater fluctuations in reported earnings appear to be costly to shareholders, sharp increases in profits are likely to generate demands for large wage increases, while sharp decreases may lead to employee fears of bankruptcy or financial difficulties. Management also want to avoid charges of manipulation of net profit data. Thus, an apparently objectively determined series that tends not to change sharply is desirable. Historical cost based accounting meets these requirements.

5. Customer Decisions

The data presented in financial statements may affect the decision of a company's customers and hence have economic consequences. Customers, like employees, may use financial statement data to predict the likelihood and/or timing of a firm going bankrupt or being unable to meet its commitments. This information may be important in estimating the value of a warranty or in predicting the availability of supporting services or continuing supplies of goods over an extended period of time. Financial institutions also may use the financial statements to assess their present and future solvency and hence, the likelihood that they will be able to repay funds or meet promises as contracted. It is likely that the sophisticated customers will be able to see through arbitrary or misleading accounting practices. Unsophisticated customers, however, may be misled by accounting procedures, particularly when newly adopted procedures result in sudden changes in reported data. With respect to customer decisions the economic consequences of accounting procedures are likely to be limited to the period of uncertainty that occurs when a change is instituted. Even then, sophisticated customers are not likely to misinterpret the change.³³

6. Manager's Decisions

The accounting data published in financial reports may have economic effects through its impact on the behaviour of the managers of corporate enterprises. The inclusion of accounting numbers in management compensation schemes or the fear of market misinterpretation of accounting reports may influence a manager's operating and financing decisions. Shareholders prefer accounting procedures that mirror economic events as closely as

possible. However, shareholders also must be concerned that the managers might manipulate the reported data to increase their compensation. Therefore, shareholders, like creditors and union leaders, also want numbers that are reliable and objectively determined. Considering the problems of obtaining measurements of income and net worth that are both objectively determined and valid representations of economic reality, it seems likely that management and shareholders would adopt compensation schemes that recognise the limitations of the data, such that the expected payments conform to the market price for managerial services.

To sum up, information contributes much towards better investment decision making, promoting understanding and creating an environment to cooperate. Financial reporting generates confidence and has favourable effect on the company's cost of capital. In the long run, financial reporting can retain its credibility only if it does what it is designed to do—provide society with relevant and reliable information about economic events and transactions—and does not attempt to move the economy in one direction rather than another.

ESTABLISHING ACCOUNTING AND REPORTING OBJECTIVE

It is now an established fact that there is a need for the regulation of accounting information and disclosure. This requires that accounting objectives should be developed to facilitate the process of designing accounting information and disclosing those information. Following are the advantages associated with having an agreed set of objectives:

- (1) The proper evaluation of current practice requires a set of objectives. In the absence of objectives, policy makers may be forced to apply inadequate and unsatisfactory criteria to the evaluation of practice. For example, practice may be judged against existing regulations or standards. Such an evaluation merely establishes how far existing regulations or standards are being applied not whether existing regulations or standards are achieving their objectives.
- (2) The evaluation of proposed changes in accounting regulations or standards require the establishment of stated objectives if a rational choice is to be made between alternatives. This merely extends a tenet of the classic economic decision model to accounting regulation.
- (3) The need to respond appropriately to changing circumstances implies objectives against which responses may be evaluated. In the absence of articulated objectives, accounting regulations or standards may become dogmatic and ends in themselves, rather than means to ends.

Despite the importance of developing accounting objectives there are serious problems in formulating objectives.

- (1) *Ignorance about user needs:* The objective selected should inevitably reflect knowledge or perceptions of the needs of those who are thought to use financial reports. However, this is not found in practice. Stamp comments:

“One of the great difficulties in producing standards and financial statements that are truly free of bias is our general

ignorance of the nature and variety of user decision models, so that it may be difficult to be sure whether information is biased or not.”³⁴

(2) *Different users have different needs*: Each user group will make its own decisions and different decisions will require different information. Moreover, within each user group the value of information will vary between individuals depending, amongst other things, upon their level of understanding and access to other information sources. Therefore, if user needs were known their variety would impose its own problem on the establishment of agreed objectives.

(3) *Conflicts of interest*: The interests of various groups are likely to be in conflict, formulating objectives for accounting depends upon resolving such conflicts. Cyert and Ijiri³⁵ consider the interaction between the three groups, users, company and the accounting profession. Their analysis is contained in Figure 13.4.

Figure 13.4 represents information sets for the three groups. Circle U represents information useful to users of accounts, circle F information which the management of firms agree to disclose, and circle P information which the accounting profession is capable of producing and verifying. Area I is the feasible set acceptable to all groups. That is, such information is perceived as relevant by users, is disclosed by firms, and can be produced and verified by accountants. Areas II to VII inclusive represent areas of conflict.

Given these conflicts Cyert and Ijiri suggest three approaches to the formulation of accounting objectives. First consider the set of information—which firms are willing to disclose and attempt to find the best means of measuring and verifying it. Thus, circle F is kept fixed and circles P and U are moved towards it. The second approach takes circle P as fixed and attempts to accommodate users and firms through various accounting options. This involves moving circles F and U towards P. Finally,

the information considered relevant by users, circle U, is considered central and accountants and firms are encouraged to produce and verify that information. It is clear the first approach is firm-oriented, the second profession-oriented, and the third user-oriented. At the present time the user-oriented approach is in the ascendancy. The UK Corporate Report (ASC, 1975), the Trueblood Report (American Institutes of Certified Public Accountants, 1973), the Canadian Stamp Report and the US FASB's Concept No. 1 and No. 8 have adopted such an approach in determining the objectives of accounting.

ICAI AWARDS FOR EXCELLENCE IN FINANCIAL REPORTING*

The Institute of Chartered Accountants of India has constituted awards to be given for excellence in financial reporting.

Objective

To recognise and encourage excellence in the preparation and presentation of financial information.

Award Categories of the Competition 'ICAI Awards for Excellence in Financial Reporting'

Category I	: Public Sector Banks
Category II	: Private Sector Banks (including Co-operative Banks & Foreign Banks)
Category III	: Insurance Sector
Category IV	: Financial Services Sector (Other than Banking and Insurance)
Category V	: Manufacturing Sector — (Turnover equal to or more than ₹ 500 crore)
Category VI	: Manufacturing Sector — (Turnover less than ₹ 500 crore)

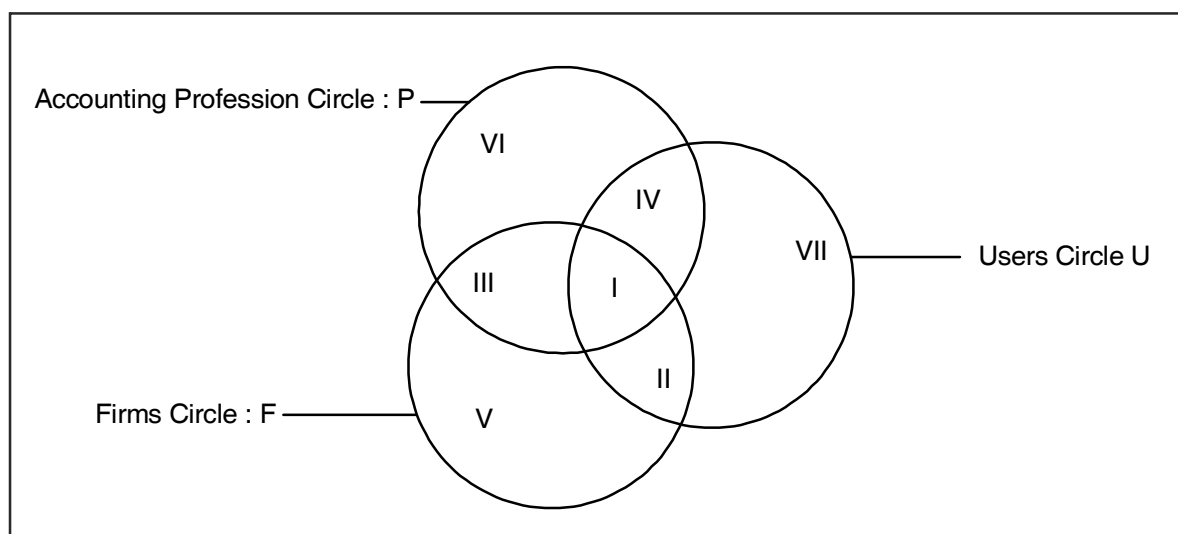


Fig. 13.4: Conflicts of Interest

*ICAI News, The Chartered Accountant, August 2014, p. 132.

- Category VII** : Infrastructure and Construction Sector (Turnover equal to or more than ₹ 500 crore)
- Category VIII** : Infrastructure and Construction Sector (Turnover less than ₹ 500 crore)
- Category IX** : Service Sector (Other than financial services sector) – (Turnover equal to or more than ₹ 500 crore)
- Category X** : Service Sector (Other than financial services sector) – (Turnover less than ₹ 500 crore)
- Category XI** : Not-for-profit Sector
- Category XII** : Local Bodies
- Category XIII** : Agricultural Sector (includes entities engaged in direct agriculture, horticulture, tea & coffee, plantations, dairies, poultry etc. but excludes entities engaged in food processing etc. which are covered by Manufacturing Sector).

In a case, where an organisation is engaged in more than one business, the dominant source of revenue will determine the category to which the organisation belongs.

Turnover will be determined on the basis of standalone financial accounts.

Awards to be distributed

Hall of Fame to be awarded to the entity that has been winning the first prize under the same category continuously in the last five years. One Gold Shield and one Silver Shield in each category for the best entry and the next best entry, respectively. Plaques to be awarded to the entities who are following better financial reporting practices amongst the enterprises that are left in each category after conferring Hall of Fame, Gold Shield and Silver Shield.

Procedure for Participation

- (1) There is no fee for participation in the competition.
- (2) Annual report relating to the financial year ending on any day between April 1 and March 31 of next year, (both days inclusive) is eligible for participation in this competition.
- (3) Decisions of the Panel of judges in all the matters relating to the Competition will be final.
- (4) An entity awarded 'Hall of Fame' may again participate in the competition after three years of getting the award of 'Hall of Fame'.
- (5) Six copies of the following documents (or such other similar documents as are prepared by the Organisation concerned) should be submitted:
 - (a) Balance Sheet
 - (b) Profit and Loss Account
 - (c) Directors' Report
 - (d) Chairman's statement of speech at the Annual General Meeting.

Some Important Factors Generally Considered by the ICAI for the Award of Gold/Silver Shields and Plaques for the Best presented Accounts

- (1) Compliance with the legal requirements in the preparation and presentation of financial statements as specified by the relevant statute, e.g., the Companies Act, 2013, in case of companies.
- (2) Basic quality of accounts as judged from the qualifications in the auditor's report, notes to the accounts and compliance with the generally accepted accounting principles such as those enunciated in the Accounting Standards, Statements, Guidance Notes, etc., issued by the Council of the Institute of Chartered Accountants of India and its various Committees.
- (3) The nature and quality of information presented in the accounts to make the disclosure meaningful. For example:
 - (i) Sufficient details of revenues/expenses for financial analysis, e.g., distinction between manufacturing cost, selling cost, administrative cost.
 - (ii) Use of vertical form as against the conventional "T" form; judicious use of schedules; use of subtotals; manner of showing comparative figures; ease of getting at figures.
 - (iii) Extent to which additional financial information is provided to the readers through charts and graphs.
 - (iv) Extent of clarity, lucidity and comprehensiveness of the information contained in the financial statements, in the context of a layman.
 - (v) Financial highlights and ratios.
 - (vi) Inclusion of one or more of the information like value added statement, break up of operations, organisation chart, location of factories/branches, human resource accounting, inflation adjusted accounts, social accounts, etc.
- (4) The extent to which the (i) Reports of the Governing Body such as Board of Directors Report and/or (ii) Chairman's Statement, if any, are informative. The following aspects are generally considered relevant in this regard:
 - (i) Availability of information regarding different segments and units of the entity, i.e., whether details about each product/service and units, and whether located in the same area or spread in different geographical locations, are given.
 - (ii) Information regarding financial operations, capital raised during the year, financial requirements, borrowings, etc. In respect of multi product/multi unit organisations, whether details as per (i) above have been given for financial operations.
 - (iii) Employee relations.
 - (iv) Industry problems and problems peculiar to the enterprise.

- (v) Information regarding social concerns (e.g., contribution to conservation and development of environment and ecology).
- (vi) Information on contribution to community development projects, (e.g., medical institutions, educational institutions, provision of sanitary and drinking water, etc.), particularly in areas around location of entity.
- (vii) Post-balance sheet events not requiring adjustment in accounts but material enough to warrant disclosure and future plans, programmes, market conditions, profitability forecast, environment friendliness, etc.
- (viii) Manner of review of performance, plans and prospects by the company.
- (ix) Compliance report on the Corporate Governance, clearly indicating non-compliance with any of the mandatory requirements with the reasons thereof.
- (x) Directors' Responsibility Statement required under section 134 of the Companies Act, 2013.

(5) Layout of contents, general appearance, presentation and quality of printing.

(6) Timeliness in presenting accounts based on the date of the notice of the Annual General Meeting in respect of which the Annual Report is circulated to the shareholders.

INFLUENCE OF COMPANIES ACT AND SEBI ON FINANCIAL REPORTING IN INDIA

Corporate financial reporting in India is governed primarily by the Companies Act, 2013 (earlier Companies Act, 1956). Another body that has a major influence in reshaping Indian financial reporting is the Securities and Exchange Board of India (SEBI). The Companies Act, 2013 prescribes the financial reporting requirements for all the companies registered under it. The reporting requirements that are imposed by the SEBI through its Guidelines and through the Listing Agreement are in addition to those prescribed under the Companies Act. SEBI requirements are to be followed by the companies listed on the Indian stock exchanges. The Companies Act and the SEBI requirements together provide the legal framework of corporate reporting in India.

A detailed discussion of the financial reporting provisions as given in the Companies Act, 2013 and SEBI regulations are given below.

THE COMPANIES ACT, 2013

The Companies Act, 2013 lays down the detailed provisions regarding the maintenance of books of accounts and the preparation and presentation of annual accounts. The Act also prescribes the mechanism for issuance of accounting standards by National Financial Reporting Authority (NFRA)*. It specifies the roles and responsibilities of directors and also the matters to be reported upon by them in the annual reports of the companies. Under the provisions of the Act, audit of annual accounts is compulsory for all companies registered under it. The Act extensively deals with the qualification, appointment, removal,

rights, duties and liabilities of auditors and provides contents of auditors' report. In case of delinquency/ default by the management or auditor, penal provisions are prescribed.

As per section 129 of the Companies Act, 2013, at the annual general meeting of a company, the Board of Directors of the company shall lay financial statements before the company:

Financial Statements as per section 2(40) of the Companies Act, 2013, *inter alia* include –

- (i) a balance sheet as at the end of the financial year;
- (ii) a profit and loss account, or in the case of a company carrying on any activity not for profit, an income and expenditure account for the financial year;
- (iii) cash flow statement for the financial year;
- (iv) a statement of changes in equity, if applicable; and
- (v) any explanatory note annexed to, or forming part of, any document referred to in subclause (i) to subclause (iv):

Provided that the financial statement, with respect to One Person Company, small company and dormant company, may not include the cash flow statement.

Financial Statements shall give a true and fair view of the state of affairs of the company as at the end of the financial year.

Compliance with Accounting Standards

As per section 133 of the Companies Act, it is mandatory to comply with accounting standards notified by the Central Government from time to time.

Schedule III to the Companies Act, 2013

As per section 129 of the Companies Act, 2013, Financial statements shall give a true and fair view of the state of affairs of the company or companies and comply with the accounting standards notified under section 133 and shall be in the form or forms as may be provided for different class or classes of companies in Schedule III under the Act.

As per section 133 of the Companies Act, 2013, the Central Government may prescribe the standards of accounting or any addendum thereto, as recommended by the Institute of Chartered Accountants of India, constituted under section 3 of the Chartered Accountants Act, 1949, in consultation with and after examination of the recommendations made by the National Financial Reporting Authority.

Section 135 of the Companies Act, 2013 deals with Corporate Social Responsibility obligations for the companies. As per provisions of this section, every company having net worth of rupees five hundred crore or more, or turnover of rupees one thousand crore or more or a net profit of rupees five crore or more during any financial year shall constitute a Corporate Social Responsibility Committee of the Board consisting of three or more directors, out of which at least one director shall be an independent director. The Board of every company shall ensure that the company spends, in every financial year, at least two per cent of

* Constitution of NFRA is prescribed under section 132 of the Companies Act, 2013.

the average net profits of the company made during the three immediate preceding financial years, in pursuance of its Corporate Social Responsibility Policy.

Provided that the company shall give preference to the local area and areas around it where it operates, for spending the amount earmarked for Corporate Social Responsibility activities.

The Corporate Social Responsibility Committee shall –

- (a) formulate and recommend to the Board, a Corporate Social Responsibility Policy which shall indicate the activities to be undertaken by the company as specified in Schedule VII;
- (b) recommend the amount of expenditure to be incurred on the activities referred to in clause (a); and
- (c) monitor the Corporate Social Responsibility Policy of the company from time to time.

Provided further that if the company fails to spend such amount, the Board shall, in its report, specify the reasons for not spending the amount.

All companies covered u/s 135 of the Companies Act, 2013 are required to disclose amount of expenditure incurred on corporate social responsibility activities as note under heading 5 (k) in statement of profit and loss as per requirements of Schedule III.

Balance Sheet

The Companies Act requires that every Balance Sheet of a company shall give a true and fair view of the state of affairs of the company as at the end of the financial year. It shall be in the form set out in Part I of the Schedule III under the Companies Act, 2013. In preparing the Balance Sheet, the preparers should follow the general instruction for preparations of Balance Sheet under the heading 'Notes' at the end of the aforesaid Part of the Schedule.

Statement of Profit and Loss

Like Balance Sheet, every Profit and Loss Account of a company is required to exhibit a true and fair view of the profit or loss of the company for the financial year. The Profit and Loss Account is required to be prepared as per the requirements of Part II of the Schedule III under the Companies Act, 2013. Like Balance Sheet, profit or loss is also prepared in the vertical form (in which items of income are shown first and items of expenses are reported as a deduction therefrom) as prescribed in Part 11 of the Schedule III. The main advantage of the vertical form of presentation is that it makes the Balance Sheet and Profit and Loss Account easily understandable to the users who may not have a basic knowledge of accounts.

Narrative Disclosures

The narrative disclosures that are contained in published company accounts embrace both qualitative and quantitative information. In most cases narrative disclosures are presented in textual form wherein more emphasis is laid on words than on figures. Although most of the narratives disclosed in published company accounts relate to the items of basic financial statements, there are certain narrative disclosures, which focus on things that are not related to financial statement items.

In India, requirements as to narrative disclosures stem from the provisions of the Companies Act and that of the accounting standards. These requirements are discussed under the following two broad heads:

- (A) Accounting Policies
- (B) Notes on Accounts

(A) Accounting Policies: Accounting policies often contain a large volume of narratives that have a significant bearing on the financial health and performance of the company. Accounting Standard I on *Disclosure of Accounting Policies* issued by the ICAI deals with the disclosure of significant accounting policies followed in the preparation and presentation of financial statements.

(B) Notes on Accounts: Notes on Accounts are integral part of the financial statements. Some of the disclosures made under Notes on Accounts are in fact the extensions of the items of the basic financial statements; while other notes may provide additional information. Disclosure through notes is done either to comply with statutory requirements or the company may voluntarily choose to provide details on certain items. Such notes provide information about the accounting methods, assumptions and estimates used by management to develop the data reported in the financial statement.

Cash Flow Statement

In a cash flow statement cash flows are required to be classified in terms of the activities generating them. AS 3 prescribes three types of activities that generate cash flows for an enterprise. These are:

- (i) cash flows generated by operating activities;
- (ii) cash flows generated by investing activities; and
- (iii) cash flows generated by financing activities.

Disclosure by Listed Companies

1. Balance Sheet, Profit and Loss Account and Directors' Report (Clause 32).

2. Cash Flow Statement: Cash flow statements are prepared as per AS 3.

3. Related Party Disclosure: Transactions between related parties may not be at arm's length. Hence, companies are required to make appropriate disclosures in respect of such transactions so that users of financial statements can make their own assessment. Such disclosures have to be made in annual reports in compliance with the accounting standard on Related Party Disclosure (AS 18) issued by the ICAI [Clause 321].

4. Disclosure to be made by Holding Companies and Subsidiary Companies in respect of Loans, Advances and Investments: Disclosures are required as per section 129(3) of the Companies Act, 2013.

5. Corporate Governance: The SEBI in its meeting held on 25th January, 2000 suggested incorporation of certain matters in the Listing Agreement as clause 49. This clause addresses different aspects of corporate governance. The disclosure requirements contained under this clause are as under:

(a) Management Discussion and Analysis Report:

Management Discussion and Analysis (MD & A) report is a very important document through which management of a company can express its views and opinions on various aspects of a company like performance, success or failure, future plan of the company, forward looking information, etc.

The MD&A complements and supplements the financial statements, but does not form part of the financial statements. The objective in preparing the MD&A should be to improve the reporting company's overall financial disclosure by providing a balanced discussion of the results of operations and financial conditions.

By virtue of the provisions contained in clause 49 under the Listing Agreement, the company has to provide a MD&A report to the shareholders. This report may be presented as part of *the directors' report* or as an *addition thereto*. It should include discussion on the following matters within the limits set by the company's competitive position:

- (i) Industry structure and developments.
- (ii) Opportunities and threats.
- (iii) Segment wise or product wise performance,
- (iv) Outlook.
- (v) Risks and concerns.
- (vi) Internal control systems and their adequacy.
- (vii) Discussion on financial performance with respect to operational performance.
- (viii) Material developments in Human Resources/ Industrial Relations, including number of people employed.

(b) Management's Report on Corporate Governance: The listed companies are required to give a detailed compliance report on corporate governance in the separate section on 'Corporate Governance' in their annual reports. The report must specifically highlight non-compliance of any mandatory requirements with reasons thereof and also the extent to which the non-mandatory requirements have been adopted.

The company should obtain a certificate from the auditors of the company regarding the compliance with the conditions of corporate governance as stipulated in this clause and annex the certificate with the directors' report which is sent annually to all the shareholders of the company.

Appendix 13A gives Schedule III to the Companies Act, 2013.

Securities and Exchange Board of India (SEBI)

The Securities and Exchange Board of India (SEBI) is the regulatory authority in India established under section 3 of SEBI Act, 1992. SEBI Act, 1992 provides for establishment of Securities and Exchange Board of India (SEBI) with statutory powers for –

- (a) protecting the interests of investors in securities,
- (b) promoting the development of the securities market, and
- (c) regulating the securities market.

SEBI has used its power to order changes in listing agreement and such changes are instrumental to bring about improvement in disclosure practices of listed companies in their annual reports. Listing agreement is the standard agreement between a company seeking listing of its securities and the stock exchange where listing is sought. Any stock exchange has power to alter the clauses of listing agreement unilaterally, and companies listed with that exchange are bound to accept such changes to enjoy the facility of listing. Thus, whenever the SEBI suggests any change, it is incumbent on the listed companies to follow such a change. In effect, the SEBI has power to direct the listed companies to follow any changed disclosure requirements.

SEBI has imposed a number of disclosures and other requirements through this process. Some important requirements are as follows:

- Dispatch of a copy of the complete & full annual report to the shareholders (Clause 32).
- Disclosure on the Y2K preparedness level (Clause 32).
- Disclosure of Cash Flow Statement (Clause 32).
- Disclosure of material developments and price sensitive information (Clause 36).
- Compliance with Takeover Code (Clause 40 B)
- Disclosure of interim unaudited financial result (Clause 41).
- Disclosure regarding listing fee payment status and the name and address of each stock exchange where the company's securities are listed (Clause 48 B).
- Corporate governance report (Clause 49)*.
- Compliance with Accounting Standards issued by the ICAI (Clause 50).

The initiative to introduce the Cash Flow Statements (as a principal financial statement) in India was taken by the SEBI and it has used its power under section 11 of the SEBI Act, 1992 to direct all recognized stock exchange to amend clause 32 of the listing agreement. Amended clause 32 provides for a requirement of appending an audited Cash Flow Statement (CFS) as a part of annual accounts. As per the SEBI mandate, the requirement of providing a CFS is mandatory for listed companies from the financial year 1994-95, i.e., year ended 31st March 1995. When the SEBI mandate was issued, there was no accounting standard issued by the ICAI regarding preparation and presentation of a CFS. The ICAI issued a revised accounting standard (AS 3) on the subject by replacing its standard on Fund Flow Statement in March 1997. After introduction of ICAI standard the SEBI has directed a change in the Listing Agreement to provide that CFS shall be prepared in accordance with the ICAI standard. Earlier in the Companies Act, 1956, there was no requirement for preparing the cash flow statement. However, the new Companies Act, 2013 has mandated the Level I entities to prepare the Cash flow statement as one of the main part of its Financial Statements.

FINANCIAL REPORTING PRACTICES IN INDIA

Many studies have been conducted in India by the individual researcher and accounting and professional bodies** on corporate reporting practices in India. These studies find that Indian companies are generally disclosing many important information in their published annual reports. These studies further observe that there is a scope for improvement in disclosure practices followed by Indian companies.

A typical survey of published annual reports of Indian companies reveals that Indian companies generally are making the following disclosures in their annual reports.

Financial Statements: Company Annual report is major vehicle through which Indian companies are publishing their financial statements. Like companies of developed countries, Indian annual reports now include much more than the legal minimum requirements. Regarding elements of annual reports, the following are most common:

- Notice of annual general meeting
- Director's report
- Management discussion & analysis
- Risk Management Report
- Audited Standalone financial statements
- Audited Consolidated financial statements
- Corporate governance report
- Shareholders Information
- Auditor's report on financial statements
- C&AG's Comments on Accounts (in case of Government Companies)
- Business Responsibility Report*
- Information on human resources*
- Value added statement*
- Corporate social responsibility policy/report
- Environmental report*
- Information on Brand/ Intangibles*
- EVA report*

*These information are provided voluntarily. Regarding last few items, disclosure is limited to large companies only.

Business Responsibility Report: SEBI recently mandated that the top 100 listed entities based on market capitalization of BSE and NSE should include 'business responsibility' reports in their annual report. Other listed entities may voluntarily disclose business responsibility reports. According to a SEBI circular, an entity's business responsibility performance will be assessed based on nine principles, business responsibility reporting is a step in the right direction, as it is expected to align Indian reporting requirements with global standards. Business responsibility reports can help entities demonstrate to key stakeholders –

including investors, employees, the government and consumers – that their businesses are not detrimental to the environment, society or employees.

Corporate Social Responsibility Reporting: Every company having net worth of rupees five hundred crore or more, or turnover of rupees one thousand crore or more or a net profit of rupees five crore or more during any financial year shall constitute a Corporate Social Responsibility Committee of the Board. The Board's report shall disclose the composition of the Corporate Social Responsibility Committee and disclose contents of such Policy in its report and also place it on the company's website, if any, in such manner as may be prescribed; and ensure that the activities as are included in Corporate Social Responsibility Policy of the company are undertaken by the company. If the company fails to spend the prescribed amount, the Board shall, in the report made under clause (0) of subsection (3) of section 134, specify the reasons for not spending the amount.

Other Disclosures (Outside the Annual Report)

1. Disclosure of Financial information in Prospectus: Prospectus is an import offer document that is issued by a company for making public issue of securities. SEBI (Disclosure & Investor Protection) Guidelines provide contents of the prospectus. There are requirements to disclose certain important pieces of financial information relating to the issuer company and group companies. The major aspect of disclosure of financial information relates to reporting of audited profits and losses and assets and liabilities of the issuer company for each of the five financial year immediately preceding the issue of the prospectus. Other financial information that is to be provided in the prospectus includes.

- (i) Capital structure of the company
- (ii) Utilization of Issue Proceeds
- (iii) Financial information of group companies
- (vi) Promise *vis-a-vis* performance
- (v) Accounting and other ratios to justify the basis of issue price, (Such ratios shall be based on the financial statements prepared on the basis of Indian Accounting Standards)

It may be noted that abovementioned items are disclosed without any audit/review by independent accountant.

SEBI Guidelines, now allow an issuer company, if it so desires, to include in the offer document, the financial statements prepared on the basis of more than one set of accounting standards (e.g. Indian standards and US GAAPs) subject to disclosure of the material differences arising because of differences in the accounting policies of two different accounting standards.

2. Unaudited Quarterly Results: All listed companies are now required to furnish unaudited quarterly results in the

** Readers are advised to refer to the two research studies conducted by the author.

(i) *Corporate Annual Reports, Theory and Practice*, Sterling Publishers, (ii) *Financial Reporting by Diversified Companies*, Vision Books, for a comprehensive view of financial reporting practices in India.

* The revised Clause 49 is applicable to all listed companies with effect from October 1, 2014.

prescribed proforma within one month from the end of the quarter to the stock exchanges on which it is listed and publish the same within 48 hours of the conclusion of the board meeting in at least one national newspaper and one regional language newspaper. The quarterly results are to be prepared on the basis of accrual accounting policy and in accordance with uniform accounting practices for all periods on quarterly basis. It incorporates a statement of segmentwise revenue; results and capital employed prepared as per AS 17 on Segment Reporting and also comply

with AS 22 on Accounting for Taxes on Income as regards measurement of the requirements of deferred taxes.

INFOSYS TECHNOLOGIES LTD.'S VALUE REPORTING

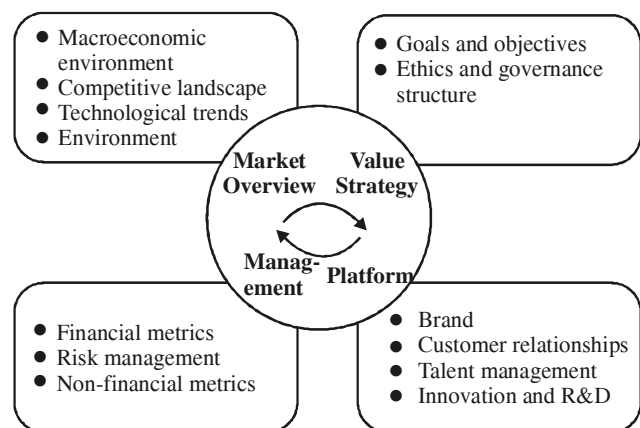
Infosys has developed a value reporting paradigm which it uses for preparing annual report for the Infosys investors. The value reporting model used by Infosys is displayed in Fig. 13.5.

At Infosys, we have always believed that information asymmetry between the Management and shareholders should be minimized. Accordingly, we have always been at the forefront in practicing progressive and transparent disclosure. We were the first in India to adopt US Generally Accepted Accounting Principles (GAAP). Thereafter, we rapidly progressed to additional disclosures that give deeper insights to the way we run our business and into our value creation. We continue to provide information that is not mandated by law because we believe it will enable investors to make more informed choices about our performance. *The Value Reporting Revolution: Moving Beyond the Earnings Game*, authored by Robert Eccles, Robert Herz, Mary Keegan and David Phillips, associated to accounting firm PricewaterhouseCoopers, (published by John Wiley & Sons, Inc., USA, @ 2001), acknowledged the need to go beyond GAAP in providing information to shareholders. In their book, *Building Public Trust: The Future of Corporate Reporting* (published by John Wiley & Sons, Inc., USA, @ 2002 PricewaterhouseCoopers), our business model and reporting were referred to in detail.

We believe the following Value Reporting™ paradigm applies to us.

We identified the need to provide a range of non-financial parameters early in our existence—before our Indian public offering in 1993.

The Value Reporting Disclosure Model



To reduce information asymmetry, we make the following disclosures in addition to the mandated Indian and US GAAP financial statements and supplementary data as required by the relevant statutes:

- Brand valuation
- Balance sheet including intangible assets
- Economic Value Added (EVA®) statement
- Intangible asset scorecard
- Risk management report
- Human resource accounting and value-added statement

These reports are integral to the Annual Report.

By adopting similar internal measures to evaluate business performance, our employees are adjudged based on metrics that are additional to the financials. This balances financial and non-financial performance across all levels of the organization. Accordingly, we seek to align the measures by which stakeholders measure our performance with what results its employee rewards.

In fiscal 2005, we adopted and furnished eXtensible Business Reporting Language (XBRL) data to the United States Securities and Exchange Commission (SEC) for the first time. We are the fourth company worldwide to adopt XBRL. We continue to participate in SEC's voluntary program for reporting financial information on EDGAR using XBRL.

In the coming years, we will continue in our commitment to furnish additional qualitative information to help our shareholders better understand the management of our business.

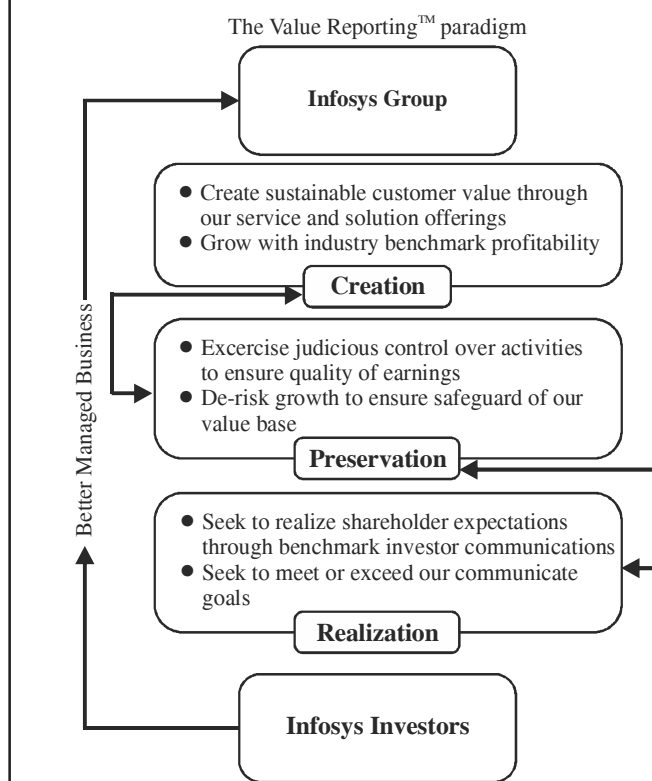


Fig. 13.5: Value Reporting

Source: Infosys Annual Report, 2007-08, p. 137.

REFERENCES

1. American Accounting Association's Committee on Basic Auditing Concepts, *The Accounting Review Supplement*, 1972, p. 23.
2. Financial Accounting Standards Board, Concept No. 1 Objectives of Financial Reporting by *Business Enterprises*, FASB, Stamford, Nov. 1978, Para 6-8.
3. *International Accounting Standard Board*, Conceptual Framework for Financial Reporting, 2010, para OB 2.
4. Report of the Study Group on the Objective of Financial Statements, *The Objectives of Financial Statements*, AICPA, 1973, p. 13.
5. Financial Accounting Standards Board, Concept No. 1, *Ibid*, para 34.
6. Duff and Phelps, *A Management Guide to Better Financial Reporting*, A Report for Arthur Anderson Co. USA, 1976, p. 33.
7. Yuji Ijiri, Theory of Accounting Measurements, Studies in Accounting Research 10, AAA, Florida, 1975, p.10.
8. Yuji Ijiri, Op cit.
9. Cheryl, R. Lehman, *Accounting's Changing Role in Social Conflicts*, Paul Chapman Publishing, London, 1992, p. 20.
10. American Institute of Certified Public Accountants, *The Objectives of Financial Statements*, 1973, pp. 13-26.
11. *American Accounting Association*, A Statement of Basic Accounting Theory, American Accounting Association, 1966, p. 1.
12. Accounting Principles Board, Statement No. 4, *Basic Concepts and Accounting Principles Underlying Financial Statements of Business Enterprises*, New York: AICPA, 1970, pp. 33-34.
13. Report of the Study Group on the Objectives of Financial Statements AICPA, 1973, pp. 61-66.
14. American Accounting Association, Committee on Concepts and Standards for External Financial Reports, Statement on Accounting Theory and Theory Acceptance, AAA, 1977, Sarsota, Florida, p. ix.
15. T. Kuhn, *The Structure of Scientific Revolutions*, IInd Edition, University of Chicago Press, 1977.
16. K. Peasnell, "Statement on Accounting Theory and Theory Acceptance : A Review Article," *Accounting and Business Research* (Summer 1978), pp. 217-228.
17. Financial Accounting Standards Board, Concept No. 1 Objectives of Financial Reporting by Business Enterprises, Nov., 1978.
18. Financial Accounting Standards Board, *SFAC No. 8*, Conceptual Framework for Financial Reporting, September 2010.
19. The Accounting Standards Steering Committee, *The Corporate Report*, London: The Institute of Chartered Accountants in England and Wales, 1976, pp. 10-17.
20. Accounting Standards Board, U.K. Statement of Principles for Financial Reporting, 1999.
21. Report of the Study Group on Objectives of Financial Statements, *op. cit.*, pp. 17.
22. Report of the Study Group on the Objectives of Financial Statements, *Ibid.*, p. 20.
23. Financial Accounting Standards Board, Statement of Financial Accounting Concept No. 1, *op. cit.* para 30.
24. Financial Accounting Standards Board, Concept No. 1, *Ibid*.
25. T.A. Lee and D.P. Tweedie, "Accounting Information: An Investigation of Private Shareholder Usage," *Accounting and Business Research* (Autumn 1975), pp. 280-291.
26. R.K. Mautz. and William G. May, Financial Disclosure in a Competitive Economy, Financial Executives Research Foundation, 1978, p.28.
27. F.D.S. Choi, "Financial Disclosure in Relation to a Firm's Capital Costs" *Accounting and Business Research* (Autumn 1973), pp. 282-292.
28. Duff and Phelps, *A Management Guide to Better Financial Reporting* *Ibid.*, p. 4.
29. R.C. Merton, "A Simple Model of Capital Market Equilibrium with Incomplete Markets", *The Journal of Finance* (July 1987), pp. 483-510.
30. D.W.Diamond and R.E. Verrecchia, "Disclosure, Liquidity and the Cost of Capital" *Journal of Finance* (September 1991), pp. 1325-1359.
31. Don. S. Dhaliwal "The Quality of Disclosure and the Cost of Capital" *Journal of Business Finance and Accounting* (Summer 1979), pp. 245-266.
32. Paul B.W. Miller and Paul R. Bahnson, *Quality Financial Reporting*, Tata McGraw-Hill Edition, 2005, pp. 6-8.
33. G.H. Sorter and M.S. Gams, "Opportunities and Implications of the Report of Objectives of Financial Statements," *Journal of Accounting Research*, Supplements, 1974.
34. E. Stamp, *Corporate Reporting: Its Future Evolution*, Canadian Institute of Chartered Accountants, 1980.
35. R.M. Cyert and Y. Ijiri, "Problems of Implementing the Trueblood Objectives Report," *Journal of Accounting Research*, Supplement, 1974.

QUESTIONS

1. For investors, creditors and other what is meant by useful information? (M.Com., Delhi, 1992)
2. What should be the objectives of financial reporting? In this connection, mention the steps taken recently in the developed countries. (M.Com., Delhi, 2010)
3. Write notes on:
 - (a) General purpose external financial reporting v. 'Specific user' financial reporting.
 - (b) Qualitative characteristics of financial statement. (M.Com., Delhi)
4. What should be the basic objectives of 'financial reporting'? Explain with reasons. (M.Com., Delhi)
5. Discuss in brief the several methods of 'making disclosure in financial statements.' (M.Com., Delhi)
6. Company annual reports containing financial statements is the most important means of company financial reporting." Do you agree with this statement? Give reasons.

7. What do you mean by the term 'financial reporting'? Distinguish between 'financial reports' and 'financial statements'.
8. Discuss the attempts made in the area of financial reporting objectives at the international level.
9. Discuss the main recommendations of Trueblood Committee report on the objectives of financial statements.
10. How FASB Concept No. 1 'Objectives of Financial Reporting by Business enterprises' has influenced the objectives of financial reporting? In the light of his statement, explain the objectives of financial reporting.
11. Discuss the relevance of general purpose report for external users. Do you think that general purpose report is an ideal solution in company financial reporting?
12. What is a specific purpose report? Explain why specific purpose reports are not yet prepared by companies.
13. Make an outline of a company annual report to provide useful information to investors for making proper economic decisions.
14. Do you think that company financial reporting practices in India are adequate and satisfactory? If not, what suggestions would you like to give to improve the financial reporting practices?
15. What should be the objectives of financial reporting by business enterprises? Explain in the light of the SFAC No. 1 of FASB (USA); and the Corporate Report' London, 1975.

(M.Com., Delhi, 1985)

16. Discuss the steps taken recently in India towards greater disclosure of information in the financial statements of companies. What more should be done to make full disclosure?
17. Compare and contrast AICPA Report of the Study Group (Trueblood Report) and FASB Concept No. 1 on the objectives of financial reporting.
18. Discuss the objectives of financial reporting.
19. Explain the developments taken place on the objectives of financial reporting.
20. Distinguish between general purpose report and specific purpose report.
21. Explain the utility of general purpose report and specific purpose report for external users. Explain why specific purpose reports are not yet prepared by companies.

(M.Com., Delhi, 2013)

22. Explain the benefits of financial reporting.

(M.Com., Delhi, 2011)

MULTIPLE CHOICE QUESTIONS

Select the correct answer for the following multiple choice questions:

1. In analyzing a company's financial statements, which financial statement would a potential investor primarily use to assess the company's liquidity and financial flexibility?
 - (a) Balance sheet.
 - (b) Income statement.
 - (c) Statement of retained earnings.
 - (d) Statement of cash flows.

Ans. (a)

2. Which of the following is false?

- (a) Prospective financial information may be prepared for general or limited users.
- (b) The responsible party is the only limited user.
- (c) The financial projection may contain assumptions not necessarily, expected to occur.
- (d) The financial projection may be expressed as a range of rupee amounts.

Ans. (b)

3. Prospective financial information is defined as

- (a) Any financial information about the past, present, or future.
- (b) Any financial information about the present or future.
- (c) Any financial information about the future related to the day to day operations.
- (d) Any financial information about the future.

Ans. (d)

4. To achieve a reasonably objective basis, financial forecasts and projections should be prepared

- I. In accordance with GAAP
- II. Using information that is in accordance with the plans of the entity.
- III. With due professional care.

(a) I and III. (b) II and III. (c) I, II, and III. (d) I and II.

Ans. (c)

5. Which of the following disclosures should prospective financial statements include?

Summary of significant accounting policies	Summary of significant assumptions
(a) Yes	Yes
(b) Yes	No
(c) No	Yes
(d) No	No

Ans. (a)

APPENDIX 13A

SCHEDULE III to the Companies Act, 2013

(See section 129)

General Instructions for preparation of Balance Sheet and Statement of Profit and Loss of A Company

General Instructions

(1) Where compliance with the requirements of the Act including Accounting Standards as applicable to the companies require any change in treatment or disclosure including addition, amendment, substitution or deletion in the head/subhead or any changes *inter se*, in the financial statements or statements forming part thereof, the same shall be made and the requirements of this Schedule shall stand modified accordingly.

(2) The disclosure requirements specified in this Schedule are in addition to and not in substitution of the disclosure requirements specified in the Accounting Standards prescribed under the Companies Act, 2013. Additional disclosures specified in the Accounting Standards shall be made in the notes to accounts

or by way of additional statement unless required to be disclosed on the face of the Financial Statements. Similarly, all other disclosures as required by the Companies Act shall be made in the notes to accounts in addition to the requirements set out in this Schedule.

(3) (i) Notes to accounts shall contain information in addition to that presented in the Financial Statements and shall provide where required (a) narrative descriptions or disaggregation's of items recognized in those statements and (b) information about items that do not qualify for recognition in those statements.

(ii) Each item on the face of the Balance Sheet and Statement of Profit and Loss shall be cross-referenced to any related information in the notes to accounts. In preparing the Financial Statements including the notes to accounts, a balance shall be maintained between providing excessive detail that may not assist users of financial statements and not providing important information as a result of too much aggregation.

(4) (i) Depending upon the turnover of the company, the figures appearing in the Financial Statements may be rounded off as given below:

(ii) Once a unit of measurement is used, it shall be used uniformly in the Financial Statements.

(5) Except in the case of the first Financial Statements laid before the Company (after its incorporation) the corresponding amounts (comparatives) for the immediately preceding reporting period for all items shown in the Financial Statements including notes shall also be given.

(6) For the purpose of this Schedule, the terms used herein shall be as per the applicable Accounting Standards.

Note: This part of Schedule sets out the minimum requirements for disclosure on the face of the Balance Sheet, and the Statement of Profit and Loss (hereinafter referred to as "Financial Statements" for the purpose of this Schedule) and Notes. Line items, sub line items and sub totals shall be presented as an addition or substitution on the face of the Financial Statements when such presentation is relevant to an understanding of the company's financial position or performance or to cater to industry/sector specific disclosure requirements or when required for compliance with the amendments to the Companies Act or under the Accounting Standards.

Notes

GENERAL INSTRUCTIONS FOR PREPARATION OF BALANCESHEET

(1) An asset shall be classified as current when it satisfies any of the following criteria:

- (a) it is expected to be realized in, or is intended for sale or consumption in the company's normal operating cycle;
- (b) it is held primarily for the purpose of being traded;
- (c) it is expected to be realized within twelve months after the reporting date; or
- (d) it is cash or cash equivalent unless it is restricted from being exchanged or used to settle a liability for at least twelve months after the reporting date.

All other assets shall be classified as non current.

(2) An operating cycle is the time between the acquisition of assets for processing and their realization in cash or cash equivalents. Where the normal operating cycle cannot be identified, it is assumed to have a duration of 12 months.

(3) A liability shall be classified as current when it satisfies any of the following criteria:

- (a) it is expected to be settled in the company's normal operating cycle;
- (b) it is held primarily for the purpose of being traded;
- (c) it is due to be settled within twelve months after the reporting date; or
- (d) the company does not have an unconditional right to defer settlement of the liability for at least twelve months after the reporting date. Terms of a liability that could, at the option of the counterparty, result in its settlement by the issue of equity instruments do not affect its classification.

All other liabilities shall be classified as non current.

(4) A receivable shall be classified as a 'trade receivable' if it is in respect of the amount due on account of goods sold or services rendered in the normal course of business.

(5) A payable shall be classified as a 'trade payable' if it is in respect of the amount due on account of goods purchased or services received in the normal course of business.

(6) A company shall disclose the following in the notes to accounts:

Turnover	Rounding off
(a) less than one hundred crore rupees	to the nearest hundreds, thousands, lakhs or millions, or decimals thereof
(b) one hundred crore rupees or more	to the nearest, lakhs, millions or crores, or decimals thereof.

PART I – BALANCE SHEET

Name of the Company

Balance Sheet as at

(Rupees in.....)

Particulars	Note No.	Figures as at the end of current reporting period	Figures as at the end of previous reporting period
1	2	3	4
EQUITY AND LIABILITIES			
1. Shareholders' funds			
(a) Share capital			
(b) Reserves and Surplus			
(c) Money received against share warrants			
2. Share application money pending allotment			
3. Non current liabilities			
(a) Long-term borrowings			
(b) Deferred tax liabilities (Net)			
(c) Other long term liabilities			
(d) Long-term provisions			
4. Current liabilities			
(a) Short-term borrowings			
(b) Trade Payables			
(c) Other current liabilities			
(d) Short-term provisions			
Total			
ASSETS			
1 Non current assets			
(a) Fixed assets			
(i) Tangible assets			
(ii) Intangible assets			
(iii) Capital Work-in-progress			
(iv) Intangible assets under development			
(b) Non current investments			
(c) Deferred tax assets (Net)			
(d) Long-term loans and advances			
(e) Other non current assets			
2 Current assets			
(a) Current investments			
(b) Inventories			
(c) Trade receivables			
(d) Cash and cash equivalents			
(e) Short-term loans and advances			
(f) Other current assets			
Total			

A. Share Capital

For each class of share capital (different classes of preference shares to be treated separately):

- (a) the number and amount of shares authorized;
- (b) the number of shares issued, subscribed and fully paid, and subscribed but not fully paid;
- (c) par value per share;
- (d) a reconciliation of the number of shares outstanding at the beginning and at the end of the reporting period;
- (e) the rights, preferences and restrictions attaching to each class of shares including restrictions on the distribution of dividends and the repayment of capital;
- (f) shares in respect of each class in the company held by its holding company or its ultimate holding company including shares held by or by subsidiaries or associates of the holding company or the ultimate holding company in aggregate;
- (g) shares in the company held by each shareholder holding more than 5 per cent shares specifying the number of shares held;
- (h) shares reserved for issue under options and contracts/commitments for the sale of shares/disinvestment, including the terms and amounts;
- (i) for the period of five years immediately preceding the date as at which the Balance Sheet is prepared:
 - (A) Aggregate number and class of shares allotted as fully paid up pursuant to contract(s) without payment being received in cash.
 - (B) Aggregate number and class of shares allotted as fully paid up by way of bonus shares.
 - (C) Aggregate number and class of shares bought back.
- (j) terms of any securities convertible into equity/preference shares issued along with the earliest date of conversion in descending order starting from the farthest such date.
- (k) calls unpaid (showing aggregate value of calls unpaid by directors and officers)
- (l) forfeited shares (amount originally paid-up)

B. Reserves and Surplus

- (i) Reserves and Surplus shall be classified as:
 - (a) Capital Reserves;
 - (b) Capital Redemption Reserve;
 - (c) Securities Premium Reserve;
 - (d) Debenture Redemption Reserve;

- (e) Revaluation Reserve;
- (f) Share Options Outstanding Account;
- (g) Other Reserves (specify the nature and purpose of each reserve and the amount in respect thereof);
- (h) Surplus, i.e., balance in Statement of Profit & Loss disclosing allocations and appropriations such as dividend, bonus shares and transfer to/from reserves etc.

(Additions and deductions since last balance sheet to be shown under each of the specified heads)

- (ii) A reserve specifically represented by earmarked investments shall be termed as a 'fund'.
- (iii) Debit balance of statement of profit and loss shall be shown as a negative figure under the head 'Surplus'. Similarly, the balance of 'Reserves and Surplus', after adjusting negative balance of surplus, if any, shall be shown under the head 'Reserves and Surplus' even if the resulting figure is in the negative.

C. Long-term Borrowings

- (i) Long-term borrowings shall be classified as:
 - (a) Bonds/Debentures.
 - (A) From banks.
 - (B) From other parties
 - (c) Deferred payment liabilities.
 - (d) Deposits.
 - (e) Loans and advances from related parties.
 - (f) Long term maturities of finance lease obligations
 - (g) Other loans and advances (specify nature).
- (ii) Borrowings shall further be subclassified as secured and unsecured. Nature of security shall be specified separately in each case.
- (iii) Where loans have been guaranteed by directors or others, the aggregate amount of such loans under each head shall be disclosed.
- (iv) Bonds/debentures (along with the rate of interest and particulars of redemption or conversion, as the case may be) shall be stated in descending order of maturity or conversion, starting from farthest redemption or conversion date, as the case may be. Where bonds/debentures are redeemable by instalments, the date of maturity for this purpose must be reckoned as the date on which the first instalment becomes due.
- (v) Particulars of any redeemed bonds/debentures which the company has power to reissue shall be disclosed.

- (vi) Terms of repayment of term loans and other loans shall be stated.
- (vii) Period and amount of continuing default as on the balance sheet date in repayment of loans and interest, shall be specified separately in each case.

D. Other Long-term Liabilities

Other Long term Liabilities shall be classified as:

- (a) Trade payables
- (b) Others

E. Long-term provisions

The amounts shall be classified as:

- (a) Provision for employee benefits.
- (b) Others (specify nature).

F. Short-term borrowings

- (i) Short-term borrowings shall be classified as:
 - (a) Loans repayable on demand
 - (A) From banks
 - (B) From other parties
 - (b) Loans and advances from related parties.
 - (c) Deposits.
 - (d) Other loans and advances (specify nature),
- (ii) Borrowings shall further be sub classified as secured and unsecured. Nature of security shall be specified separately in each case.
- (iii) Where loans have been guaranteed by directors or others, the aggregate amount of such loans under each head shall be disclosed.
- (iv) Period and amount of default as on the balance sheet date in repayment of loans and interest shall be specified separately in each case.

G. Other current liabilities

The amounts shall be classified as:

- (a) Current maturities of long term debt;
- (b) Current maturities of finance lease obligations;
- (c) Interest accrued but not due on borrowings;
- (d) Interest accrued and due on borrowings;
- (e) Income received in advance;
- (f) Unpaid dividends
- (g) Application money received for allotment of securities and due for refund and interest accrued thereon. Share application money includes advances towards allotment of share capital. The terms and conditions including the

number of shares proposed to be issued, the amount of premium, if any, and the period before which shares shall be allotted shall be disclosed. It shall also be disclosed whether the company has sufficient authorized capital to cover the share capital amount resulting from allotment of shares out of such share application money. Further, the period for which the share application money has been pending beyond the period for allotment as mentioned in the document inviting application for shares along with the reason for such share application money being pending shall be disclosed. Share application money not exceeding the issued capital and to the extent not refundable shall be shown under the head Equity and share application money to the extent refundable, i.e., the amount in excess of subscription or in case the requirements of minimum subscription are not met, shall be separately shown under Other current liabilities'

- (h) Unpaid matured deposits and interest accrued thereon
- (i) Unpaid matured debentures and interest accrued thereon
- (o) Other payables (specify nature);

H. Short-term provisions

The amounts shall be classified as:

- (a) Provision for employee benefits.
- (b) Others (specify nature).

I. Tangible assets

- (i) Classification shall be given as:
 - (a) Land.
 - (b) Buildings.
 - (c) Plant and Equipment.
 - (d) Furniture and Fixtures.
 - (e) Vehicles,
 - (f) Office Equipment.
 - (g) Others (specify nature).
- (ii) Assets under lease shall be separately specified under each class of asset.
- (iii) A reconciliation of the gross and net carrying amounts of each class of assets at the beginning and end of the reporting period showing additions, disposals, acquisitions through business combinations and other adjustments and the related depreciation and impairment losses/reversals shall be disclosed separately.
- (iv) Where sums have been written off on a reduction of capital or revaluation of assets or where sums have been added on revaluation of assets, every balance sheet subsequent to date of such write-off, or addition shall

show the reduced or increased figures as applicable and shall by way of a note also show the amount of the reduction or increase as applicable together with the date thereof for the first five years subsequent to the date of such reduction or increase.

J. Intangible assets

- (i) Classification shall be given as:
 - (a) Goodwill.
 - (b) Brands /trademarks.
 - (c) Computer software.
 - (d) Mastheads and publishing titles.
 - (e) Mining rights.
 - (f) Copyrights, and patents and other intellectual property rights, services and operating rights.
 - (g) Recipes, formulae, models, designs and prototypes.
 - (h) Licenses and franchise.
 - (i) Others (specify nature).
- (ii) A reconciliation of the gross and net carrying amounts of each class of assets at the beginning and end of the reporting period showing additions, disposals, acquisitions through business combinations and other adjustments and the related amortization and impairment losses/reversals shall be disclosed separately.
- (iii) Where sums have been written off on a reduction of capital or revaluation of assets or where sums have been added on revaluation of assets, every balance sheet subsequent to date of such write-off, or addition shall show the reduced or increased figures as applicable and shall by way of a note also show the amount of the reduction or increase as applicable together with the date thereof for the first five years subsequent to the date of such reduction or increase.

K. Non current investments

- (i) Non current investments shall be classified as trade investments and other investments and further classified as:
 - (a) Investment property;
 - (b) Investments in Equity Instruments;
 - (c) Investments in preference shares
 - (d) Investments in Government or trust securities;
 - (e) Investments in debentures or bonds;
 - (f) Investments in Mutual Funds;
 - (g) Investments in partnership firms
 - (h) Other non-current investments (specify nature)

Under each classification, details shall be given of names of the bodies corporate [indicating separately whether such bodies are (i) subsidiaries, (ii) associates, (iii) joint ventures, or (iv) controlled special purpose entities] in whom investments have been made and the nature and extent of the investment so made in each such body corporate (showing separately investments which are partly paid). In regard to investments in the capital of partnership firms, the names of the firms (with the names of all their partners, total capital and the shares of each partner) shall be given.

- (ii) Investments carried at other than at cost should be separately stated specifying the basis for valuation thereof.
- (iii) The following shall also be disclosed:
 - (a) Aggregate amount of quoted investments and market value thereof;
 - (b) Aggregate amount of unquoted investments;
 - (c) Aggregate provision for diminution in value of investments.

L. Long-term loans and advances

- (i) Long-term loans and advances shall be classified as:
 - (a) Capital Advances;
 - (b) Security Deposits;
 - (c) Loans and advances to related parties (giving details thereof);
 - (d) Other loans and advances (specify nature).
- (ii) The above shall also be separately sub classified as:
 - (a) Secured, considered good;
 - (b) Unsecured, considered good;
 - (c) Doubtful.
- (iii) Allowance for bad and doubtful loans and advances shall be disclosed under the relevant heads separately.
- (iv) Loans and advances due by directors or other officers of the company or any of them either severally or jointly with any other persons or amounts due by firms or private companies respectively in which any director is a partner or a director or a member should be separately stated.

M. Other non-current assets

Other non-current assets shall be classified as:

- (i) Long-term Trade Receivables (including trade receivables on deferred credit terms);
- (ii) Others (specify nature)

(iii) Long-term Trade Receivables, shall be sub classified as:

- (a) (A) Secured, considered good;
- (B) Unsecured, considered good;
- (C) Doubtful
- (b) Allowance for bad and doubtful debts shall be disclosed under the relevant heads separately.
- (c) Debts due by directors or other officers of the company or any of them either severally or jointly with any other person or debts due by firms or private companies respectively in which any director is a partner or a director or a member should be separately stated.

N. Current Investments

- (i) Current investments shall be classified as:
 - (a) Investments in Equity Instruments;
 - (b) Investment in Preference Shares
 - (c) Investments in government or trust securities;
 - (d) Investments in debentures or bonds;
 - (e) Investments in Mutual Funds;
 - (f) Investments in partnership firms
 - (g) Other investments (specify nature).

Under each classification, details shall be given of names of the bodies corporate [indicating separately whether such bodies are (i) subsidiaries, (ii) associates, (iii) joint ventures, or (iv) controlled special purpose entities] in whom investments have been made and the nature and extent of the investment so made in each such body corporate (showing separately investments which are partly-paid). In regard to investments in the capital of partnership firms, the names of the firms (with the names of all their partners, total capital and the shares of each partner) shall be given.

- (ii) The following shall also be disclosed:
 - (a) The basis of valuation of individual investments
 - (b) Aggregate amount of quoted investments and market value thereof;
 - (c) Aggregate amount of unquoted investments;
 - (d) Aggregate provision made for diminution in value of investments.

O. Inventories

- (i) Inventories shall be classified as:
 - (a) Raw materials;
 - (b) Work-in-progress;
 - (c) Finished goods;

- (d) Stock-in-trade (in respect of goods acquired for trading);
- (e) Stores and spares;
- (f) Loose tools;
- (g) Others (specify nature).
- (ii) Goods-in-transit shall be disclosed under the relevant subhead of inventories.
- (iii) Mode of valuation shall be stated.

P. Trade Receivables

- (i) Aggregate amount of Trade Receivables outstanding for a period exceeding six months from the date they are due for payment should be separately stated.
- (ii) Trade receivables shall be subclassified as:
 - (a) Secured, considered good;
 - (b) Unsecured, considered good;
 - (c) Doubtful.
- (iii) Allowance for bad and doubtful debts shall be disclosed under the relevant heads separately.
- (iv) Debts due by directors or other officers of the company or any of them either severally or jointly with any other person or debts due by firms or private companies respectively in which any director is a partner or a director or a member should be separately stated.

Q. Cash and cash equivalents

- (i) Cash and cash equivalents shall be classified as:
 - (a) Balances with banks;
 - (b) Cheques, drafts on hand;
 - (c) Cash on hand;
 - (d) Others (specify nature).
- (ii) Earmarked balances with banks (for example, for unpaid dividend) shall be separately stated.
- (iii) Balances with banks to the extent held as margin money or security against the borrowings, guarantees, other commitments shall be disclosed separately.
- (iv) Repatriation restrictions, if any, in respect of cash and bank balances shall be separately stated.
- (v) Bank deposits with more than 12 months maturity shall be disclosed separately.

R. Short-term loans and advances

- (i) Short-term loans and advances shall be classified as:
 - (a) Loans and advances to related parties (giving details thereof);
 - (b) Others (specify nature).

- (ii) The above shall also be subclassified as:
 - (a) Secured, considered good;
 - (b) Unsecured, considered good;
 - (c) Doubtful.
- (iii) Allowance for bad and doubtful loans and advances shall be disclosed under the relevant heads separately.
- (iv) Loans and advances due by directors or other officers of the company or any of them either severally or jointly with any other person or amounts due by firms or private companies respectively in which any director is a partner or a director or a member shall be separately stated.

S. Other current assets (specify nature).

This is an all-inclusive heading, which incorporates current assets that do not fit into any other asset categories.

T. Contingent liabilities and commitments (to the extent not provided for)

- (i) Contingent liabilities shall be classified as:
 - (a) Claims against the company not acknowledged as debt;
 - (b) Guarantees;
 - (c) Other money for which the company is contingently liable
- (ii) Commitments shall be classified as:
 - (a) Estimated amount of contracts remaining to be executed on capital account and not provided for;
 - (b) Uncalled liability on shares and other investments partly paid
 - (c) Other commitments (specify nature).

U. The amount of dividends proposed to be distributed to equity and preference shareholders for the period and the related amount per share shall be disclosed separately. Arrears of fixed cumulative dividends on preference shares shall also be disclosed separately.

V. Where in respect of an issue of securities made for a specific purpose, the whole or part of the amount has not been used for the specific purpose at the balance sheet date, these shall be indicated by way of note how such unutilized amounts have been used or invested.

W. If, in the opinion of the Board, any of the assets other than fixed assets and non current investments do not have a value on realization in the ordinary course of business at least equal to the amount at which they are stated, the fact that the Board is of that opinion, shall be stated.

GENERAL INSTRUCTIONS FOR PREPARATION OF STATEMENT OF PROFIT AND LOSS

(1) The provisions of this Part shall apply to the income and expenditure account referred to in subclause (ii) of Clause (40) of

Section 2 in like manner as they apply to a statement of profit and loss.

(2) (A) In respect of a company other than a finance company revenue from operations shall disclose separately in the notes revenue from

- (a) Sale of products;
- (b) Sale of services;
- (c) Other operating revenues;

Less:

- (d) Excise duty.

(B) In respect of a finance company, revenue from operations shall include revenue from

- (a) Interest; and
- (b) Other financial services

Revenue under each of the above heads shall be disclosed separately by way of notes to accounts to the extent applicable.

(3) Finance Costs

Finance costs shall be classified as:

- (a) Interest expense;
- (b) Other borrowing costs;
- (c) Applicable net gain/loss on foreign currency transactions and translation.

(4) Other income

Other income shall be classified as:

- (a) Interest Income (in case of a company other than a finance company);
- (b) Dividend Income;
- (c) Net gain/loss on sale of investments
- (d) Other non operating income (net of expenses directly attributable to such income).

(5) Additional Information

A Company shall disclose by way of notes additional information regarding aggregate expenditure and income on the following items:

- (i) (a) Employee Benefits Expense [showing separately (i) salaries and wages, (ii) contribution to provident and other funds, (iii) expense on Employee Stock Option Scheme (ESOP) and Employee Stock Purchase Plan (ESPP), (iv) staff welfare expenses].
- (b) Depreciation and amortization expense;
- (c) Any item of income or expenditure which exceeds one per cent of the revenue from operations or ₹ 1,00,000, whichever is higher;
- (d) Interest Income;
- (e) Interest Expense;
- (f) Dividend Income;
- (g) Net gain/ loss on sale of investments;
- (h) Adjustments to the carrying amount of investments;

PART II – STATEMENT OF PROFIT AND LOSS

Name of the Company

Profit and loss statement for the year ended.

(Rupees in)

	Particulars	Note No.	Figures for the current reporting period	Figures for the previous reporting period
1		2	3	4
I.	Revenue from operations		XXX	XXX
II.	Other income		XXX	XXX
III.	Total Revenue (I + II)		XXX	XXX
IV.	Expenses:		XXX	XXX
	Cost of materials consumed		XXX	XXX
	Purchases of Stock-in-Trade		XXX	XXX
	Changes in inventories of finished goods work in progress and Stock-in-Trade		XXX	XXX
	Employee benefits expense		XXX	XXX
	Finance costs		XXX	XXX
	Depreciation and amortization expense		XXX	XXX
	Other expenses		XXX	XXX
	Total expenses		XXX	XXX
V.	Profit before exceptional and extraordinary items and tax (III-IV)		XXX	XXX
VI.	Exceptional items		XXX	XXX
VII.	Profit before extraordinary items and tax (V- VI)		XXX	XXX
VIII.	Extraordinary Items		XXX	XXX
IX.	Profit before tax (VII-VIII)		XXX	XXX
X.	Tax expense:			
	(1) Current tax		XXX	XXX
	(2) Deferred tax		XXX	XXX
XI.	Profit (Loss) for the period from continuing operations (VII-VIII)		XXX	XXX
XII.	Profit/(loss) from discontinuing operations		XXX	XXX
XIII.	Tax expense of discontinuing operations		XXX	XXX
XIV.	Profit/(loss) from Discontinuing operations (after tax) (XII-XIII)		XXX	XXX
XV.	Profit (Loss) for the period (XI + XIV)		XXX	XXX
XVI.	Earnings per equity share:			
	(1) Basic	XXX	XXX	
	(2) Diluted	XXX	XXX	

(i) Net gain or loss on foreign currency transaction and translation (other than considered as finance cost);

(j) Payments to the auditor as

- (a) auditor,
- (b) for taxation matters,
- (c) for company law matters,
- (d) for management services,
- (e) for other services,
- (f) for reimbursement of expenses;

(k) In case of companies covered u/s 135, amount of expenditure incurred on corporate social responsibility activities.

(l) Details of items of exceptional and extraordinary nature;

(m) Prior period items;

(ii) (a) In the case of manufacturing companies,

(1) Raw materials under broad heads.

(2) Goods purchased under broad heads.

- (b) In the case of trading companies, purchases in respect of goods traded in by the company under broad heads.
 - (c) In the case of companies rendering or supplying services, gross income derived from services rendered or supplied under broad heads.
 - (d) In the case of a company, which falls under more than one of the categories mentioned in (a), (b) and (c) above, it shall be sufficient compliance with the requirements herein if purchases, sales and consumption of raw material and the gross income from services rendered is shown under broad heads.
 - (e) In the case of other companies, gross income derived under broad heads.
- (iii) In the case of all concerns having works in progress, works-in-progress under broad heads.
- (iv) (a) The aggregate, if material, of any amounts set aside or proposed to be set aside, to reserve, but not including provisions made to meet any specific liability, contingency or commitment known to exist at the date as to which the balance-sheet is made up.
- (b) The aggregate, if material, of any amounts withdrawn from such reserves.
- (v) (a) The aggregate, if material, of the amounts set aside to provisions made for meeting specific liabilities, contingencies or commitments.
- (b) The aggregate, if material, of the amounts withdrawn from such provisions, as no longer required.
- (vi) Expenditure incurred on each of the following items, separately for each item:
- (a) Consumption of stores and spare parts.
 - (b) Power and fuel.
 - (c) Rent.
 - (d) Repairs to buildings.
 - (e) Repairs to machinery.
 - (f) Insurance
 - (g) Rates and taxes, excluding, taxes on income.
 - (h) Miscellaneous expenses,
- (vii) (a) Dividends from subsidiary companies.
- (b) Provisions for losses of subsidiary companies.
- (viii) The profit and loss account shall also contain by way of a note the following information, namely:
- (a) Value of imports calculated on C.I.F basis by the company during the financial year in respect of –
 - I. Raw materials;
 - II. Components and spare parts;
 - III. Capital goods;
 - (b) Expenditure in foreign currency during the financial year on account of royalty, know-how, professional and consultation fees, interest, and other matters;
 - (c) Total value if all imported raw materials, spare parts and components consumed during the financial year and the total value of all indigenous raw materials, spare parts and components similarly consumed and the percentage of each to the total consumption;
 - (d) The amount remitted during the year in foreign currencies on account of dividends with a specific mention of the total number of non resident shareholders, the total number of shares held by them on which the dividends were due and the year to which the dividends related;
 - (e) Earnings in foreign exchange classified under the following heads, namely:
 - I. Export of goods calculated on F.O.B. basis;
 - II. Royalty, know-how, professional and consultation fees;
 - III. Interest and dividend;
 - IV. Other income, indicating the nature thereof

Note: Broad heads shall be decided taking into account the concept of materiality and presentation of true and fair view of financial statements.

GENERAL INSTRUCTIONS FOR THE PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS*

(1) Where a company is required to prepare Consolidated Financial Statements, i.e., consolidated balance sheet and consolidated statement of profit and loss, the company shall mutatis mutandis follow the requirements of this Schedule as applicable to a company in the preparation of balance sheet and statement of profit and loss. In addition, the consolidated financial statements shall disclose the information as per the requirements specified in the applicable Accounting Standards including the following:

- (i) Profit or loss attributable to “minority interest” and to owners of the parent in the statement of profit and loss shall be presented as allocation for the period.
- (ii) “Minority interests” in the balance sheet within equity shall be presented separately from the equity of the owners of the parent.

(2) In Consolidated Financial Statements, the following shall be disclosed by way of additional information:

* General instructions, for preparation of Consolidated Financial Statements are part of Schedule III.

Name of the entity in the	Net Assets, i.e., total assets minus total liabilities		Share in profit or loss	
	As % of consolidated net assets	Amount	As % of consolidated profit or loss	Amount
1	2	3	4	5
Parent Subsidiaries Indian 1. 2. 3. . . Foreign 1. 2. 3. . . Minority Interests in all subsidiaries Associates (Investment as per the equity method) Indian 1. 2. 3. . . Foreign 1. 2. 3. . . Joint Ventures (as per proportionate consolidation/investment as per the equity method) Indian 1. 2. 3. . . Foreign 1. 2. 3. . . TOTAL				

3. All subsidiaries, associates and joint ventures (whether Indian or foreign) will be covered under consolidated financial statements,
4. An entity shall disclose the list of subsidiaries or associates or joint ventures which have not been consolidated in the consolidated financial statements along with the reasons of not consolidating.



Conceptual Framework

CONCEPT

A conceptual framework of accounting is a structured theory of accounting. At its highest theoretical levels, it states the scope and objective of financial reporting. At the next fundamental conceptual level, it identifies and defines the qualitative characteristics of financial information (such as relevance, reliability, comparability, timeliness and understandability) and the basic elements of accounting reports (such as assets, liabilities, equity, income, expenses and profit). At the lower operational levels, the conceptual framework deals with principles and rules of recognition and measurement of the basic elements and type of information to be displayed in financial reports.

The Financial Accounting Standards Board (USA) has defined a conceptual framework, as a constitution, a coherent system of interrelated objectives and fundamentals that can lead to consistent standards and that prescribe the nature, function and limit of financial accounting and financial statements¹. A conceptual framework consists of the following elements:

- (i) general agreement on the overall objectives of financial reporting.
- (ii) general agreement on the nature and needs of the various users of financial reports.
- (iii) identification of a set of (ideally mutually exclusive and collectively exhaustive) criteria to be used in choosing between alternative solutions to standard-setting problems and in assessing the quality and utility of financial reports.

The conceptual framework is an attempt to provide a meta theoretical structure for financial accounting². According to IASB's The Conceptual Framework for Financial Reporting (September 2010):

The *Conceptual Framework* deals with

- (a) the objective of financial reporting;
- (b) the qualitative characteristics of useful financial information;
- (c) the definition, recognition and measurement of the elements from which financial statements are constructed; and
- (d) concepts of capital and capital maintenance.

The objective of conceptual framework is to help produce a body of standards that is more internally consistent than the *ad hoc* approach thereby enhancing the credibility of accounting information. A conceptual framework is an priori theory whose validity depends upon its consistency with stated objectives of accounting and logical structure. The establishment of a

conceptual framework provides many benefits which are listed as follows:

- (1) With a conceptual framework, the standard-setter is in a better position to assess the usefulness of alternative methods in accounting.
- (2) A conceptual framework will help produce a body of accounting principles and standards which can be used for preparing financial statements and other accounting statements and will further enhance the credibility and reliability of these statements.
- (3) A conceptual framework will help to reduce personal biases, subjectivity and political pressures in making decisions in accounting. As there are diverse (conflicting) interests in the information market, conceptual framework will help encourage a common attitude towards accounting issues. This may require preparers and users to subordinate their individual preferences and interests in the knowledge that they will in the long run gain more than lose.

The purpose of conceptual framework is

- (a) to assist the Board (IASB) in the development of future IFRSs and in its review of existing IFRSs;
- (b) to assist the Board in promoting harmonisation of regulations, accounting standards and procedures relating to the presentation of financial statements by providing a basis for reducing the number of alternative accounting treatments permitted by IFRSs;
- (c) to assist national standard-setting bodies in developing national standards;
- (d) to assist preparers of financial statements in applying IFRSs and in dealing with topics that have yet to form the subject of an IFRS;
- (e) to assist auditors in forming an opinion on whether financial statements comply with IFRSs;
- (f) to assist users of financial statements in interpreting the information contained in financial statements prepared in compliance with IFRSs; and
- (g) to provide those who are interested in the work of the IASB with information about its approach to the formulation of IFRSs.³

This chapter discuss the following *Conceptual Frameworks* and other issues related to it.

- (1) IASB's *Conceptual Framework* (September, 2010)
- (2) FASB's *Conceptual Framework* (2010)
- (3) ICAI's *Framework* (July, 2000)

IASB'S CONCEPTUAL FRAMEWORK FOR FINANCIAL REPORTING*

The *Conceptual Framework* for Financial Reporting was issued by the IASB in September 2010. It superseded the conceptual framework for the preparation and presentation of financial statements issued by International Accounting Standards Committee (IASC) in July 1989.

The *Conceptual Framework for Financial Reporting 2010* sets forth “the concepts that underlie the preparation and presentation of financial statements for external users.” The *Conceptual Framework (2010)* is designed to assist standard setters in developing and reviewing standards, to assist preparers of financial statements in applying standards and in dealing with issues not specifically covered by standards, to assist auditors in forming an opinion on financial statements, and to assist users in interpreting financial statement information. It is important to note that an understanding of the *Conceptual Framework (2010)* is expected to assist users of financial statements—including financial analysts—in interpreting the information contained therein.

The *Conceptual Framework (2010)* is diagrammed in Figure 14.1. The top part of the diagram shows the objective of general purpose financial reporting at the center, because other aspects of the framework are based upon this core. The qualitative characteristics of useful financial information surround the

objective (fundamental characteristics are listed on the right and enhancing characteristics are listed on the left). The reporting elements are shown next with elements of financial statements shown at the bottom. Beneath the diagram of the framework are the basic constraint (cost) and assumption (going concern) that guide the development of standards and the preparation of financial reports.

In the following, we discuss the *Conceptual Framework (2010)* starting at the core, The objective of financial statements.

1. Objective of Financial Reports

At the core of the *Conceptual Framework (2010)* is the objective: The provision of financial information that is useful to current and potential providers of resources in making decisions. All other aspects of the framework flow from that central objective.

The providers of resources are considered to be the primary users of financial reports and include investors, lenders, and other creditors. The purpose of providing the financial information is to be useful in making decisions about providing resources. Other users may find the financial information useful for making economic decisions. The types of economic decisions differ by users, so the specific information needed differs as well. However, although these users may have unique information needs, some information needs are common across all users. Information is needed about the company's financial position: its resources and its financial obligations. Information is needed about a company's financial performance; this information explains how and why the company's financial position changed in the past and can be useful in evaluating potential changes in the future. The third common information need reflected in the *Conceptual Framework (2010)* diagram is the need for information about a company's cash. How did the company obtain cash (by selling its products and services, borrowing, other)? How did the company use cash (by paying expenses, investing in new equipment, paying dividends, other)?

The *Conceptual Framework (2010)* indicates that to make decisions about providing resources to the company, users need information that is helpful in assessing future net cash inflows to the entity. Such information includes information about the economic resources of (assets) and claims against (liabilities and equity) the entity, and about how well the management and governing board have utilized the resources of the entity. It is specifically noted in the *Conceptual Framework (2010)* that users need to consider information from other sources as well in making their decisions. Further, it is noted that the financial reports do not show the value of an entity but are useful in estimating the value of an entity.

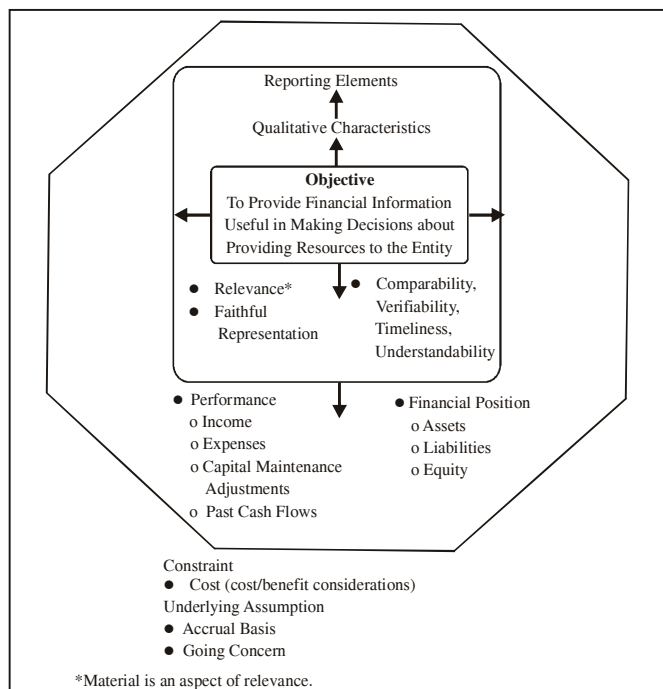


Figure 14.1: IFRS Framework for the Preparation and Presentation of Financial Reports

2. Qualitative Characteristics of Financial Reports

Flowing from the central objective of providing information that is useful to providers of resources, the *Conceptual Framework (2010)* elaborates on what constitutes usefulness. It identifies

*The discussion in this section is based on IASB's The *Conceptual Framework for Financial Reporting* (September 2010).

two fundamental qualitative characteristics that make financial information useful: relevance and faithful representation. The concept of materiality is discussed within the context of relevance.

(1) Relevance: Information is relevant if it would potentially affect or make a difference in users' decisions. The information can have predictive value (useful in making forecasts), confirmatory value (useful to evaluate past decisions or forecasts), or both. In other words, relevant information helps users of financial information to evaluate past, present, and future events, or to confirm or correct their past evaluations in a decision-making context. **Materiality:** Information is considered to be material if omission or misstatement of the information could influence users' decisions. Materiality is a function of the nature and/or magnitude of the information.

(2) Faithful representation: Information that faithfully represents an economic phenomenon that it purports to represent is ideally complete, neutral, and free from error. Complete means that all information necessary to understand the phenomenon is depicted. Neutral means that information is selected and presented without bias. In other words, the information is not presented in such a manner as to bias the users' decisions. Free from error means that there are no errors of commission or omission in the description of the economic phenomenon, and that an appropriate process to arrive at the reported information was selected and was adhered to without error. Faithful representation maximizes the qualities of complete, neutral, and free from error to the extent possible.

Relevance and faithful representation are the fundamental, most critical characteristics of useful financial information. In addition to these two fundamental characteristics, the *Conceptual Framework (2010)* identifies four characteristics that enhance the usefulness of relevant and faithfully represented financial information. These enhancing qualitative characteristics are comparability, verifiability, timeliness, and understandability.

(i) Comparability: Comparability allows users "to identify and understand similarities and differences of items." Information presented in a consistent manner over time and across entities enables users to make comparisons more easily than information with variations in how similar economic phenomena are represented.

(ii) Verifiability: Verifiability means that different knowledgeable and independent observers would agree that the information presented faithfully represents the economic phenomena it purports to represent.

(iii) Timeliness: Timely information is available to decision makers prior to their making a decision.

(iv) Understandability: Clear and concise presentation of information enhances understandability. The *Conceptual Framework (2010)* specifies that the information is prepared for and should be understandable by users who have a reasonable knowledge of business and economic activities, and who are willing to study the information with diligence. However, some complex economic phenomena cannot be presented in an easily understandable form. Information that is useful should not be

excluded simply because it is difficult to understand. It may be necessary for users to seek assistance to understand information about complex economic phenomena.

Financial information exhibiting these qualitative characteristics—fundamental and enhancing—should be useful for making economic decisions.

3. Constraints on Financial Reports

Although it would be ideal for financial statements to exhibit all of these qualitative characteristics and thus achieve maximum usefulness, it may be necessary to make tradeoffs across the enhancing characteristics. The application of the enhancing characteristics follows no set order of priority. Depending on the circumstances, each enhancing characteristic may take priority over the others (para QC 34). The aim is an appropriate balance among the enhancing characteristics.

A pervasive constraint on useful financial reporting is the cost of providing and using this information. Optimally, benefits derived from information should exceed the costs of providing and using it. Again, the aim is a balance between costs and benefits.

A limitation of financial reporting not specifically mentioned in the *Conceptual Framework (2010)* involves information not included. Financial statements, by necessity, omit information that is non-quantifiable. For example, the creativity, innovation, and competence of a company's work force are not directly captured in the financial statements. Similarly, customer loyalty, a positive corporate culture, environmental responsibility, and many other aspects about a company may not be directly reflected in the financial statements. Of course, to the extent that these items result in superior financial performance, a company's financial reports will reflect the results.

4. The Elements of Financial Statements

Financial statements portray the financial effects of transactions and other events by grouping them into broad classes (elements) according to their economic characteristics. Three elements of financial statements are directly related to the measurement of financial position: assets, liabilities, and equity.

- **Assets:** Resources controlled by the enterprise as a result of past events and from which future economic benefits are expected to flow to the enterprise. Assets are what a company owns (e.g., inventory and equipment).
- **Liabilities:** Present obligations of an enterprise arising from past events, the settlement of which is expected to result in an outflow of resources embodying economic benefits. Liabilities are what a company owes (e.g., bank borrowings).
- **Equity** (for public companies, also known as "shareholders' equity" or stockholders' equity"): Assets less liabilities. Equity is the residual interest in the assets after subtracting the liabilities.

The elements of financial statements directly related to the measurement of performance (profit and related measures) are income and expenses.

- **Income:** Increases in economic benefits in the form of inflows or enhancements of assets, or decreases of liabilities that result in an increase in equity (other than increases resulting from contributions by owners). Income includes both revenues and gains. Revenues represent income from the ordinary activities of the enterprise (e.g., the sale of products). Gains may result from ordinary activities or other activities (the sale of surplus equipment).
- **Expenses:** Decreases in economic benefits in the form of outflows or depletions of assets, or increases in liabilities that result in decreases in equity (other than decreases because of distributions to owners). Expenses include losses, as well as those items normally thought of as expenses, such as the cost of goods sold or wages.

5. Underlying Assumptions in Financial Statements

Two important assumptions underlie financial statements: accrual accounting and going concern. These assumptions determine how financial statement elements are recognized and measured.

The use of “accrual accounting” assumes that financial statements should reflect transactions in the period when they actually occur, not necessarily when cash movements occur. For example, accrual accounting specifies that a company reports revenues *when they are earned (when the performance obligations have been satisfied)*, regardless of whether the company received cash before delivering the product, after delivering the product, or at the time of delivery.

“Going concern” refers to the assumption that the company will continue in business for the foreseeable future. To illustrate, consider the value of a company’s inventory if it is assumed that the inventory can be sold over a normal period of time versus the value of that same inventory if it is assumed that the inventory must all be sold in a day (or a week). Companies with the intent to liquidate or materially curtail operations would require different information for a fair presentation.

In reporting the financial position of a company that is assumed to be a going concern, it may be appropriate to list assets at some measure of a current value based upon normal market conditions. However, if a company is expected to cease operations and be liquidated, it may be more appropriate to list such assets at an appropriate liquidation value, namely, a value that would be obtained in a forced sale.

6. Recognition of Financial Statement Elements

Recognition means that an item is included in the balance sheet or income statement. Recognition occurs if the item meets the definition of an element and satisfies the criteria for recognition. A financial statement element (assets, liabilities,

equity, income, and expenses) should be recognized in the financial statements if:

- it is probable that any future economic benefit associated with the item will flow to or from the enterprise, and
- the item has a cost or value that can be *measured with reliability*.

7. Measurement of Financial Statement Elements

Measurement is the process of determining the monetary amounts at which the elements of the financial statements are to be recognized and carried in the balance sheet and income statement. The following alternative bases of measurement are used to different degrees and in varying combinations to measure assets and liabilities.

- **Historical cost:** Historical cost is simply the amount of cash or cash equivalents paid to purchase an asset, including any costs of acquisition and/or preparation. If the asset was not bought for cash, historical cost is the fair value of whatever was given in order to buy the asset. When referring to liabilities, the historical cost basis of measurement means the amount of proceeds received in exchange for the obligation.
- **Amortised cost:** Historical cost adjusted for amortisation, depreciation, or depletion and/or impairment.
- **Current cost:** In reference to assets, current cost is the amount of cash or cash equivalents that would have to be paid to buy the same or an equivalent asset today. In reference to liabilities, the current cost basis of measurement means the undiscounted amount of cash or cash equivalents that would be required to settle the obligation today.
- **Realizable (settlement) value:** In reference to assets, realizable value is the amount of cash or cash equivalents that could currently be obtained by selling the asset in an orderly disposal. For liabilities, the equivalent to realizable value is called “settlement value”—that is, settlement value is the undiscounted amount of cash or cash equivalents expected to be paid to satisfy the liabilities in the normal course of business.
- **Present value:** For assets, present value is the present discounted value of the future net cash inflows that the asset is expected to generate in the normal course of business. For liabilities, present value is the present discounted value of the future net cash outflows that are expected to be required to settle the liabilities in the normal course of business.
- **Fair value:** Fair value is a measure of value mentioned but not specifically defined in the *Conceptual Framework (2010)*. Fair value is the amount at which an asset could be exchanged, or a liability settled, between knowledgeable, willing parties in an arm’s length

transaction. This may involve either market measures or present value measures depending on the availability of information.

8. General Requirements for Financial Statements

The *Conceptual Framework (2010)* provides a basis for establishing standards and the elements of financial statements, but it does not address the contents of the financial statements. Having discussed the *Conceptual Framework (2010)*, we now address the general requirements for financial statements.

International Accounting Standard (IAS) No. 1, *Presentation of Financial Statements*, specifies the required financial statements, general features of financial statements, and structure and content of financial statements. These general requirements are illustrated in Figure 14.2 and described in the subsections below.

In the following sections, we discuss the required financial statements, the general features underlying the preparation of financial statements, and the specified structure and content in greater detail.

Required Financial Statements

Under IAS No. 1, a complete set of financial statements includes

Required Financial Statements

- Statement of financial position (Balance sheet)
- Statement of comprehensive income (Single statement or Income statement + Statement of comprehensive income)
- Statement of changes in equity
- Statement of cash flows
- Notes summarizing accounting policies and disclosing other items
- Minimum specified note disclosures
- In certain cases, Statement of financial position from earliest comparative period

General Features

- Fair presentation
- Going concern
- Accrual basis
- Materiality and aggregation
- No offsetting
- Frequency of reporting
- Comparative information
- Consistency of presentation

Structure and Content

- Classified balance sheet
- Minimum specified information on the face of financial statements
- Minimum information in the notes
- Comparative information

- a statement of financial position (balance sheet);
- a statement of comprehensive income (a single statement of comprehensive income or two statements, an income statement and a statement of comprehensive income that begins with profit or loss from the income statement);
- a statement of changes in equity, separately showing changes in equity resulting from profit or loss, each item of other comprehensive income, and transactions with owners in their capacity as owners;
- a statement of cash flows; and
- notes comprising a summary of significant accounting policies and other explanatory notes that disclose information required by IFRS and not presented elsewhere and that provide information relevant to an understanding of the financial statements.

Entities are encouraged to furnish other related financial and non-financial information in addition to that required. Financial statements need to present fairly the financial position, financial performance, and cash flows of an entity.

General Features of Financial Statements

A company that applies IFRS is required to state explicitly in the notes to its financial statements that it is in compliance with the standards. Such a statement is only made when a company is in compliance with *all* requirements of IFRS. In extremely rare circumstances, a company may deviate from a requirement of IFRS if management concludes that complying with IFRS would result in misleading financial statements.

In this case, management must disclose details of the departure from IFRS.

IAS No. 1 specifies a number of general features underlying the preparation of financial statements. These features clearly reflect the *Conceptual Framework (2010)*.

- *Fair Presentation:* The application of IFRS is presumed to result in financial statements that achieve a fair presentation. The IAS describes fair presentation as follows:

Fair presentation requires the faithful representation of the effects of transactions, other events and conditions in accordance with the definitions and recognition criteria for assets, liabilities, income and expenses set out in the *Framework*.
- *Going Concern:* Financial statements are prepared on a going concern basis unless management either intends to liquidate the entity or to cease trading, or has no realistic alternative but to do so. If not presented on a going concern basis, the fact and rationale should be disclosed.
- *Accrual Basis:* Financial statements (except for cash flow information) are to be prepared using the accrual basis of accounting.

Figure 14.2: IASB General Requirements for Financial Statements

- **Materiality and Aggregation:** Omissions or misstatements of items are material if they could individually or collectively influence the economic decisions that users make on the basis of the financial statements. Each material class of similar items is presented separately. Dissimilar items are presented separately unless they are immaterial.
- **No Offsetting:** Assets and liabilities, and income and expenses, are not offset unless required or permitted by an IFRS.
- **Frequency of Reporting:** Financial statements must be prepared at least annually.
- **Comparative Information:** Financial statements must include comparative information from the previous period. The comparative information of prior periods is disclosed for all amounts reported in the financial statements, unless an IFRS requires or permits otherwise.
- **Consistency:** The presentation and classification of items in the financial statements are usually retained from one period to the next.

Structure and Content Requirements

IAS No. 1 also specifies structure and content of financial statements. These requirements include the following:

- **Classified Statement of Financial Position (Balance Sheet):** IAS No. 1 requires the balance sheet to distinguish between current and non-current assets, and between current and non-current liabilities unless a presentation based on liquidity provides more relevant and reliable information (e.g., in the case of a bank or similar financial institution).
- **Minimum Information on the Face of the Financial Statements:** IAS No. 1 specifies the minimum line item disclosures on the face of, or in the notes to, the financial statements. For example, companies are specifically required to disclose the amount of their plant, property, and equipment as a line item on the face of the balance sheet. The specific requirements are listed in Figure 14.3.
- **Minimum Information in the Notes (or on the face of financial statements):** IAS No. 1 specifies disclosures about information to be presented in the financial statements. This information must be provided in a systematic manner and cross-referenced from the face of the financial statements to the notes. The required information is summarized in Figure 14.4
- **Comparative Information:** For all amounts reported in a financial statement, comparative information should be provided for the previous period unless another standard requires or permits otherwise. Such comparative information allows users to better understand reported amounts.

USES OF IASB'S CONCEPTUAL FRAMEWORK

The Framework has a variety of uses.⁴

1. Most importantly, the Framework guides the IASB and International Financial Reporting Interpretations Committee (IFRIC) members in deliberating and establishing International Financial Reporting Standards and interpretations of these standards. In the absence of a framework, each board member inevitably would debate accounting standards questions premised on his or her own professional experience—their personal frameworks. Unfortunately, as in any debate, different premises can lead to different equally logical conclusions. For example, a board member who felt that accounting should smooth earnings volatility to help financial analysts assess long-term trends might favour a deferral-and-amortisation approach for certain kinds of costs. Another board member, however, who felt that assets must have clear future benefits in terms of expected cash flows to the entity might reject a deferral-and-amortisation approach. Both board members would have logic on their side. The difference, of course, is in the premises to their reasoning. The Framework provides a set of 'givens' in the debate over accounting standards.
2. Basing a set of accounting standards on the underlying IASB Framework helps ensure that the body of standards is internally consistent, at least to the maximum extent possible. For instance, one of the things the Framework does is define the basic elements of financial statements—assets, liabilities, equity, income and expenses. When an accounting issue that comes before the IASB involves whether to accrue a provision (liability and related expense) for a contingency of uncertain amount or timing—such as a pending lawsuit—the Framework definition of a liability becomes a 'given'; and the debate should centre on whether the particular contingency in question meets the agreed definition of a liability.
3. Preparers and auditors of financial statements use the Framework as a point of reference to resolve an accounting question in the absence of a standard or interpretation that specifically deals with the question. It is not possible for any set of accounting standards to provide clear answers to all accounting questions. Judgement is required in answering specific questions that the standards do not address. The Framework establishes boundaries for the exercise of judgement in preparing financial statements.
4. The IASB Framework establishes precise terminology by which people can discuss accounting questions. To illustrate, agreement on the definition of 'liability' helps in deciding whether things known variously as obligations, commitments, contingencies, provisions,

On the face of the Statement of Financial Position	● Plant, property, and equipment ● Investment property ● Intangible assets ● Financial assets (those not included in other specified line items) ● Investments accounted for using the equity method ● Biological assets ● Inventories ● Trade and other receivables ● Cash and cash equivalents ● Total assets in groups held for sale ● Trade and other payables ● Provisions ● Financial liabilities (not listed in other line items) ● Liabilities and assets for current tax ● Deferred tax liabilities and deferred tax assets ● Total liabilities in groups held for sale ● Non-controlling interest (i.e., minority interest, presented within equity) ● Issued capital and reserves attributable to owners of the parent
On the face of the Statement of Comprehensive Income, presented either in a single statement or in two statements (Income statement + Statement of comprehensive income)	● Revenue ● Specified gains and losses for financial assets ● Finance costs ● Share of the profit or loss of associates and joint ventures accounted for using the equity method ● Pre-tax gain or loss recognized on the disposal of assets or settlement of liabilities attributable to discontinued operations ● Tax expense ● Profit or loss ● Each component of other comprehensive income ● Amount of profit or loss and amount of comprehensive income attributable to non-controlling interest (minority interest) ● Amount of profit or loss and amount of comprehensive income attributable to the parent
On the face of the Statement of Changes in Equity	● Total comprehensive income for the period, showing separately the total amounts attributable to owners of the parent and to non-controlling interest (minority interest) ● For each component of equity, a reconciliation between beginning balances and ending balances, showing separately amounts arising from (a) profit or loss, (b) each item of other comprehensive income, and (c) transactions with owners in their capacity as owners ● For each component of equity, the effects of changes in accounting policies and corrections of errors recognized in accordance with IAS No. 8

Figure 14.3: IAS No. 1: Minimum Required Line Items in Financial Statements

accruals and the like qualify for recognition as liabilities in the balance sheet.

5. The Framework reduces the volume of standards. Without the Framework, each accounting question would have to be answered ad hoc, and there would be pressure from the preparers, auditors and users of financial statements for more detailed standards. The Framework provides direction for resolving questions without the need for increasingly specific standards.
6. By providing parameters for the exercise of judgement, the Framework reduces the need for interpretations and other detailed implementation guidance.
7. By adding rigour and discipline, the Framework enhances public confidence in financial reports. Users of financial statements make comparisons, and comparability is diminished if financial statement preparers use their own judgement on an ad hoc, company-by-company basis. No matter how well intentioned that judgement may be, financial statements

Disclosure of Accounting Policies	● Measurement bases used in preparing financial statements ● Significant accounting policies used ● Judgments made in applying accounting policies that have the most significant effect on the amounts recognized in the financial statements
Sources of Estimation Uncertainty	● Key assumptions about the future and other key sources of estimation uncertainty that have a significant risk of causing material adjustment to the carrying amount of assets and liabilities within the next year
Other Disclosures	● Information about capital and about certain financial instruments classified as equity ● Dividends not recognized as a distribution during the period, including dividends declared before the financial statements were issued and any cumulative preference dividends ● Description of the entity, including its domicile, legal form, country of incorporation, and registered office or business address ● Nature of operations and principal activities ● Name of parent and ultimate parent

Figure 14.4: Summary of IFRS Required Disclosures in the Notes to the Financial Statements

can lose credibility if they lack a conceptual underpinning.

FASB's CONCEPTUAL FRAMEWORK

The Financial Accounting Standards Board of USA has identified the following components of conceptual framework for financial accounting and reporting (Figure 14.5). Between 1978 and 2010, the FASB issued eight *Statements of Financial Accounting Concepts (SFAC)*.

The FASB Concepts Statements are intended to serve the public interest by setting the objectives, qualitative characteristics, and other concepts that guide selection of economic phenomena to be recognized and measured for financial reporting and their display in financial statements or related means of communicating information to those who are interested. Concepts Statements guide the Board in developing sound accounting principles and provide the Board and its constituents with an understanding of the appropriate content and inherent limitations of financial

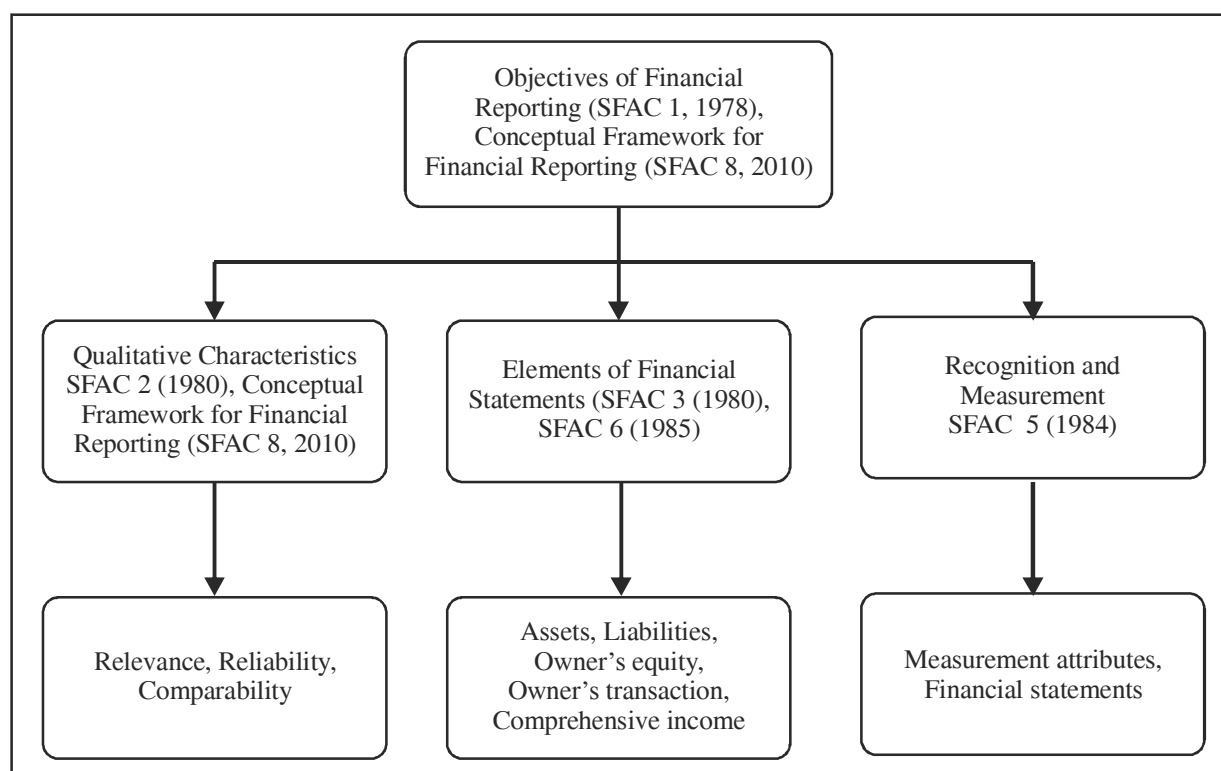


Figure 14.5: FASB Conceptual Framework

reporting. These concepts statements do not establish generally accepted accounting principles.

These concepts statements are not the same as the FASB's *Statements of Financial Accounting Standards (SFAS)*. The *SFASs* are authoritative statements of generally accepted accounting principles that must be followed. The *SFACs* are guidelines the Board uses in developing new standards. Accountants are not required to follow the *SFACs* in practice.

FASB's conceptual framework consists of eight different statements. Statement No. 7 came out in 2000, 15 years after Statement No. 6, then Statement No. 8 was not published until a decade later. Each of these eight parts is referred to as a statement of financial accounting concepts (SFAC).

Statements of Financial Accounting Concepts:

No. 1.	OBJECTIVES OF FINANCIAL REPORTING BY BUSINESS ENTERPRISES (SFAC No. 1)	1978
No. 2.	QUALITATIVE CHARACTERISTICS OF ACCOUNTING INFORMATION (SFAC No. 2)	1980
No. 3.	ELEMENTS OF FINANCIAL STATEMENTS OF BUSINESS ENTERPRISES (SFAC No. 3)	1980
No. 4.	OBJECTIVES OF FINANCIAL REPORTING BY NONBUSINESS ORGANIZATIONS (SFAC No. 4)	1980
No. 5.	RECOGNITION AND MEASUREMENT IN FINANCIAL STATEMENTS OF BUSINESS ENTERPRISES (SFAC No. 5)	1984
No. 6.	ELEMENTS OF FINANCIAL STATEMENTS; a replacement of FASB Concepts Statement No. 3, also incorporating an amendment of FASB Concepts Statement No. 2 (SFAC No. 6)	1985
No. 7.	USING CASH FLOW INFORMATION AND PRESENT VALUE IN ACCOUNTING MEASUREMENTS (SFAC No. 7)	2000
No. 8.	CONCEPTUAL FRAMEWORK FOR FINANCIAL REPORTING, a 2010 replacement of SFAC No. 1 and No. 2	2010

The Conceptual Framework developed by FASB consists of the following components:

(1) The Objectives of Financial Reporting

The FASB's first *Statement of Financial Accounting Concepts (SFAC 1)* (1978) identified the broad objectives of financial reporting. The first and most general objective stated in *SFAC 1* is to "provide information that is useful to present and potential investors and creditors and other users in making rational investment, credit, and similar decisions." From this beginning point in *SFAC 1*, the Board expressed other more specific objectives. These objectives recognize (i) that financial reporting should help users predict future cash flows, and (ii) that information about a company's resources and obligations is useful in making such predictions. All the concepts in the conceptual framework are intended to be consistent with these general objectives. In USA, present accounting practice already provides

information about a company's resources and obligations. Thus, although the conceptual framework is intended to be prescriptive of new and improved practices, the concepts in the framework are also descriptive of many current practices.

The Statement No. 1 also notes the importance of stewardship in terms of assessing how well management has discharged its duties and obligations to owners and other interested groups. The notion of stewardship goes beyond the narrow interpretation of proper custodianship of the firm's resources and moves toward accountability, a preferable term.

Several important value judgments are made throughout the report:

- Information is not costless to provide, so benefits of usage should exceed costs of production.
- Accounting reports are by no means the only source of information about enterprises.
- Accrual accounting is extremely useful in assessing and predicting earning power and cash flows of an enterprise.
- The information provided should be helpful, but users make their own predictions and assessments.

Finally, the document does not specify what statements should be used, much less what their format should be. It does mention, however, that financial reporting should provide information relative to the firm's economic resources, obligations, and owners' equity (para. 41). Also discussed is how firm performance is provided by measurements of earnings and its components (para. 43) as well as how cash is acquired and disbursed (para. 49).

Statement No. 8

In September 2010, the FASB issued Concepts Statement No. 8, *Conceptual Framework for Financial Reporting*, replacing, some 30 years after their adoption, SFACs No. 1 and No. 2. In 2004, this joint project by the FASB and IASB began as an addition to their original Norwalk Agreement. It completed phase one (1) of the eight (8) phase plan to converge their respective conceptual frameworks. The FASB/IASB's initial issuance of a discussion paper in 2006 and an exposure draft two years later were significant steps in the pursuit of a single, common conceptual framework.

The resultant objective of general purpose financial reporting, *Chapter 1 of the Conceptual Framework for Financial Reporting*, is "to provide financial information about the reporting entity that is useful to existing and potential investors, lenders, and other creditors in making decisions about providing resources to the entity. This emphasis on financial reporting is consistent with SFAC No. 1's wording, but broader than the IASB's earlier focus on financial statements alone. SFAC No. 1 sees potential investors and creditors, as its primary user group; SFAC No. 8 considers this group to be resource providers, not the primary user group. Historically, the divide between businesses and their owners widened. FASB's conclusion is that entity theory better represents this increasing separation rather than the owner focused proprietary theory.

Statement No. 4

SFAC No. 4 is concerned with objectives of non-business financial reporting. Non-business organizations are characterized by

(1) receipts of significant amounts of resources from providers who do not expect to receive either repayment or economic benefits proportionate to resources provided;

(2) operating purposes that are primarily other than to provide goods or services at a profit ... ;

(3) absence of defined ownership interests that can be sold, transferred, or redeemed, or that convey entitlement to a share of residual distribution of resources in the event of liquidation of the organization.

SFAC No. 4 also notes that non-business organizations do not have a single indicator of the entity's performance comparable to income measurement in the profit sector.

(2) The Qualities of Useful Information

The next component in the conceptual framework is the qualities (or qualitative characteristics) that financial information should have if it is to be useful in decision making. In SFAC 2, the FASB said that information is useful if it is (i) relevant, (ii) reliable, and (iii) comparable. Information is relevant if it can make difference in a decision. Information has this quality when it helps users predict the future or evaluate the past and is received in time to affect their decisions.

Information is reliable if users can depend on it to be free from bias and error. Reliable information is verifiable and faithfully represents what is supposed to be described. In addition, users can depend on information only if it is neutral. This means that the rules used to produce information should not be designed to lead users to accept or reject any specific decision alternative.

Information is comparable if users can use it to identify differences and similarities between companies. Comparability is possible only if companies follow uniform practices. However, even if all companies uniformly follow the same practices, comparable reports do not result if the practices are not appropriate. For example, comparable information would not be provided if all companies were to ignore the useful lives of their assets and depreciate all assets over two years.

Comparability also requires consistency, which means that a company should not change its accounting practices unless the change is justified as a reporting improvement. Another important concept discussed in SFAC 2 is materiality.

SFAC No. 8: Qualitative Characteristics of Useful Financial Information, results from FASB's collaborative work with the IASB and their respective qualitative characteristics.

Relevance continues to be one of the two fundamental qualitative characteristics of useful information; however, "faithful representation" replaces "reliability" as the second. Relevance influences user decisions, this is a subtle shift from SFAC, No 2's emphasis on making a difference in decisions. Predictive and

confirmatory values determine relevance. Confirmatory value is essentially feedback that confirms or refutes prior judgments related to the information. Again, relevant information is constrained by entity—specific materiality and costs.

Information that is faithfully represented is complete, neutral, and free from error. When reporting financial information, the FASB recommends a 3-step process: (1) identification of the economic phenomenon, (2) determination of the most relevant information and that it can be faithfully represented, and (3) determination of the information's availability and that it can be faithfully represented. Note that in SFAC No 2's hierarchy, verifiability was closely associated with representational faithfulness, but is now one of four "enhancing qualitative characteristics."

The new framework groups comparability, verifiability, timeliness, and understandability as enhancing qualitative characteristics. This result simplifies the framework while improving the usefulness of information that is relevant and faithfully represented. The boards considered other concepts (e.g., true and fair view, transparency, quality) for inclusion in the framework, but determined they were not qualitative characteristics.

(3) Elements of Financial Statements

Another important step in developing a conceptual framework is to determine the elements of financial statements. This involves defining the categories of information that should be contained in financial reports. The FASB's discussion of financial statement elements includes definitions of important elements such as assets, liabilities, equity, revenues, expenses, gains, and losses. The FASB's pronouncement on financial statement elements was first published in 1980 as SFAC 3. In 1985, SFAC 3 was replaced by SFAC 6, which modified the discussion of financial statement elements to include several elements for not forprofit accounting entities.

SFAC No. 3 defines ten (10) elements of financial statements. It is obviously a resolution of the definitions presented in the discussion memorandum for the conceptual framework project. These definitions were amended in SFAC No. 6 (1985).

Statement No. 6

SFAC No. 6 is a replacement (not a revision) of SFAC No. 3. However, its definitions are virtually identical to those in SFAC No. 3 except that they are extended to non-business organizations. Likewise, the qualitative characteristics of accounting information of SFAC No. 2 are extended to non-business organizations. Clearly, then, SFAC No. 6 added nothing further to the conceptual framework from the perspective of business enterprises.

The definitions of the 10 elements of financial statements presented in SFAC No. 6 (with very slight modification from SFAC No. 3) are as follows:

- (1) Assets are probable future economic benefits obtained or controlled by a particular entity as a result of past transactions or events.

- (2) Liabilities are probable future sacrifices of economic benefits arising from present obligations of a particular entity to transfer assets or provide services to other entities in the future as a result of past transactions or events.
- (3) Equity or net assets is the residual interest in the assets of an entity that remains after deducting its liabilities. In a business enterprise, the equity is the ownership interest. In a not-for-profit organization, which has no ownership interest in the same sense as a business enterprise, net assets is divided into three classes based on the presence or absence of donor-imposed restrictions – permanently restricted, temporarily restricted, and unrestricted net assets.
- (4) Investments by owners are increases in equity of a particular business enterprise resulting from transfers to it from other entities of something valuable to obtain or increase ownership interests (or equity) in it. Owners most commonly receive assets as investments, but that which is received may also include services or satisfaction or conversion of liabilities of the enterprise.
- (5) Distributions to owners are decreases in equity of a particular business enterprise resulting from transferring assets, rendering services, or incurring liabilities by the enterprise to owners. Distributions to owners decrease ownership interest (or equity) in an enterprise.
- (6) Comprehensive income is the change in equity of a business enterprise during a period from transactions and other events and circumstances from no owner sources. It includes all changes in equity during a period except those resulting from investments by owners and distributions to owners.
- (7) Revenues are inflows or other enhancements of assets of an entity or settlements of its liabilities (or a combination of both) from delivering or producing goods, rendering services, or other activities that constitute the entity's ongoing major or central operations.
- (8) Expenses are outflows or other depletions of assets or incurrence's of liabilities (or a combination of both) from delivering or producing goods, rendering services, or carrying out other activities that constitute the entity's ongoing major or central operations.
- (9) Gains are increases in equity (net assets) from peripheral or incidental transactions of an entity and from all other transactions and other events and circumstances affecting the entity except those that result from revenues or investments by owners.
- (10) Losses are decreases in equity (net assets) from peripheral or incidental transactions of an entity and from all other transactions and other events and circumstances affecting the entity except those that result from expenses or distributions to owners,

Source: FASB Concepts Statement No. 6, *Elements of Financial Statements*, pages ix and x.

Statement No. 7

SFAC No. 7 applies to situations in which present market-determined amounts such as cash received or paid and current Cost or market value are not available at the point of recognition. Instead estimated future cash flows are used for asset or liability measurement.

SFAC No. 7 applies only to initial recognition and not subsequent revaluations, which it terms “fresh-start measurements.” SFAC No. 7 is divided into two parts: asset measurement and liability measurement.

Present Value Asset Measurement

The most important point about asset measurement is that present value measurements are intended to simulate fair value rather than the particular present value of the asset to the firm itself. For example, the asset might have a higher value to the firm because it holds special manufacturing processes or other preferences that increase the value of the asset to the particular enterprise. Thus any value accruing to the particular firm because the simulated fair value is less than the present value of the asset to the firm is to be realized in the form of cost savings during usage rather than in higher initial valuation. Hence if the firm does not know the specific market value of a particular asset, it strives for that discount rate, which leads as closely as possible to estimated fair value. Discount rates should also include risk and uncertainty, which reflects the assessment by the market of the asset's value. It is important to note that the FASB's preference for fair value rather than specific firm valuation emphasizes the severability of the asset.

Present Value Liability Measurement

The key point about liability measurement is that the discount rate must be tied to the credit standing of the firm. The carrying value of the original liability is tied to the firm's credit standing. This means that if the firm's credit standing deteriorates, the valuation of the liability decreases (because a poorer credit standing means that the applicable discount rate rises). Hence any firm acquiring the liability from the original creditor pays less to acquire the liability owing to the debtor's worsening credit standing.

Asset and liability measurements under SFAC No. 7 are not inconsistent. An asset can be viewed and therefore valued separately from the firm owning it, but a liability cannot be separately viewed. In other words, a liability must ultimately be resolved by the debtor. An asset's value to others is separate from its current owner.

Subsequent Revaluations

Although SFAC No. 7 does not address “fresh-start” measurements occurring after initial acquisition, it does state preferences if estimated cash flows of an asset or liability change, the original discount rate is applied to the revised cash flows. The FASB refers to this method as the “catch-up approach.”

(4) Recognition and Measurement

In SFAC 5, "Recognition and Measurement in Financial Statements of Business Enterprises," the FASB established concepts for deciding (1) when items should be presented (or recognized) in the financial statements, and (2) how to assign numbers to (or measure) those items. In general, the FASB has said that items should be recognized in the financial statements if they meet the following criteria: (i) *definitions*—the item meets the definition of an element of financial statements; (ii) *measurability*—it has a relevant attribute measurable with sufficient reliability; (iii) *relevance*—the information about it is capable of making a difference in user decisions; and (iv) *reliability*—the information is representationally faithful, verifiable, and neutral.

In SFAC 5, the FASB has stated that a full set of financial statements should show:

- (i) Financial position at the end of the period.
- (ii) Earnings for the period.
- (iii) Comprehensive income for the period. (This new concept is broader than earnings and includes all changes in owners' equity other than those that resulted from transactions with the owners. Some changes in asset values are included in this concept but are excluded from earnings).
- (iv) Cash flows during the period.
- (v) Investments by and distributions to owners during the period.

Scope of the Statement

SFAC No. 5 makes clear that the concepts discussed apply strictly to financial statements and not other means of disclosure. Indeed, it is almost vehement on the subject:

"Disclosure by other means is *not* recognition. Disclosure of information about the items in financial statements and their measures that may be provided by notes or parenthetically on the face of financial statements, by supplementary information, or by other means of financial reporting is not a substitute for recognition in financial statements for items that meet recognition criteria."

Earnings and Comprehensive Income

One of the principal concerns of SFAC No. 5 was the format and presentation of changes in owners' equity that do not arise from transactions with owners. This has been referred to as the matter of "display." Earnings replace net income and differ from the latter by excluding the cumulative effect on prior years of a change in accounting principle, such as a switch from straight-line depreciation to sum-of-the-years'-digits. Earnings thus are a better indicator of current operating performance than net income.

Accompanying the statement of earnings is a statement of comprehensive income. The latter is now conceived as a statement that covers all changes in owners' equity during the period except for transactions with owners. The previously mentioned

cumulative effect of a change in accounting principle would appear here. Also appearing here would be such items as the income effect of losses or gains (to the extent recognized) of marketable securities that are not classified as current assets as well as foreign currency translation adjustments. Finally, the only two items that are now classified as prior period adjustments enter into a comprehensive income statements.

The recasting of performance into earnings and comprehensive income in SFAC No. 5 arose as a result of the inability to come to grips with the measurement problem. Using earnings was, more or less, an attempt to maintain the status quo of income, and the possibility was open in the future to include unrealized holding gains in comprehensive income.

Recognition Criteria

Recognition criteria refers to when an asset, liability, expense, revenue, gain, or loss is recorded in the accounts. The fundamental recognition criteria from earlier parts of the conceptual framework are:

- Definitions. The item meets the definition of an element of financial statements.
- Measurability. It has a relevant attribute measurable with sufficient reliability
- Relevance. The information about it is capable of making a difference in user decisions.
- Reliability. The information is representationally faithful, verifiable, and neutral.

In applying recognition criteria to revenue and gain situations, recognition requires that the asset received has been realized or is realizable and that the revenue should be earned. Likewise, recognition criteria for expenses and losses arise as the asset is used up or when no further benefits are expected (para. 85). Recognition methods for expenses include matching with revenues, write-off during the period when cash is expended, or liabilities incurred for very short-lived expense items, or other systematic and rational procedures.

Measurement Attributes

The five measurement attributes are mentioned in SFAC No. 5:

- (1) Historical cost
- (2) Current cost (replacement cost)
- (3) Current market value (exit value)
- (4) Net realizable value (selling cost less any costs to complete or dispose)
- (5) Present (discounted) value of future cash flows

ICAI'S FRAMEWORK FOR THE PREPARATION AND PRESENTATION OF FINANCIAL STATEMENTS (JULY, 2000)

The Accounting Standards Board (ASB) of the ICAI issued a Framework in July, 2000 which provides the fundamental basis for development of new standards and also for review of existing standards.

The principal areas (subject matter) covered by the Framework are as follows:

I. Purpose and Status

This Framework sets out the concepts that underlie the preparation and presentation of financial statements for external users. The purpose of the Framework is to

- (a) assist preparers of financial statements in applying Accounting Standards and in dealing with topics that have yet to form the subject of an Accounting Standard;
- (b) assist the Accounting Standards Board in the development of future Accounting Standards and in its review of existing Accounting Standards;
- (c) assist the Accounting Standards Board in promoting harmonisation of regulations, accounting standards and procedures relating to the preparation and presentation of financial statements by providing a basis for reducing the number of alternative accounting treatments permitted by Accounting Standards;
- (d) assist auditors in forming an opinion as to whether financial statements conform with Accounting Standards;
- (e) assist users of financial statements in interpreting the information contained in financial statements prepared in conformity with Accounting Standards; and
- (f) provide those who are interested in the work of the Accounting Standards Board with information about its approach to the formulation of Accounting Standards.

The Accounting Standards Board recognises that in a limited number of cases there may be a conflict between the Framework and an Accounting Standard. In those cases where there is a conflict, the requirements of the Accounting Standard prevail over those of the Framework.

II. Scope

The Framework deals with:

- (a) the objective of financial statements;
- (b) the qualitative characteristics that determine the usefulness of information provided in financial statements;
- (c) definition, recognition and measurement of the elements from which financial statements are constructed, and
- (d) concepts of capital and capital maintenance.

The Framework is concerned with general purpose financial statements (hereafter referred to as 'financial statements'). Such financial statements are prepared and presented at least annually and are directed toward the common information needs of a wide range of users. Special purpose financial reports, prospectuses and computations prepared for taxation purposes, are outside the scope of this Framework. Nevertheless, the Framework may be applied in the preparation of such special purpose reports where their requirements permit.

The Framework applies to the financial statements of all reporting enterprises engaged in commercial, industrial and business activities, whether in the public or in the private sector.

III. Users and Their Information Needs

The users of financial statements include present and potential investors, employees, lenders, suppliers and other trade creditors, customers, governments and their agencies and the public. They use financial statements in order to satisfy some of their information needs. These needs include the following:

- (a) *Investors.* The providers of risk capital are concerned with the risk inherent in, and return provided by, their investments. They need information to help them determine whether they should buy, hold or sell. They are also interested in information which enables them to assess the ability of the enterprise to pay dividends.
- (b) *Employees.* Employees and their representative groups are interested in information about the stability and profitability of their employers. They are also interested in information which enables them to assess the ability of the enterprise to provide remuneration, retirement benefits and employment opportunities.
- (c) *Lenders.* Lenders are interested in information which enables them to determine whether their loans, and the interest attaching to them, will be paid when due.
- (d) *Suppliers and other trade creditors.* Suppliers and other creditors are interested in information which enables them to determine whether amounts owing to them will be paid when due. Trade creditors are likely to be interested in an enterprise over a shorter period than lenders unless they are dependent upon the continuance of the enterprise as a major customer.
- (e) *Customers.* Customers have an interest in information about the continuance of an enterprise, especially when they have a long term involvement with, or are dependent on, the enterprise.
- (f) *Governments and their agencies.* Governments and their agencies are interested in the allocation of resources and, therefore, the activities of enterprises. They also require information in order to regulate the activities of enterprises and determine taxation policies, and to serve as the basis for determination of national income and similar statistics.
- (g) *Public.* Enterprises affect members of the public in a variety of ways. For example, enterprises may make a substantial contribution to the local economy in many ways including the number of people they employ and their patronage of local suppliers. Financial statements may assist the public by providing information about the trends and recent developments in the prosperity of the enterprise and the range of its activities.

IV. The Objective of Financial Statements

The objective of financial statements is to provide information about the financial position, performance and cash flows of an enterprise that is useful to a wide range of users in making economic decisions.

Financial Position, Performance and Cash Flows

The economic decisions that are taken by users of financial statements require an evaluation of the ability of an enterprise to generate cash and cash equivalents and of the timing and certainty of their generation. This ability ultimately determines, for example, the capacity of an enterprise to pay its employees and suppliers, meet interest payments, repay loans, and make distributions to its owners. Users are better able to evaluate this ability to generate cash and cash equivalents if they are provided with information that focuses on the financial position, performance and cash flows of an enterprise.

The financial position of an enterprise is affected by the economic resources it controls, its financial structure, its liquidity and solvency, and its capacity to adapt to changes in the environment in which it operates. Information about the economic resources controlled by the enterprise and its capacity in the past to alter these resources is useful in predicting the ability of the enterprise to generate cash and cash equivalents in the future. Information about financial structure is useful in predicting future borrowing needs and how future profits and cash flows will be distributed among those with an interest in the enterprise; it is also useful in predicting how successful the enterprise is likely to be in raising further finance. Information about liquidity and solvency is useful in predicting the ability of the enterprise to meet its financial commitments as they fall due. Liquidity refers to the availability of cash in the near future to meet financial commitments over this period. Solvency refers to the availability of cash over the longer term to meet financial commitments as they fall due.

Information about the performance of an enterprise, in particular its profitability, is required in order to assess potential changes in the economic resources that it is likely to control in the future. Information about variability of performance is important in this respect. Information about performance is useful in predicting the capacity of the enterprise to generate cash flows from its existing resource base. It is also useful in forming judgements about the effectiveness with which the enterprise might employ additional resources.

Information concerning cash flows of an enterprise is useful in order to evaluate its investing, financing and operating activities during the reporting period. This information is useful in providing the users with a basis to assess the ability of the enterprise to generate cash and cash equivalents and the needs of the enterprise to utilise those cash flows.

V. Underlying Assumptions

Accrual Basis

In order to meet their objectives, financial statements are prepared on the accrual basis of accounting. Under this basis, the effects of transactions and other events are recognised when they occur (and not as cash or a cash equivalent is received or paid) and they are recorded in the accounting records and reported in the financial statements of the periods to which they relate.

Going Concern

The financial statements are normally prepared on the assumption that an enterprise is a going concern and will continue operation for the foreseeable future. Hence, it is assumed that the enterprise has neither the intention nor the need to liquidate or curtail materially the scale of its operations; if such an intention or need exists, the financial statements may have to be prepared on a different basis and, if so, the basis used is disclosed.

Consistency

In order to achieve comparability of the financial statements of an enterprise through time, the accounting policies are followed consistently from one period to another; a change in an accounting policy is made only in certain exceptional circumstances.

VI. Qualitative Characteristics of Financial Statements

Qualitative characteristics are the attributes that make the information provided in financial statements useful to users. The four principal qualitative characteristics are understandability, relevance, reliability and comparability.

Understandability

An essential quality of the information provided in financial statements is that it must be readily understandable by users. For this purpose, it is assumed that users have a reasonable knowledge of business and economic activities and accounting and study the information with reasonable diligence. Information about complex matters that should be included in the financial statements because of its relevance to the economic decision-making needs of users should not be excluded merely on the ground that it may be too difficult for certain users to understand.

Relevance

To be useful, information must be relevant to the decision making needs of users. Information has the quality of relevance when it influences the economic decisions of users by helping them evaluate past, present or future events or confirming, or correcting, their past evaluations.

Materiality

The relevance of information is affected by its materiality. Information is material if its misstatement (i.e., omission or erroneous statement) could influence the economic decisions of users taken on the basis of the financial information. Materiality depends on the size and nature of the item or error, judged in the particular circumstances of its misstatement. Materiality provides

a threshold or cut-off point rather than being a primary qualitative characteristic which the information must have if it is to be useful.

Reliability

To be useful, information must also be reliable. Information has the quality of reliability when it is free from material error and bias and can be depended upon by users to represent faithfully that which it either purports to represent or could reasonably be expected to represent.

Information may be relevant but so unreliable in nature or representation that its recognition may be potentially misleading. For example, if the validity and amount of a claim for damages under a legal action against the enterprise are highly uncertain, it may be inappropriate for the enterprise to recognise the amount of the claim in the balance sheet, although it may be appropriate to disclose the amount and circumstances of the claim.

Faithful Representation

To be reliable, information must represent faithfully the transactions and other events it either purports to represent or could reasonably be expected to represent. Thus, for example, a balance sheet should represent faithfully the transactions and other events that result in assets, liabilities and equity of the enterprise at the reporting date which meet the recognition criteria.

Substance Over Form

If information is to represent faithfully the transactions and other events that it purports to represent, it is necessary that they are accounted for and presented in accordance with their substance and economic reality and not merely their legal form. The substance of transactions or other events is not always consistent with that which is apparent from their legal or contrived form. For example, where rights and beneficial interest in an immovable property are transferred but the documentation and legal formalities are pending, the recording of acquisition/disposal (by the transferee and transferor respectively) would in substance represent the transaction entered into.

Neutrality

To be reliable, the information contained in financial statements must be neutral, that is, free from bias. Financial statements are not neutral if, by the selection or presentation of information, they influence the making of a decision or judgement in order to achieve a predetermined result or outcome.

Prudence

Prudence is the inclusion of a degree of caution in the exercise of the judgements needed in making the estimates required under conditions of uncertainty, such that assets or income are not overstated and liabilities or expenses are not understated. However, the exercise of prudence does not allow, for example, the creation of hidden reserves or excessive provisions, the deliberate understatement of assets or income, or the deliberate overstatement of liabilities or expenses, because the financial statements would then not be neutral and, therefore, not have the quality of reliability.

Completeness

To be reliable, the information in financial statements must be complete within the bounds of materiality and cost. An omission can cause information to be false or misleading and thus unreliable and deficient in terms of its relevance.

Comparability

Users must be able to compare the financial statements of an enterprise through time in order to identify trends in its financial position, performance and cash flows. Users must also be able to compare the financial statements of different enterprises in order to evaluate their relative financial position, performance and cash flows.

An important implication of the qualitative characteristic of comparability is that users be informed of the accounting policies employed in the preparation of the financial statements, any changes in those policies and the effects of such changes.

The need for comparability should not be confused with mere uniformity and should not be allowed to become an impediment to the introduction of improved accounting standards. It is not appropriate for an enterprise to continue accounting in the same manner for a transaction or other event if the policy adopted is not in keeping with the qualitative characteristics of relevance and reliability. It is also inappropriate for an enterprise to leave its accounting policies unchanged when more relevant and reliable alternatives exist.

Constraints on Relevant and Reliable Information

Timeliness

If there is undue delay in the reporting of information it may lose its relevance. Management may need to balance the relative merits of timely reporting and the provision of reliable information.

Balance between Benefit and Cost

The balance between benefit and cost is a pervasive constraint rather than a qualitative characteristic. The benefits derived from information should exceed the cost of providing it. The evaluation of benefits and costs is, however, substantially a judgmental process.

Balance between Qualitative Characteristics

In practice, a balancing, or trade-off, between qualitative characteristics is often necessary. Generally the aim is to achieve an appropriate balance among the characteristics in order to meet the objective of financial statements. The relative importance of the characteristics in different cases is a matter of professional judgment.

True and Fair View

Financial statements are frequently described as showing a true and fair view of the financial position, performance and cash flows of an enterprise. Although this Framework does not deal directly with such concepts, the application of the principal qualitative characteristics and of appropriate accounting standards normally results in financial statements that convey

what is generally understood as a true and fair view of such information.

VII. The Elements of Financial Statement

Financial statements portray the financial effects of transactions and other events by grouping them into broad classes according to their economic characteristics. These broad classes are termed the elements of financial statements. The elements directly related to the measurement of financial position in the balance sheet are assets, liabilities and equity. The elements directly related to the measurement of performance in the statement of profit and loss are income and expenses. The cash flow statement usually reflects elements of statement of profit and loss and changes in balance sheet elements; accordingly, this Framework identifies no elements that are unique to this statement.

VIII. Recognition of the Elements of Financial Statements

Recognition is the process of incorporating in the balance sheet or statement of profit and loss an item that meets the definition of an element and satisfies the criteria for recognition. It involves the depiction of the item in words and by a monetary amount and the inclusion of that amount in the totals of balance sheet or statement of profit and loss. Items that satisfy the recognition criteria should be recognised in the balance sheet or statement of profit and loss. The failure to recognise such items is not rectified by disclosure of the accounting policies used nor by notes or explanatory material.

An item that meets the definition of an element should be recognised if:

- (a) it is probable that any future economic benefit associated with the item will flow to or from the enterprise; and
- (b) the item has a cost or value that can be measured with reliability.

In assessing whether an item meets these criteria and therefore qualifies for recognition in the financial statements, regard needs to be given to the materiality considerations. The interrelationship between the elements means that an item that meets the definition and recognition criteria for a particular element, for example, an asset, automatically requires the recognition of another element, for example, income or a liability.

Reliability of Measurement

The second criterion for the recognition of an item is that it possesses a cost or value that can be measured with reliability. In many cases, cost or value must be estimated; the use of reasonable estimates is an essential part of the preparation of financial statements and does not undermine their reliability. When, however, a reasonable estimate cannot be made, the item is not recognised in the balance sheet or statement of profit and loss. For example, the damages payable in a lawsuit may meet the definitions of both a liability and an expense as well as the probability criterion for recognition; however, if it is not possible to measure the claim reliably, it should not be recognised as a liability or as an expense.

An item that, at a particular point in time, fails to meet the recognition criteria may qualify for recognition at a later date as a result of subsequent circumstances or events.

An item that possesses the essential characteristics of an element but fails to meet the criteria for recognition may nonetheless warrant disclosure in the notes, explanatory material or supplementary schedules.

IX. Measurement of the Elements of Financial Statements

Measurement is the process of determining the monetary amounts at which the elements of financial statements are to be recognised and carried in the balance sheet and statement of profit and loss. This involves the selection of the particular basis of measurement.

A number of different measurement bases are employed to different degrees and in varying combinations in financial statements. They include the following:

- (a) *Historical cost.* Assets are recorded at the amount of cash or cash equivalents paid or the fair value of the other consideration given to acquire them at the time of their acquisition. Liabilities are recorded at the amount of proceeds received in exchange for the obligation, or in some circumstances (for example, income taxes), at the amounts of cash or cash equivalents expected to be paid to satisfy the liability in the normal course of business.
- (b) *Current cost.* Assets are carried at the amount of cash or cash equivalents that would have to be paid if the same or an equivalent asset were acquired currently. Liabilities are carried at the undiscounted amount of cash or cash equivalents that would be required to settle the obligation currently.
- (c) *Realisable (settlement) value.* Assets are carried at the amount of cash or cash equivalents that could currently be obtained by selling the asset in an orderly disposal. Liabilities are carried at their settlement values, that is, the undiscounted amounts of cash or cash equivalents expected to be required to settle the liabilities in the normal course of business.
- (d) *Present value.* Assets are carried at the present value of the future net cash inflows that the item is expected to generate in the normal course of business. Liabilities are carried at the present value of the future net cash outflows that are expected to be required to settle the liabilities in the normal course of business.

The measurement basis most commonly adopted by enterprises in preparing their financial statements is historical cost. This is usually combined with other measurement bases. For example, inventories are usually carried at the lower of cost and net realisable value and pension liabilities are carried at their present value. Furthermore, the current cost basis may be used as a response to the inability of the historical cost accounting

model to deal with the effects of changing prices of non monetary assets.

X. Concepts of Capital and Capital Maintenance

Concepts of Capital

Under a financial concept of capital, such as invested money or invested purchasing power, capital is synonymous with the net assets or equity of the enterprise. Under a physical concept of capital, such as operating capability, capital is regarded as the productive capacity of the enterprise based on, for example, units of output per day.

The selection of the appropriate concept of capital by an enterprise should be based on the needs of the users of its financial statements. Thus, a financial concept of capital should be adopted if the users of financial statements are primarily concerned with the maintenance of nominal invested capital or the purchasing power of invested capital. If, however, the main concern of users is with the operating capability of the enterprise, a physical concept of capital should be used. The concept chosen indicates the goal to be attained in determining profit, even though there may be some measurement difficulties in making the concept operational.

Concepts of Capital Maintenance and the Determination of Profit

The concepts of capital described herein give rise to the following concepts of capital maintenance:

- (a) *Financial capital maintenance.* Under this concept, a profit is earned only if the financial (or money) amount of the net assets at the end of the period exceeds the financial (or money) amount of net assets at the beginning of the period, after excluding any distributions to, and contributions from, owners during the period. Financial capital maintenance can be measured in either nominal monetary units or units of constant purchasing power.
- (b) *Physical capital maintenance.* Under this concept, a profit is earned only if the physical productive capacity (or operating capability) of the enterprise at the end of the period exceeds the physical productive capacity at the beginning of the period, after excluding any distributions to, and contributions from, owners during the period.

The concept of capital maintenance is concerned with how an enterprise defines the capital that it seeks to maintain. It provides the linkage between the concepts of capital and the concepts of profit because it provides the point of reference by which profit is measured; it is a prerequisite for distinguishing between an enterprise's return on capital and its return of capital, only inflows of assets in excess of amounts needed to maintain capital can be regarded as profit and therefore as a return on capital. Hence, profit is the residual amount that remains after expenses (including capital maintenance adjustments, where

appropriate) have been deducted from income. If expenses exceed income, the residual amount is a net loss.

The physical capital maintenance concept requires the adoption of the current cost basis of measurement. The financial capital maintenance concept, however, does not require the use of a particular basis of measurement. Selection of the basis under this concept is dependent on the type of financial capital that the enterprise is seeking to maintain.

The principal difference between the two concepts of capital maintenance is the treatment of the effects of changes in the prices of assets and liabilities of the enterprise. In general terms, an enterprise has maintained its capital if it has as much capital at the end of the period as it had at the beginning of the period. Any amount over and above that required to maintain the capital at the beginning of the period is profit.

Under the concept of financial capital maintenance where capital is defined in terms of nominal monetary units, profit represents the increase in nominal money capital over the period. Thus, increases in the prices of assets held over the period, conventionally referred to as holding gains, are, conceptually, profits. They may not be recognised as such, however, until the assets are disposed of in an exchange transaction. When the concept of financial capital maintenance is defined in terms of constant purchasing power units, profit represents the increase in invested purchasing power over the period. Thus, only that part of the increase in the prices of assets that exceeds the increase in the general level of prices is regarded as profit. The rest of the increase is treated as a capital maintenance adjustment and, hence, as part of equity.

Under the concept of physical capital maintenance when capital is defined in terms of the physical productive capacity, profit represents the increase in that capital over the period. All price changes affecting the assets and liabilities of the enterprise are viewed as changes in the measurement of the physical productive capacity of the enterprise; hence, they are treated as capital maintenance adjustments that are part of equity and not as profit.

The selection of the measurement bases and concept of capital maintenance will determine the accounting model used in the preparation of the financial statements. Different accounting models exhibit different degrees of relevance and reliability and, as in other areas, management must seek a balance between relevance and reliability. This Framework is applicable to a range of accounting models and provides guidance on preparing and presenting the financial statements under the chosen model.

QUALITATIVE CHARACTERISTICS OF FINANCIAL REPORTING INFORMATION

The qualitative characteristics of useful financial information identify the types of information that are likely to be most useful to the existing and potential investors, lenders and other creditors for making decisions about the reporting entity on the basis of information in its financial report (financial information).

The qualitative characteristics of useful financial information apply to financial information provided in financial statements, as well as to financial information provided in other ways. Cost, which is a pervasive constraint on the reporting entity's ability to provide useful financial information, applies similarly. However, the considerations in applying the qualitative characteristics and the cost constraint may be different for different types of information. For example, applying them to forward-looking information may be different from applying them to information about existing economic resources and claims and to changes in those resources and claims.

Qualitative characteristics or qualities necessary for information serve a major supporting role in the decision usefulness, decision model approach to accounting theory. Qualitative characteristics are the attributes that make the information provided in financial statements useful to users. Accounting information that is reported to facilitate economic decisions should possess certain characteristics or normative standards. The information must be useful in the formulation of objectives, the making of decisions, or the direction and control of resources to accomplish objectives. The utility of information lies in its ability to reduce uncertainty about the actual state of affairs of a business enterprise to the user. The characteristics make information a desirable commodity and guide the selection of preferred accounting policies and methods from among available alternatives. These characteristics have been viewed as a hierarchy of qualities with usefulness for decision making of most importance. The hierarchy of informational qualities which has been accepted by FASB (USA) in its Concept No. 2 "Qualitative Characteristics of Accounting Information" is displayed in Fig 14.6. SFAC Concept No. 2 has recognized relevance and reliability as fundamental qualitative characteristics (Figure 14.6). However, SFAC No. 8 Conceptual Framework for Financial Reporting (2010) has accepted relevance and faithful representation as fundamental qualitative characteristics. SFAC 8 says:

"If financial information is to be useful, it must be relevant and faithfully represent what it purports to represent. The usefulness of financial information is enhanced if it is comparable, verifiable, timely, and understandable."

Qualitative characteristics of useful information as suggested by SFAC No. 8 issued by FASB in September 2010 are exhibited in Figure 14.7.

International Accounting Standards Board (earlier IASC) has also recognized relevance and faithful representation as fundamental qualitative characteristics in its Conceptual Framework (Sept. 2010). The other qualities recognized by IASB are:

1. Comparability
2. Verifiability
3. Timeliness
4. Understandability

These qualitative characteristics have been discussed below:

(The discussion of qualitative characteristics is based on IASB's Conceptual Framework for Financial Reporting issued in September 2010 by IASB.)

1. Relevance

Relevant financial information is capable of making a difference in the decisions made by users. Information may be capable of making a difference in a decision even if some users choose not to take advantage of it or are already aware of it from other sources.

Financial information is capable of making a difference in decisions if it has predictive value, confirmatory value or both.

Financial information has predictive value if it can be used as an input to processes employed by users to predict future outcomes. Financial information need not be a prediction or forecast to have predictive value. Financial information with predictive value is employed by users in making their own predictions.

Financial information has confirmatory value if it provides feedback about (confirms or changes) previous evaluations.

The predictive value and confirmatory value of financial information are interrelated. Information that has predictive value often also has confirmatory value. For example, revenue information for the current year, which can be used as the basis for predicting revenues in future years, can also be compared with revenue predictions for the current year that were made in past years. The results of those comparisons can help a user to correct and improve the processes that were used to make those previous predictions.

Materiality

Information is material if omitting it or misstating it could influence decisions that users make on the basis of financial information about a specific reporting entity. In other words, materiality is an entity-specific aspect of relevance based on the nature or magnitude, or both, of the items to which the information relates in the context of an individual entity's financial report. Consequently, the Board cannot specify a uniform quantitative threshold for materiality or predetermine what could be material in a particular situation.

2. Faithful representation

Financial reports represent economic phenomena in words and numbers. To be useful, financial information must not only represent relevant phenomena but it must also faithfully represent the phenomena that it purports to represent. To be a perfectly faithful representation, a depiction would have three characteristics. It would be complete, neutral and free from error. Of course perfection is seldom, if ever, achievable. The Board's (IASB) objective is to maximise those qualities to the extent possible.

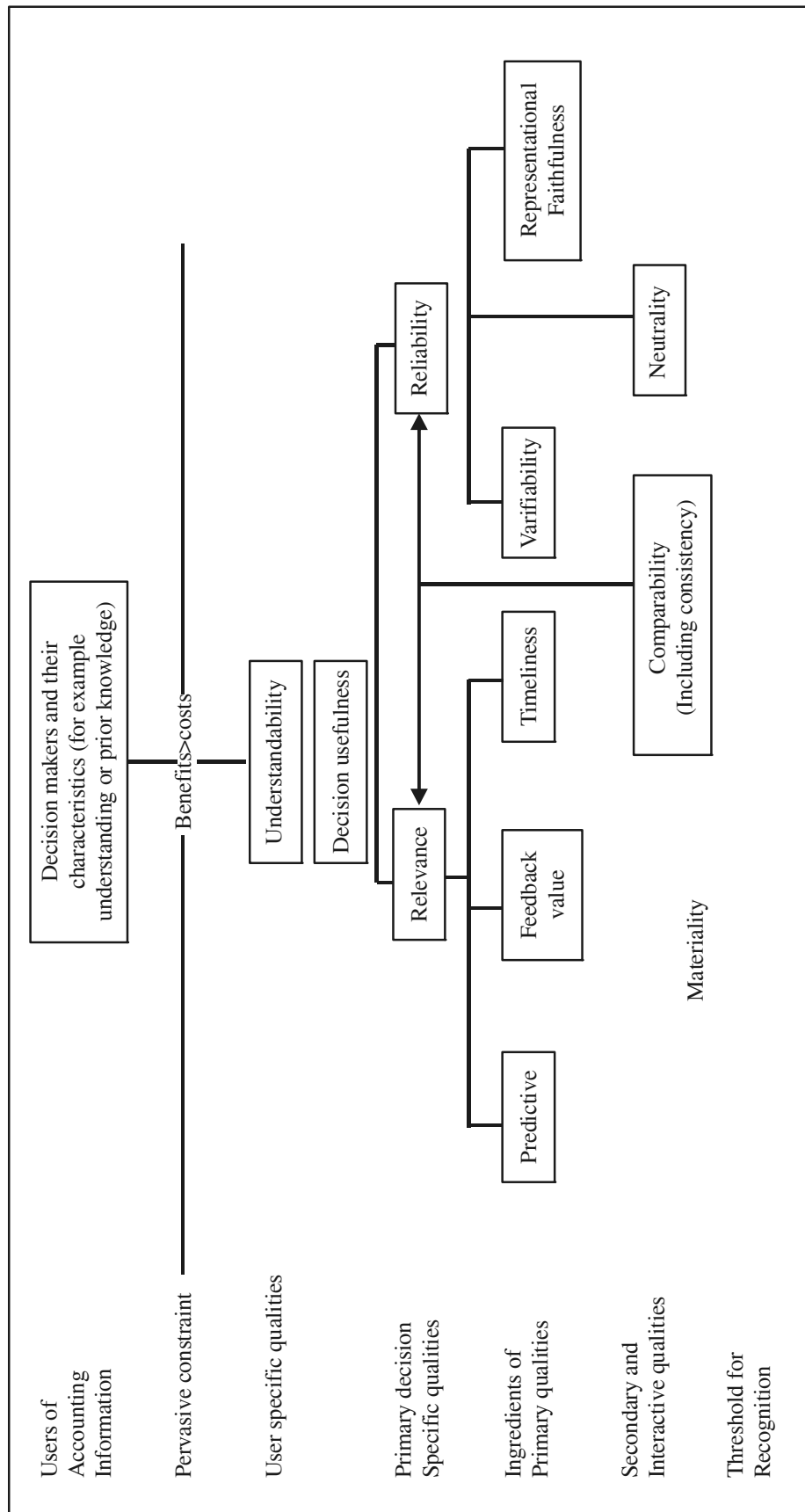


Figure 14.6 : A Hierarchy of Accounting Qualities

Source : Financial Accounting Standards Board, *Statement of Financial Accounting Concept No. 2, Qualitative Characteristics of Accounting Information*, Stamford: FASB, p. 15.

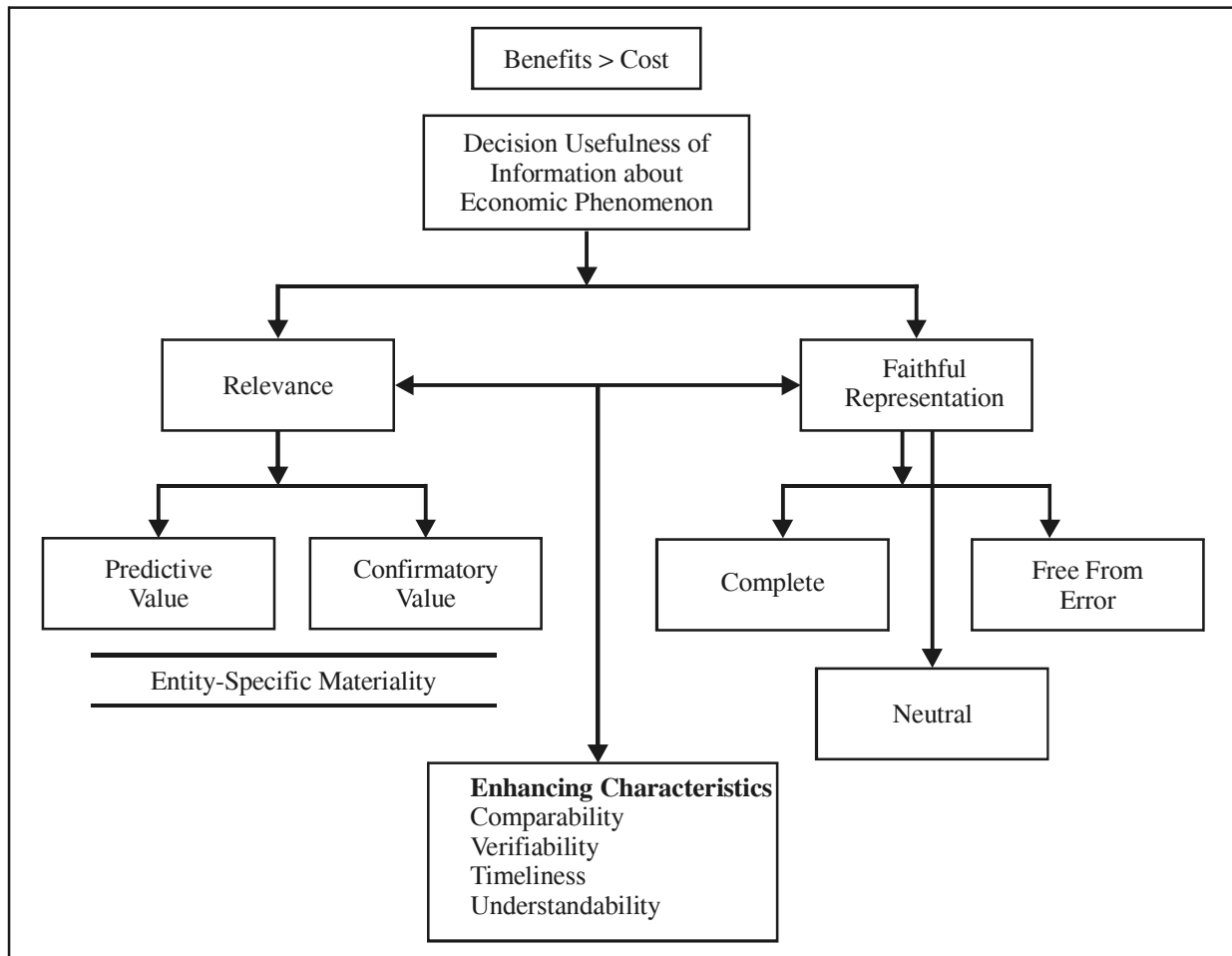


Figure 14.7: Qualitative Characteristics of Useful Financial Information

Source: Financial Accounting Standards Board (FASB), Statement of Financial Accounting Concepts (SFAC) No. 8, September 2010.

A complete depiction includes all information necessary for a user to understand the phenomenon being depicted, including all necessary descriptions and explanations. For example, a complete depiction of a group of assets would include, at a minimum, a description of the nature of the assets in the group, a numerical depiction of all of the assets in the group, and a description of what the numerical depiction represents (for example, original cost, adjusted cost or fair value). For some items, a complete depiction may also entail explanations of significant facts about the quality and nature of the items, factors and circumstances that might affect their quality and nature, and the process used to determine the numerical depiction.

A neutral depiction is without bias in the selection or presentation of financial information. A neutral depiction is not slanted, weighted, emphasised, de-emphasised or otherwise manipulated to increase the probability that financial information will be received favourably or unfavourably by users. Neutral information does not mean information with no purpose or no influence on behaviour. On the contrary, relevant financial

information is, by definition, capable of making a difference in users' decisions.

Faithful representation does not mean accurate in all respects. Free from error means there are no errors or omissions in the description of the phenomenon, and the process used to produce the reported information has been selected and applied with no errors in the process. In this context, free from error does not mean perfectly accurate in all respects. For example, an estimate of an unobservable price or value cannot be determined to be accurate or inaccurate. However, a representation of that estimate can be faithful if the amount is described clearly and accurately as being an estimate, the nature and limitations of the estimating process are explained, and no errors have been made in selecting and applying an appropriate process for developing the estimate.

A faithful representation, by itself, does not necessarily result in useful information. For example, a reporting entity may receive property, plant and equipment through a government grant. Obviously, reporting that an entity acquired all asset at no cost would faithfully represent its cost, but that information would

probably not be very useful. A slightly more subtle example is an estimate of the amount by which an asset's carrying amount should be adjusted to reflect an impairment in the asset's value. That estimate can be a faithful representation if the reporting entity has properly applied an appropriate process, properly described the estimate and explained any uncertainties that significantly affect the estimate. However, if the level of uncertainty in such an estimate is sufficiently large, that estimate will not be particularly useful. In other words, the relevance of the asset being faithfully represented is questionable. If there is no alternative representation that is more faithful, that estimate may provide the best available information.

Applying the fundamental qualitative characteristics

Information must be both relevant and faithfully represented if it is to be useful. Neither a faithful representation of an irrelevant phenomenon nor an unfaithful representation of a relevant phenomenon helps users make good decisions.

The most efficient and effective process for applying the fundamental qualitative characteristics would usually be as follows (subject to the effects of enhancing characteristics and the cost constraint, which are not considered in this example). First, identify an economic phenomenon that has the potential to be useful to users of the reporting entity's financial information. Second, identify the type of information about that phenomenon that would be most relevant if it is available and can be faithfully represented. Third, determine whether that information is available and can be faithfully represented. If so, the process of satisfying the fundamental qualitative characteristics ends at that point. If not, the process is repeated, with the next most relevant type of information.

Enhancing qualitative characteristics

Comparability, verifiability, timeliness and understandability are qualitative characteristics that enhance the usefulness of information that is relevant and faithfully represented. The enhancing qualitative characteristics may also help determine which of two ways should be used to depict a phenomenon if both are considered equally relevant and faithfully represented.

3. Comparability

Users' decisions involve choosing between alternatives, for example, selling or holding an investment, or investing in one reporting entity or another. Consequently, information about a reporting entity is more useful if it can be compared with similar information about other entities and with similar information about the same entity for another period or another date.

Comparability is the qualitative characteristic that enables users to identify and understand similarities in, and differences among items. Unlike the other qualitative characteristics, comparability does not relate to a single item. A comparison requires at least two items.

Consistency, although related to comparability, is not the same. Consistency refers to the use of the same methods for the

same items, either from period to period within a reporting entity or in a single period across entities. Comparability is the goal; consistency helps to achieve that goal.

Comparability is not uniformity. For information to be comparable, like things must look alike and different things must look different. Comparability of financial information is not enhanced by making unlike things look alike any more than it is enhanced by making like things look different.

Some degree of comparability is likely to be attained by satisfying the fundamental qualitative characteristics. A faithful representation of a relevant economic phenomenon should naturally possess some degree of comparability with a faithful representation of a similar relevant economic phenomenon by another reporting entity.

Although a single economic phenomenon can be faithfully represented in multiple ways, permitting alternative accounting methods for the same economic phenomenon diminishes comparability.

4. Verifiability

Verifiability helps assure users that information faithfully represents the economic phenomena it purports to represent. Verifiability means that different knowledgeable and independent observers could reach consensus, although not necessarily complete agreement, that a particular depiction is a faithful representation. Quantified information need not be a single point estimate to be verifiable. A range of possible amounts and the related probabilities can also be verified.

Verification can be direct or indirect. Direct verification means verifying an amount or other representation through direct observation, for example, by counting cash. Indirect verification means checking the inputs to a model, formula or other technique and recalculating the outputs using the same methodology. An example is verifying the carrying amount of inventory by checking the inputs (quantities and costs) and recalculating the ending inventory using the same cost flow assumption (for example, using the first-in, first-out method).

It may not be possible to verify some explanation and forward-looking financial information until a future period, if at all. To help users decide whether they want to use that information, it would normally be necessary to disclose the underlying assumptions, the methods of compiling the information and other factors and circumstances that support the information.

5. Timeliness

Timeliness means having information available to decision-makers in time to be capable of influencing their decisions. Generally, the older the information is the less useful it is. However, some information may continue to be timely long after the end of a reporting period because, for example, some users may need to identify and assess trends.

6. Understandability

Classifying, characterising and presenting information clearly and concisely makes it understandable.

Some phenomena are inherently complex and cannot be made easy to understand. Excluding information about those phenomena from financial reports might make the information in those financial reports easier to understand. However, those reports would be incomplete and therefore potentially misleading.

Financial reports are prepared for users who have a reasonable knowledge of business and economic activities and who review and analyse the information diligently. At times, even well-informed and diligent users may need to seek the aid of an adviser to understand information about complex economic phenomena.

Applying the enhancing qualitative characteristics

Enhancing qualitative characteristics should be maximised to the extent possible. However, the enhancing qualitative characteristics, either individually or as a group, cannot make information useful if that information is irrelevant or not faithfully represented.

Applying the enhancing qualitative characteristics is an iterative process that does not follow a prescribed order. Sometimes, one enhancing qualitative characteristic may have to be diminished to maximise another qualitative characteristic. For example, a temporary reduction in comparability as a result of prospectively applying a new financial reporting standard may be worthwhile to improve relevance or faithful representation in the longer term. Appropriate disclosures may partially compensate for non-comparability.

The cost constraint on useful financial reporting

Cost is a pervasive constraint on the information that can be provided by financial reporting. Reporting financial information imposes costs, and it is important that those costs are justified by the benefits of reporting that information. There are several types of costs and benefits to consider.

Providers of financial information expend most of the effort involved in collecting, processing, verifying and disseminating financial information, but users ultimately bear those costs in the form of reduced returns. Users of financial information also incur costs of analysing and interpreting the information provided. If needed information is not provided, users incur additional costs to obtain that information elsewhere or to estimate it.

Reporting financial information that is relevant and faithfully represents what it purports to represent helps users to make decisions with more confidence. This results in more efficient functioning of capital markets and a lower cost of capital for the economy as a whole. An individual investor, lender or other creditor also receives benefits by making more informed decisions. However, it is not possible for general purpose financial reports to provide all the information that every user finds relevant.

In applying the cost constraint, the Board (IASB) assesses whether the benefits of reporting particular information are likely to justify the costs incurred to provide and use that information. When applying the cost constraint in developing a proposed financial reporting standard, the Board seeks information from providers of financial information, users, auditors, academics and others about the expected nature and quantity of the benefits and costs of that standard. In most situations, assessments are based on a combination of quantitative and qualitative information.

Because of the inherent subjectivity, different individuals' assessments of the costs and benefits of reporting particular items of financial information will vary. Therefore, the Board seeks to consider costs and benefits in relation to financial reporting generally, and not just in relation to individual reporting entities. That does not mean that assessments of costs and benefits always justify the same reporting requirements for all entities. Differences may be appropriate because of different sizes of entities, different ways of raising capital (publicly or privately), different users' needs or other factors.

Other Qualitative Characteristics of Accounting Information

Some other qualities which have been suggested in accounting literature (for example, FASB, SFAC No. 2 etc.) are as follows:

1. Reliability

Reliability is described as one, of the two primary qualities (relevance and reliability) that make accounting information useful for decisionmaking. Reliable information is required to form judgements about the earning potential and financial position of a business firm. Reliability differs from item to item. Some items of information presented in an annual report may be more reliable than others. For example, information regarding plant and machinery may be less reliable than certain information about current assets because of differences in uncertainty of realisation. Reliability is that quality which permits users of data to depend upon it with confidence as representative of what it purports to represent. FASB Concept No. 2 concludes:

“The reliability of a measure rests on the faithfulness with which it represents what it purports to represent, coupled with an assurance for the user that it has that representational quality’. To be useful, information must be reliable as well as relevant. Degrees of reliability must be recognised. It is hardly ever a question of black or white, but rather of more reliability or less. Reliability rests upon the extent to which the accounting description or measurement is verifiable and representationally faithful. Neutrality of information also interacts with those two components of reliability to affect the usefulness of the information.⁵

FASB (USA) finds that it is not always easy to maintain a clear distinction between relevance and reliability, yet it is important to try to keep the two concepts apart. To explain this point, the FASB (Concept No. 2) illustrates further.⁶

“Two different meanings of reliability can be distinguished and illustrated by considering what might be meant by describing a drug as reliable. It could mean that the drug can be relied on to cure or alleviate the condition for which it was prescribed, or it could mean that a dose of the drug can be relied on to conform to the formula shown on the label. The first meaning implies that the drug is effective at doing what it is expected to do. The second meaning implies nothing about effectiveness but does imply a correspondence between what is represented on the label and what is contained in the bottle.”

There are many factors affecting the reliability of information such as uncertainties inherent in the subject matter and accounting measurements. Accounting measurements, like others, may be subject to error. A continuing source of misunderstanding about accounting information and measurements is the tendency to attribute to them a level of precision which is not practicable or attainable. The possibility of error in measuring information and business events may create difficulty in attaining high degree of reliability. Thus, measurement constraints in accounting place restriction on the accuracy and reliability of information. Adequate disclosure in annual reports, however, requires that users should be informed about the data limitations and the magnitude of possible measurement errors. The reliability concept does not imply 100 per cent reliability or accuracy. Non-disclosure of limitations attached with information will mislead the users. It can be noted that the most reliable information may not be the most significant for users in making economic decisions and assessment of an enterprise's earning power.

It is the responsibility of management to report reliable information in annual reports. The goal of reliable information can be achieved by management if it applies generally accepted accounting principles, appropriate to the enterprise's circumstances, maintains proper and effective systems of accounts and internal control and prepares adequate financial statements. If corporate management decides to disclose uncertainties and assumptions in annual reports, they will increase the value of the information expressed therein.

2. Consistency

Consistency of method over a period of time is a valuable quality that makes accounting numbers more useful. Consistent use of accounting principles from one accounting period to another enhances the utility of financial statements to users by facilitating analysis and understanding of comparative accounting data. It is relatively unimportant to the investor what precise rules or conventions are adopted by a company in reporting its earnings, if he knows what method is being followed and is assured that it is followed consistently from year to year. Lack of consistency produces lack of comparability. The value of intercompany comparisons is substantially reduced when material differences in income are caused by variations in accounting practices.

The quality of consistency can be applied in different situations, *e.g.*, use of same accounting procedures by a single firm or accounting entity from period to period, the use of similar measurement concepts and procedures for related items within the statement of a firm for a single period, and the use of same procedures by different firms. If a change in accounting practices or procedures is made, disclosure of the change and its effects permits some comparability, although users can rarely make adjustments that make the data completely comparable.

Consistency in the use of accounting procedures over a period is a user constraint, otherwise there would be difficulty in making predictions. If different measurement procedures are adopted, it is difficult to predict trends in earning power or financial position of a company. If assets are valued at cost in some periods, and at replacement cost in others, the firm's earning power may be distorted, especially when the difference in cost and replacement cost is significant over a period of time.

Although consistency in the use of accounting principles from one accounting period to another is a desirable quality, but it, if pushed too far, will prove a bottleneck for bringing about improvements in accounting policies, practices, and procedures. No change to a preferred accounting method can be made without sacrificing consistency; there is no way that accounting can develop without change. Users' needs may change over time which would require a change in accounting principles, standards and methods. These improvements are needed to serve users' needs in changing circumstances. When it is found that current practices or presentations being followed are not fulfilling users' purposes, a new practice or procedure should be adopted. According to Backer,⁷ “different accounting methods are needed to reflect different management objectives and circumstances. The consensus of opinion among analysts interviewed was that standards are desirable as guidelines to financial reporting, but that management should be free to depart from these standards provided methods used and their effects are clearly disclosed”.

Thus, consistency and uniformity in accounting methods would not necessarily bring comparability. Instead of enforced uniformity, accounting standards should be developed which would be best or preferred methods in most cases. Such accounting standards should be followed unless there is a compelling reason why they will not provide a correct and useful reflection of business operations and results. Also, full disclosure should be made of the alternative method applied and, whenever practical, of the monetary difference resulting from deviations from the standard. To conclude, consistency is desirable, until a need arises to improve practices, policies, and procedures.

3. Neutrality

Neutrality is also known as the quality of ‘freedom from bias’ or objectivity. Neutrality means that, in formulating or implementing standards, the primary concern should be the relevance and reliability of the information that results, not the effect that the new rule may have on a particular interest or user(s). A neutral choice between accounting alternatives is free from

bias towards a predetermined result. The objectives of (general purpose) financial reporting serve many different information users who have diverse interests, and no one predetermined result is likely to suit all users' interests and purposes. Therefore, accounting facts and accounting practices should be impartially determined and reported with no objective of purposeful bias toward any user or user group. If there is no bias in selection of accounting information reported, it cannot be said to favour one set of interests over another. It may, in fact, favour certain interests, but only because the information points that way.

To say that information should be free from bias is not to say that standards setters or providers of information should not have a purpose in mind for financial reporting. In fact, information must be purposeful. Neutrality neither means 'without purpose' nor does it mean that accounting should be without influence on human behaviour. Accounting information cannot avoid affecting behaviour, nor should it. If it were otherwise, the information would be valueless—by definition, irrelevant and—the effort to produce it would be futile. It is, above all, the predetermination of a desired result, and the consequential selection of information to induce that result, that is the negation of neutrality in accounting. To be neutral, accounting information must report economic activity as faithfully as possible, without colouring the image it communicates for the purpose of influencing behaviour in some particular direction.⁸

For a standard to be neutral, it is not necessary that it treats everyone alike in all respects. A standard could require less disclosure from a small enterprise than it does from a large one without having its neutrality impugned. Nevertheless, in general, standards that apply differently need to be looked at carefully to ensure that the criterion of neutrality is not being violated.

4. Materiality

The concept of materiality permeates the entire field of accounting and auditing. The materiality concept implies that not all financial information need or should be communicated in accounting reports—only material information should be reported. Immaterial information may and probably should be omitted. Information should be disclosed in the annual report which is likely to influence economic decisions of the users. Information that meets this requirement is material.

In recent accounting literature, where relevance and reliability are held upon as the primary qualitative characteristics that accounting information must have if it is to be useful, materiality is not recognised as a primary characteristic of the same kind. Materiality judgments are, primarily, quantitative in nature. They are described as the relative quantitative importance of some piece of financial information to a user, in the context of a decision to be made. They pose the question: Is this item large enough for users of information to be influenced by it? However, the answer to that question will usually be affected by the nature of the item; items too small to be thought material, if they result from routine transactions, may be considered material if they arise in abnormal circumstances. Thus, materiality of an item depends not only

upon its relative size, but also upon its nature or combination of both, that is, on either quantitative or qualitative characteristics, or on both.

Generally, the decision makers (investor, accountant and manager) see materiality in relation to actual assets or income. Investors see materiality in terms of the rate of change or change in the rate of change. What seems not to be material in business may turn out to be very important in the investment market. It has been established that the effect on earnings was the primary standard to evaluate materiality in a specific case. Guidelines to test materiality are: amount of the item, trend of net income, average net income for a series of years, assets, liabilities, trends and ratios that establish meaningful analytical relationship of information contained in annual reports. Almost always, the relative rather than the absolute size of a judgment item determines whether it should be considered material in a given situation. Losses from bad debts or pilferage that could be shrugged off as routine by a large business may threaten the continued existence of a small one. An error in inventory valuation may be material in a small enterprise for which it cut earnings in half, but immaterial in an enterprise for which it might make barely perceptible ripple in the earnings. Another factor in materiality judgments is the degree of precision that is attainable in estimating the judgment item. The amount of deviation that is considered immaterial may increase as the attainable degree of precision decreases. For example, accounts payable usually can be estimated more accurately than can contingent liabilities arising from litigation or threats of it, and a deviation considered to be material in the first case may be quite trivial in the second.

Relevance and Materiality

Materiality, like relevance, is not usually considered by accountants as a qualitative characteristic. Materiality is directly related to measurement and is a quantitative characteristic. Materiality judgements have been partially based on an item of information's relative size when compared with some pertinent base such as net income or revenue. Of course, in some situations, the nature of some items of information may dictate their materiality regardless of their relative size or the fact that they cannot be adequately quantified. Magnitude of the item by itself, without regard to the nature of the item and the circumstances in which the judgment has to be made, will not generally be a sufficient basis for a materiality judgment. Relevance generally refers to the nature of the item with respect to specific or general uses of financial reports, while materiality refers to the significance of a specific item in a specific context. In spite of the differences in the two concepts (relevance and materiality) both have much in common—both are defined in terms of what influences or makes a difference to an investor or other decision maker.

5. Conservatism

Conservatism is generally referred to as a convention that many accountants believe to be appropriate in making accounting decisions. According to APB (USA) Statement 4:

“Frequently, assets and liabilities are measured in a context of significant uncertainties. Historically, managers, investors, and accountants have generally preferred that possible errors in measurement be in the direction of understatement rather than overstatement of net income and net assets. This has led to the convention of conservatism.”⁹

There is a place for a convention, such as conservatism—meaning prudence, in financial accounting and reporting, because business and economic activities are surrounded by uncertainty, but it needs to be applied with care. Conservatism in financial reporting should no longer connote deliberate, consistent, understatement of net assets and profits. Conservatism is a prudent reaction to uncertainty to try to ensure that uncertainties and risks inherent in business situations are adequately considered. Thus, if two estimates of amounts to be received or paid in the future are about equally likely, conservatism dictates using the less optimistic estimates. However, if two amounts are not equally likely, conservatism does not necessarily dictate using the more pessimistic amount rather than the more likely one. Conservatism no longer requires deferring recognition of income beyond the time that adequate evidence of its existence becomes available, or justifies recognising losses before there is adequate evidence that they have been incurred.

6. Substance over Form (Economic Realism)

Economic realism is not usually mentioned as a qualitative criterion in accounting literature, but it is important to investors. It is a concept, that seems easy to understand but hard to define because perceptions of reality differ. In essence, economic reality means an accurate measurement, of the business operations, that is, economic costs and benefits generated in business activity. The definitional problem arises from cash vs. accrual accounting, or the principle of matching costs with revenues. Accrual accounting is necessary for complex organisations, of course, but, where accruals and estimates have a considerable degree of uncertainty as to amount or timing, cash accounting would seem to come closer to economic realism.

There have been tendencies in accounting for “the media to become the message”, i.e., for accounting numbers to become the reality rather than the underlying facts they represent. These tendencies appear through devices to smooth income such as too early recognition of income, deferral of expenses, and use of reserves. These may give the illusion of steady earnings and as a result, both investors and management may feel better, but, in fact, there is a considerable fluctuation in business activity. Investors need to know the facts about these fluctuations; if they find it useful to average earnings, they can do so themselves. The objective should be “to tell it like it is.”¹⁰

Evaluating the Qualitative Characteristics

The above mentioned characteristics (relevance, faithful representation, understandability, comparability, verifiability, timeliness) make financial reporting information useful to users.

These normative qualities of information are based largely upon the common needs of users. However, there are three constraints on full achievement of the qualitative characteristics: (i) conflict of objectives, (ii) environmental influences, and (iii) lack of complete understanding of the objectives. The pursuit of one characteristic may work against the other characteristics. It is difficult to design financial reports which may be relevant to user needs on the one hand and also free from bias towards any particular user group on the other. The qualitative characteristics should be arranged in terms of their relative importance. Desirable tradeoffs among them should be determined. Some environmental factors such as difficulty in measuring business events, limitations of available data, users’ diverse requirements, affect accounting and thus put constraint on achieving objectives. Constraints also arise because users have different level of competence to handle large masses of data or to interpret summarised data in making predictions.

It can be concluded that there are likely to be tradeoffs between qualitative characteristics in many circumstances. In a particular situation, the importance attached to one quality in relation to the importance of other qualities of accounting information will be different for different informatic users, and their willingness to trade one quality for another will also differ. This quite significant as it makes the question of preferability difficult and puts unanimity about preferences among accounting alternatives out of reach. Although there is a considerable agreement about qualitative characteristics that accounting information should possess, no consensus is found about their relative importance in a specific situation because different users have or perceive themselves to have different needs, and therefore, have different preferences. It has been suggested, that, “to be useful, financial information must have each of the qualities (mentioned) to a minimum degree. Beyond that, the rate at which one quality can be sacrificed in return for a gain in another quality without making the information less useful overall will be different in different situations.”¹¹

CHARACTERISTICS OF AN EFFECTIVE FINANCIAL REPORTING FRAMEWORK

Any effective financial reporting system needs to be a coherent one (i.e., a framework in which all the pieces fit together according to an underlying logic). Such frameworks have several characteristics:

- *Transparency*: A framework should enhance the transparency of a company’s financial statements. Transparency means that users should be able to see the underlying economics of the business reflected clearly in the company’s financial statements. Full disclosure and fair presentation create transparency.
- *Comprehensiveness*: To be comprehensive, a framework should encompass the full spectrum of transactions that have financial consequences. This spectrum includes not only transactions currently occurring, but also new types of transactions as the), are developed. So an effective financial reporting framework is based on

principles that are universal enough to provide guidance for recording both existing and newly developed transactions.

- **Consistency:** An effective framework should ensure reasonable consistency across companies and time periods. In other words, similar transactions should be measured and presented in a similar manner regardless of industry, company size, geography, or other characteristics. Balanced against this need for consistency, however, is the need for sufficient flexibility to allow companies sufficient discretion to report results in accordance with underlying economic activity.

Barriers to a Single Coherent Framework

Although effective frameworks all share the characteristics of transparency, comprehensiveness, and consistency, there are some conflicts that create inherent limitations in any financial reporting standards framework. Three areas of conflict include valuation, standard-setting approach, and measurement.

- **Valuation:** As discussed, various bases for measuring the value of assets and liabilities exist, such as historical cost, current cost, fair value, realizable value, and present value. Historical cost valuation, under which an asset's value is its initial cost, requires minimal judgment. In contrast, other valuation approaches, such as fair value, require considerable judgment but can provide more relevant information.
- **Standard-Setting Approach:** Financial reporting standards can be established based on (1) principles, (2) rules, or (3) a combination of principles and rules (sometimes referred to as "objectives oriented"). A principles-based approach provides a broad financial reporting framework with little specific guidance on how to report a particular element or transaction. Such principles-based approaches require the preparers of financial reports and auditors to exercise considerable judgment in financial reporting. In contrast, a rules-based approach establishes specific rules for each element or transaction. Rules-based approaches are characterized by a list of yes-or-no rules, specific numerical tests for classifying certain transactions (known as "bright line tests"), exceptions, and alternative treatments. Some suggest that rules are created in response to preparers' needs for specific guidance in implementing principles, so even standards that begin purely as principles evolve into a combination of principles and rules. The third alternative, an objectives-oriented approach, combines the other two approaches by including both a framework of principles and appropriate levels of implementation guidance. The common conceptual framework is likely to be more objectives oriented.
- **Measurement:** The balance sheet presents elements at a point in time, whereas the income statement reflects

changes during a period of time. Because these statements are related, standards regarding one of the statements have an effect on the other statement. Financial reporting standards can be established taking an "asset/liability" approach, which gives preference to proper valuation of the balance sheet, or a "revenue/expense" approach that focuses more on the income statement. This conflict can result in one statement being reported in a theoretically sound manner, but the other statement reflecting less relevant information. In recent years, standard-setters have predominantly used an asset/liability approach.

REFERENCES

1. Financial Accounting Standards Board, SFAC No. 8, Conceptual Framework for Financial Reporting, FASB.
2. Harvy I. Wolk, James L. Dodd and John J. Rozycki, *Accounting Theory*, Sage, 2013, p. 225.
3. International Accounting Standards Board, The Conceptual Framework for Financial Reporting, September 2010, p. A21.
4. Keith Alfredson et. al., *Applying International Accounting Standards* Ernst and Young, 2005, pp. 56-57.
5. Financial Accounting Standards Board, Concept No. 2 *Qualitative Characteristics of Accounting Information*, Stamford: FASB, May 1980, pp. xi-xii.
6. Financial Accounting Standards Board, Concept No. 2, *Ibid.*, para 60.
7. Morton Backer, *Financial Reporting and Security Investment Decision*, New York: National Association of Accountants, 1972, p. 24.
8. Financial Accounting Standards Board, Financial Accounting Concept No. 2, *op. cit.*, para 100.
9. Accounting Principles Board, Statement No. 4, 1970.
10. Duff and Phelps, A Management Guide to Better Financial Reporting, A Report for Arthur Andersons & Co., 1976, p. 47.
11. Financial Accounting Standards Board, SFAC No. 2, *Qualitative Characteristics of Accounting Information*, May 1980, para 34.

QUESTIONS

1. Discuss briefly the 'primary decision specific qualities' of accounting information identified in SFAC No. 2 issued by the FASB. *(M.Com., Delhi, 1994)*
2. Explain the relevance and reliability characteristics of financial accounting and reporting. *(M.Com., Delhi, 2003)*
3. What is a conceptual framework for accounting? List and explain the objectives of financial reporting presented by Trueblood Committee. Do you find any variation in the objectives of accounting framed by Financial Accounting Standard Board. *(M.Com., Delhi, 2006)*
4. Discuss the qualitative characteristics which make information useful. Is it possible to fix relative importance of these characteristics. Give arguments.
5. Discuss relevance and reliability as primary qualities of financial reporting information.

6. Discuss the problems arising in achievement of qualitative characteristics of accounting information. Give some suggestions to overcome these problems.
7. Explain clearly, the meaning of 'materiality' as a user constraint for disclosure of information to external user groups. (*M.Com., Delhi, 1991*)
8. "Defining the objectives of corporate reporting and the conceptual framework within which financial reporting standards should be set are too important for Indian professional accountants to set aside." Comment.
Make suggestions for improving the quality of Indian Accounting Standards issued so far by ICAI.
9. What are the two primary qualitative characteristics of financial accounting and reporting? Explain. (*M.Com., Delhi, 2000*)
10. Discuss the qualitatives of accounting information.
11. What is a Conceptual Framework? What are its components and possible advantages?
12. What is the need for establishing objectives of financial accounting and reporting?
13. Several qualitative characteristics of useful accounting information were identified in the chapter. Below is a list of these qualities as well as a list of statements describing the qualities.

A. Comparability	G. Timeliness
B. Decision usefulness	H. Verifiability
C. Relevance	I. Neutrality
D. Reliability	J. Representational faithfulness
E. Predictive value	K. Consistency
F. Feedback value	L. Materiality

 - (i) Ability of measures to form a consensus that the selected accounting method has been without error or bias.
 - (ii) Having information available to decision makers before it loses its capacity to influence decisions.
 - (iii) Capacity to make a difference in a decision.
 - (iv) Overall qualitative characteristics.
 - (v) Absence of bias intended to influence behaviour in a particular direction.
 - (vi) Reasonably free from error and bias.
 - (vii) Helps decision makers to correctly forecast.
 - (viii) Validity.
 - (ix) Interactive quality; helps identify and explain similarities and differences.
 - (x) Quantitative "threshold" constraint.
 - (xi) Conformity from period to period.
 - (xii) Helps decision makers to confirm or correct prior expectations.

Required. Place the appropriate letter identifying each quality on the line in front of the statement describing the quality.
14. Explain briefly the elements of financial statements as identified in the 'Framework for the Preparation and Presentation of Financial Statements' issued by International Accounting Standards Committee in July 1989. (*M.Com., Delhi, 1996*)
15. What considerations would you generally weigh in developing a theoretical framework for accounting? Explain briefly. (*M.Com., 1997, 1998, 2001*)
16. Discuss briefly the main objectives of financial reporting by business enterprises as identified by SFAC No. 1. (*M.Com., Delhi, 1997*)
17. How far do you think that abridged Balance Sheets instead of full balance sheets supplied to the shareholders meet their requirements in India? (*M.Com., Delhi, 1997*)
18. "Financial accounting emphasizes the economic substance of events even though the legal form may differ and suggest different treatments." Elaborate this statement.
19. Give a brief overview of the framework of accounting as has been developed by IASC. (*M.Com., Delhi, 1998*)
20. "Consistency serves to eliminate personal bias and to even out personal judgment, but it must not become a fetish so as to ignore changed conditions or need for improvements in techniques." Comment on the statement. Give examples. (*M.Com. Delhi, 1999*)
21. Materiality is essentially a matter of professional judgement. Elaborate. (*M.Com., Delhi, 1999*)
22. What are the two primary decision specific qualities of financial accounting information? Discuss in brief their role in decision usefulness? (*M.Com., Delhi, 1998, 2002*)
23. Critically evaluate IASC's framework for the preparation and presentation of Financial Statements, issued in July 1989.
24. Discuss conceptual framework developed by FASB, USA. (*M.Com., Delhi, 2011*)
25. Distinguish points of similarities and dissimilarities between conceptual frame works, developed by FASB and IASB.
26. What are the objectives of financial reporting: Explain briefly quantative characteristics of accounting information. (*M.Com., Delhi, 2009*)
27. Discuss the salient features of ICAI's Framework, issued in July, 2000.
28. What is the purpose of ASB's Framework (2000)?
29. Explain the scope of ICAI's Framework (2000).
30. What are the users identified in ICAI's Framework (2000)? What are their information needs?
31. Explain the objectives of financial statements as outlined in ICAI's Framework (2000).
32. Discuss the underlying assumption as per ICAI's Framework (2000).
33. Explain the qualitative characterizes of accounting information as found in ICAI's Framework (2000).
34. Discuss the different elements of financial statements as identified in ICAI's Framework (2000).
35. What are the recognition criteria for different elements of financial statements?
36. Discuss the measurement rules for the different elements of financial statements.
37. Explain the concepts of capital and capital maintenance as stated in ICAI's Framework (2000).
38. This question consists of 10 items that represent descriptions or definitions of the various elements of the FASB's Statements of Financial Accounting Concepts.

Required:

Select the best answer for each item from the terms listed in A-L. A term may be used once, more than once, or not at all.

Concept statement definitions

1. Component of relevance.
2. Increases in net assets from incidental or peripheral transactions affecting an entity.
3. The process of converting noncash resources and rights into cash or claims to cash
4. Ingredient of relevance and reliability.
5. The process of formally recording an item in the financial statements of an entity after it has met existing criteria and been subject to cost benefit constraints and materiality thresholds.
6. All changes in net assets of an entity during a period except those resulting from investments by owners and distributions to owners.
7. Inflows or other enhancements of assets of an entity or settlements of its liabilities from delivering or producing goods, rendering services, or other activities that constitute the entity's ongoing operations.
8. The amount of cash, or its equivalent, that could be obtained by selling an asset in orderly liquidation.
9. The quality of information that helps users to increase the likelihood of correctly forecasting the outcome of past or present events.
10. A performance measure concerned primarily with cash to cash cycles.

Terms

- A. Recognition
- B. Comprehensive Income
- C. Representational Faithfulness
- D. Revenues
- E. Predictive Value
- F. Consistency .
- G. Gains
- H. Net Income
- I. Earnings
- J. Realization
- K. Replacement Cost
- L. Current Market Value

Ans. 1. E, 2. G, 3. J, 4. F, 5., A, 6. B, 7. D, 8. L, 9. E, 10. I.

MULTIPLE CHOICE QUESTIONS

Select the correct answer for the following multiple choice questions:

1. What are the Statements of Financial Accounting Concepts intended to establish?
 - (a) Generally accepted accounting principles in financial reporting by business enterprises.
 - (b) The meaning of "Present fairly in accordance with generally accepted accounting principles."
 - (c) The objectives and concepts for use in developing standards of financial accounting and reporting.
 - (d) The hierarchy of sources of generally accepted accounting principles.

Ans. (c)

2. The objectives of financial reporting for business enterprises are based on:
 - (a) Generally accepted accounting principles.
 - (b) Reporting on management's stewardship.
 - (c) The need for conservatism.
 - (d) The needs of the users of the information.

Ans. (d)

3. The usefulness of providing information in financial statements is subject to the constraint of:
 - (a) Consistency.
 - (b) Cost-benefit.
 - (c) Reliability.
 - (d) Representational faithfulness.

Ans. (b)

4. During a period when an enterprise is under the direction of a particular management, its financial statements will directly provide information about:
 - (a) Both enterprise performance and management performance.
 - (b) Management performance but not directly provide information about enterprise performance.
 - (c) Enterprise performance but not directly provide information about management performance.
 - (d) Neither enterprise performance nor management performance.

Ans. (c)

5. Neutrality is an ingredient of:

	<i>Reliability</i>	<i>Relevance</i>
(a) Yes	Yes	Yes
(b) Yes	Yes	No
(c) No	No	Yes
(d) No	No	No

Ans. (b)

6. Which of the following relates to both relevance and reliability?
 - (a) Comparability.
 - (b) Feedback value.
 - (c) Verifiability.
 - (d) Timeliness.

Ans. (a)

7. Which of the following situations violates the concept of reliability?
- (a) Data on segments having the same expected risks and growth rates are reported to analysts estimating future profits.
 - (b) Financial statements are issued nine months late.
 - (c) Management reports to stockholders regularly refer to new projects undertaken, but the financial statements never report project results.
 - (d) Financial statements include property with a carrying amount increased to management's estimate of market value.
- Ans. (d)**
8. Which of the following statements conforms to the realization concept?
- (a) Equipment depreciation was assigned to a production department and then to product unit costs.
 - (b) Depreciated equipment was sold in exchange for a note receivable.
 - (c) Cash was collected on accounts receivable.
 - (d) Product unit costs were assigned to cost of goods sold when the units were sold.
- Ans. (b)**
9. What is the underlying concept that supports the immediate recognition of a contingent loss?
- (a) Substance over form.
 - (b) Consistency.
 - (e) Matching.
 - (d) Conservatism.
- Ans. (d)**
10. What is the underlying concept governing the generally accepted accounting principles pertaining to recording gain contingencies?
- (a) Conservatism.
 - (b) Relevance.
 - (c) Consistency,
 - (d) Reliability.
- Ans. (a)**
11. Companies are most likely to make trade-offs between which of the following when preparing financial reports?
- (a) Relevance and materiality.
 - (b) Timeliness and verifiability.
 - (c) Relevance and faithful representation.
- Ans. (b)**



Accounting for Changing Prices

The continuous inflation has an adverse effect on household budgets, as well as business and industry. Because of the continuous increases in prices, that is, decline in the value of Indian rupee, a demand has been made in accounting area that business enterprises should prepare inflation adjusted financial statements in place of historical cost based financial statements which are currently prepared by them. During the last few years, various accounting bodies, professional institutes, accountants, and academicians have conducted a great deal of research and experimentation on accounting for changing prices. This chapter aims to provide a comprehensive analysis of the concepts, issues, and techniques in inflation accounting. However, before discussing these aspects it would be proper to evaluate the strengths and weaknesses of statements under historical cost accounting, especially during periods of inflation.

HISTORICAL COST ACCOUNTING (HCA)

Historical Cost Accounting (HCA), also known as conventional accounting, record transactions appearing in both the balance sheet and the profit and loss account in monetary amounts which reflect their historical costs, *i.e.*, prices that are generally the result of arm's length transactions. The historical cost principle requires that accounting records be maintained at original transaction prices and that these values be retained throughout the accounting process to serve as the basis for values in the financial statements. HCA is based on the realisation principle which requires the recognition of revenue when it has been realised. The realisation principle has an important implication affecting both the profit and loss account and the balance sheet. The principle requires that only realised revenues be included in the income statement. In the balance sheet, the realisation principle requires adherence to the historical cost of the assets until the asset is sold, despite any changes in the value of the assets (resources) held by a business enterprise. Arguments which are advanced in favour of HCA are listed as follows:

1. Accounting data under HCA are generally considered free from bias, independently verifiable, and hence more reliable by the investing public, and other external users. Financial statements can easily be verified with the help of relevant documentary and other evidence. Because of the verifiability feature, accounting profession has more preference for traditional accounting

2. Historical accounting reduces to a minimum the extent to which the accounts may be affected by the personal judgements of those who prepare them. Being based on actual transactions, it provides data that are less disputable than are found in alternative accounting systems.

3. It has been generally found that users, internal and external, have preferences for HCA and financial statements prepared under it. According to Mautz¹, "if those who make management and investment decisions had not found financial reports based on historical cost useful over the years, changes in accounting would long since have been made". Ijiri, a strong supporter of HCA, argues that HCA has played a significant role in the past and will continue to be important in financial reporting in the future². Berkin favours historical cost because of its ability to present actual events without arbitrary adjustments by management³. According to him, if corporate income was arbitrarily adjusted to show the impact of inflation, labour would be in an untenable bargaining position.

4. Historical accounting is also defended on the ground that it is only the legally recognised accounting system accepted as a basis for taxation, dividend declaration, defining legal capital, etc.

5. Historical cost valuation is, among all valuation methods currently proposed, the method that is least costly to society considering the social costs of recording, reporting, auditing and settling disputes⁴.

Limitations of Historical Cost Accounting

In an economic environment, where prices are constantly rising, as has been the case in most countries of the world, HCA suffers from some limitations. The drawbacks of HCA are listed as follows:

1. In times of inflation, the value of money declines and, therefore, the monetary unit (*e.g.*, rupee in India) which is used as a standard of measurement does not have a constant value and shrinks in value as the prices rise. The HCA ignores this decline in the value of rupee and keeps adding transactions acquired at different dates with rupees of varying purchasing power. Thus, in historical accounts, the monetary unit (*e.g.*, rupee in India) used to measure incomes and expenditures, assets and liabilities, has a mixture of values depending on the date at which each item was originally brought into the accounts.

The HCA is based on the assumption of stable monetary unit which assumes that (i) there is no inflation, or (ii) the rate of inflation can be ignored. This assumption does not prove true during inflation because of the change in general purchasing power of the monetary unit. This creates serious problems in measuring and communicating results of a business enterprise.

2. Secondly, HCA does not match current revenues with the current costs of operations. Revenues are measured in inflated (current) rupees whereas production costs are a mix of current

and historical costs. Some costs are measured in very old rupees (*e.g.*, depreciation), other tend to be in more recent rupees (*e.g.*, inventories), while still others reflect current rupees (*e.g.*, wages, salary, selling expenses and similar current operating expenses). In general, whenever there is a time lag between acquisition and utilisation, historical cost may well differ significantly from current cost. Accordingly, HCA tends to report 'inflated' or 'inventory' profits and lower costs of consuming stocks and fixed assets during a period of increasing prices. 'Overstated' profits become harmful in the following respects:

- (a) Over distribution of dividends.
- (b) Settlement of wage claims on terms which companies could not afford.
- (c) Excessive taxation on the corporate sector in general and inequitable distribution of tax burden between companies.
- (d) Underpricing of sales.
- (e) Investors being misled as to the performance of companies.

3. The 'inflated' profits resulting under HCA are not the real profits but exaggerated and illusory. This causes the depreciation allowance to become inadequate to replace fixed assets and finance growth and expansion. In periods of inflation, therefore, inflated profits result in substantial fall in the operating capital and in turn, in the operating capability of a business enterprise. This is a major problem and is best illustrated by two examples.

Example 1: Replacement of Inventory

A company buys 20,000 items each year on January 1 and sells them all by the end of the year. In 2016 the price was ₹ 5 each, but the supplier announces that on January 1, 2017 the price will be increased to ₹ 6. During 2016 the items were sold at ₹ 6 each and the company had other expenses of ₹ 10,000. Under HCA, the profit and loss account will appear as follows:

	₹
Sales	1,20,000
Less: Purchases	1,00,000
Gross Profit	20,000
Less: Expenses	10,000
Net Profit	10,000

When the company decides to buy new inventory to replace that which it has sold, it will need ₹ 1,20,000 (₹ 6 × 20,000), but its cash resources amount to only ₹ 1,10,000 (sale proceeds ₹ 1,20,000 less expenses ₹ 10,000). Thus, despite making a profit it is not in a position to maintain its operating capability without borrowing or raising further capital. Like this, change may occur in the prices of the other inventories also. The longer the delay between goods being acquired and their being sold, the more serious the situation is likely to be.

Example 2: Replacement of Fixed Asset

On January 1, 2016, a firm buys a machine for ₹ 1,00,000 which it expects to last for five years and have no scrap value. It has no other assets or liabilities and distributes all of its profits to its shareholders. Its profits before providing for depreciation is expected to be ₹ 30,000 per year. Taxation is to be ignored. The profit and loss account of the firm for each year will be as follows:

	₹
Profit before depreciation	30,000
Depreciation	20,000
Net Profit	10,000
Distributed	10,000
Retained	Nil

The cash generated by the business each year amounts to ₹ 30,000 represented by the trading profit; the depreciation charge merely amounting to an accounting charge in order to spread the cost of using the machine over its expected life. After five years, the firm will have generated ₹ 1,50,000 and distributed ₹ 50,000, leaving a balance of ₹ 1,00,000 representing the original capital, which may be returned to the owners, or reinvested. However, if there have been significant increase in prices in the meantime, the firm will find that it has insufficient funds to replace the equipment, which has now reached the end of its economic life.

As with inventories, it is probable that a firm will replace fixed assets on a frequent basis, and that the funds retained by virtue of depreciation will not be used for direct replacement of the same machine. However, the overall impact of the rise in the prices will be the same. By charging depreciation on the historical cost, rather than upon the current cost of consuming the assets, the accounts will fail to show the true cost of maintaining the operating capacity of the business. In a business where the rate of inflation is faster than the rate of profit growth, there is undoubtedly an erosion in the total operating wealth and capability of the business. Capital intensive industries such as steel, aluminum and engineering are hard hit because of increased replacement costs and intense competition from producers with more modern facilities. Therefore during inflation, additional funds are needed to finance operations (*e.g.*, inventories, plant and equipment, working capital, other assets) in order to support a given physical volume of production and sales. The level of these additional funds (investment) is likely to increase as a result of rising prices, but this will not be measured by the amount of distributable profits reported by historical cost accounts.

4. Inflation causes many other problems and dislocations, such as the following, which are not considered in HCA. The result is that historical cost figures become of less and less significance and the value of accounts for decision making is severely restricted.

- (i) Growing uncertainty about magnitude of future costs and price changes for materials, labour and capital equipment impair the company's ability to finance itself internally because corporate income taxes are based on stated nominal profits rather than real profits. This has

led to the corporate sector to depend largely on external funds rather than on retained earnings. Consequently, the cost of borrowings, *i.e.*, the rate of expected return has increased as well as higher debt equity ratios in the corporate sector. Similarly, equity costs tend to increase as debt cost increase because equity shareholders also require a higher return in view of the increased risks and the decreased purchasing power caused by inflation.

- (ii) Business responds by requiring higher returns on new capital projects than in lower inflationary periods. This usually requires significant increases in selling prices, which may be difficult to impose because of competition or price controls.
- (iii) During high inflationary periods, the economic situation becomes uncertain for common man as well as businessman. Businessmen attach more importance to the risks in new investments. Projects expected to give marginal return are given up and thus new productive activities are curtailed. This leads to a fall in overall investments and productive activity throughout the economy, resulting in curtailed growth, fewer new jobs; increased unemployment etc. Increased productivity and output are essential to offset the decline in the value of the currency and in general standard of living⁵.
- (iv) There is no distinction in the historical cost accounts between real and fictitious growth. A rising figure for sales over a period of time might be seen to indicate a growth in sales, but the truth may be different. In order to determine the actual position, it is necessary to know how individual product prices have changed over the period. The same problem arises in relation to the trend in profits, but in this case the position is further complicated by difficulties in measuring the profit figure itself.

5. HCA is defended on the ground of its assumed objectivity. Objectivity is claimed because historical cost numbers are derived from actual transactions that have been entered into by the enterprise itself rather than (sometimes) from transactions that are being entered into by others in the marketplace. The objectivity that is claimed is largely unfounded because of the existence of alternative, generally accepted methods for computing depreciation, inventory valuation and similar such items. As a result, there is a serious credibility gap in financial reporting. Further, it is also argued that there is no definitive sources of the accepted principles. Chambers⁶ observes:

“This whole array of sources (of accounting principles) is so openminded that it is no exaggeration to say that almost anything can be a ‘generally accepted principle’—the availability of alternative rules makes it possible for companies to select sets of rules which ‘on the whole’ grossly misrepresent income.”

6. Although historical cost generally represents ‘current market value’ at the time of transaction, however, as time passes, the cost (value) of non-monetary items in the balance sheets tends to move further and further from their current value due solely to changes in the value of money (inflation). This phenomenon (under valuation of assets) renders the historical cost balance sheet of limited significance to interested external parties such as investors and creditors, who may well be more concerned about the current value of the economic resources owned by an enterprise than about the original cost of these resources. Historical cost-based balance sheet does not truly represent the resources held by an enterprise at the balance sheet date, for the values at which they are carried do not relate to that date but to the date on which they were acquired. HCA, thus, is forced to exclude highly relevant information about changes in the value of resources that may have supervened between their acquisition and use or between their acquisition and the accounting date if they are still then held. HCA is appropriate only if prices, in fact, do not change between the date that resources are acquired and the date they are used or the accounting date, if that comes first.

7. Since historical accounting is based on realisation principles, profit can easily be manipulated. By accelerating or retarding the timing of the realisation of gains, profits can be increased or decreased. Management’s ability to control what profits are reported is known as ‘income smoothing’. Income smoothing is possible under other accounting approaches also. But with the recognition of all gains accruing in a period rather than gains realised in the period, the scope for income smoothing is much reduced (in other approaches) than that of HCA.

To conclude, the HCA has several drawbacks, which emerge mainly from two of its underlying principles: stable monetary unit and realisation principle. Additionally, there are problems that arise because of several acceptable, alternative accounting methods, resulting in a multitude of possibilities for presenting the same transactions. Solomons⁷ sums up the case against HCA in the following words:

“The information it (HCA) provides about the financial position of an enterprise is not relevant to the situation of the enterprise at the accounting date. The information it provides about income does not faithfully represent ‘betteroffness’, and what it discloses about financial position does not faithfully represent the position as it exists at the accounting date. HCA results in invalid and misleading comparisons. Insofar as it is riddled with arbitrary allocations, its numbers are incapable of being verified by reference to events and conditions outside the enterprise. In sum, its results are woefully lacking in the qualitative characteristics (relevance, reliability, representational faithfulness, neutrality, comparability, materiality, conservatism) that (are) seen to be the criteria by which accounting information should be judged.”

UTILITY OF INFLATION-ADJUSTED ACCOUNT

As stated in previous paragraphs, historical cost-based financial statements are not adequate in an inflationary period. Total capital requirements of the business go up and capital formation (cash flows) are not adequate to meet replacement of plant and equipment, and working capital requirements. Inflationary cost increases consume a progressively larger share of cash flows generated. Profits earned and selling prices are the key to financing replacement and growth in an inflationary environment. However, increased prices simply add more fuel to the fire. Because of these, a need has been felt to restructure historical cost-based financial statements or to develop alternative accounting model(s) for accurate measurement of profit and reliable reporting, of financial position.

In a recent study, Smith and Anderson,⁸ find that “additional dimensions of performance or changes in corporate position are revealed by inflation accounting information, beyond those revealed by contemporaneous historical cost information”. Hence, they conclude that “there is a potential value in the profession’s continuing pursuit of an appropriate accounting response to the problems associated with changing prices”. Inflation adjusted financial statements, it is argued, would not only achieve the objective of reliable profit and financial position measurements, but would also prove useful to managements and external users in their decision making. Some examples of ways in which inflation-adjusted information would help the decision making are listed as follows:

1. In capital markets, allocation of capital is achieved through the pricing mechanism. Prices based on financial information which is incomplete or misleading will result in poor pricing and allocation decisions. Inflation, especially at rates varying widely from year to year, introduces increased uncertainty into business activities. Most managements appreciate the need to consider inflation in making decisions. But communicating the effects of inflation is hindered by the lack of systematic and explicit recognition of inflation’s effects in financial reports. By introducing a system of inflation accounting, the external users will be able to make better decisions; shareholders will be more realistic in their dividend expectations and investment valuations; employees will have a clearer view of what the company can afford in settling wage claims; and the Government will be aware of the impact of taxation on ‘real’ company profits.
2. Management will be better informed and, therefore, better equipped to tackle the problems caused by inflation. Management decisions may be influenced by the disclosure of ‘real’ growth. Those with an interest in an enterprise will be better able to judge management performance and ask pertinent questions. This may result in changes in pricing policy and investment decisions,

incentives to improve productivity and, in some cases, changes in management.

3. Economic policy decisions concerning investment incentives, industry development schemes, and taxation are based in part on macro economic data; information about the effect of specific price changes on individual enterprises and by industry groupings are likely to provide insight to policymakers on the different effects of inflation on each industry. Its public understanding is improved by disclosure of the effects of inflation on businesses, it may also affect Government policy decisions.
4. The general public’s view of the business sector is mainly influenced by the price paid for goods and services. It is also affected by reports of record business earnings during inflation. To the extent that the public’s understanding of the effects of inflation is enhanced, business may be viewed in a somewhat less critical perspective. The continued ability of the enterprise to supply goods and services and to provide employment and generate funds for new investment, new employment, and increased wealth is dependent on achieving an adequate return through prices charged.⁹

NATURE OF PRICE CHANGES

Prices reflect the exchange value of goods and services which include the several factors of production and items at intermediate stages of production, items held for speculative purposes, and goods and services acquired for consumption purposes. Prices may be input prices, *i.e.*, prices of factors of production or of goods and services at intermediate stages, acquired for further production or resale or output prices, *i.e.*, prices of goods and services sold as the product of the enterprise. Price changes occur only when the prices of goods or services are different from what they were previously in the same market. The fact that a firm buys a commodity in its input market at one price and sells it to its customers at a higher price does not mean that the price of the commodity has changed. A price change occurs only if a price increases or decreases either in an input market or in an output market or in both.

Price changes can be the following types:

- (1) General Price Changes
- (2) Specific Price Changes
- (3) Relative Price Changes

General Price Changes

A general price change is the result of a change in the value of the monetary unit during periods of inflation and deflation. Generally all prices would move together by the same percentage. However, if prices are moving at different rates, which is the usual case, a measure of general price changes can be obtained only by computing an average or index of prices to express the general level of current prices compared with some base period. The ratio

of the current index of prices to the baseperiod index expresses the relative change in all prices included in the index. For example, if the price index should increase from 100 to 200, prices would have doubled, but the purchasing power of the Rupee would have decreased to one half of its previous level.

The term purchasing power means the ability to buy goods and services with a given quantity of money compared with what the same quantity of money could have purchased at an earlier date. To obtain a good comparison of the purchasing power of money at two different dates, the goods and services available at the two dates must be the same or similar. Since the types and qualities of goods and services available change considerably over time, good comparisons of purchasing power is not possible. General purchasing power means the ability to buy all types of goods and services available in the economy, and it is measured by changes in the general price level. Specific purchasing power refers to the ability to buy specific goods and services at different dates. Thus, specific purchasing power can be measured by changes in specific prices.

Specific Price Changes

A change in the price of a specific commodity represents a change in its exchange value. Changes in prices in an input market result in increase or decrease in costs or expenses of the firm, and changes of prices in the output market result in a shift in revenues (assuming that the price change does not affect the quantity sold).

A more useful matching of expenses with revenue is obtained by reporting as expenses the current prices of the goods used in the process of obtaining revenue. This matching of the current input prices with the current output (revenue) prices is more relevant as a measure of operating efficiency and as a better basis for the prediction of the results of future transactions.

Relative Price Changes

Most often, prices of goods and services move at different rates, and some even in different directions. The extent to which specific prices move at different rate or in a different direction from general price is known as relative price changes. This is explained with the help of the following example.

Example

If the market price of product A was ₹ 20 in 2016 and ₹ 30 in 2008; and further, if the market price of all the products comprising general price index was ₹ 200 in 2016 and ₹ 240 in 2017, calculate:

- (i) Specific price index for product A
- (ii) General price index for all the products
- (iii) Relative price index of product A

SOLUTION

- (i) Specific Price Index of product A, $\text{₹ } 30 - \text{₹ } 20 = \text{₹ } 10$
i.e., $10/20 \times 100 = 50\%$

- (ii) General Price Index for all products, $\text{₹ } 240 - \text{₹ } 200 = \text{₹ } 40$
i.e., $40/200 \times 100 = 20\%$

- (iii) Relative Price Index of Product A

Assuming price index of 100 in 2007 as a base, specific price index in 2008 will be 150, and General Price Index will be 120 in 2008.

Therefore, relative price index of product A is

$$\text{₹ } 150 - \text{₹ } 120 = \text{₹ } 30$$

$$\text{i.e., } 30/120 \times 100 = 25\%$$

METHODS OF ACCOUNTING FOR CHANGING PRICES

Many alternatives have been proposed in accounting to minimise the limitations of historical costbased financial statements and to recognise the effects of inflation on financial statements. Though no consensus has yet been reached on a specific solution, the professional bodies in various countries have issued a number of statements suggesting the use of different methods of accounting for changing prices. It would indeed be a major development in the building up of a coherent and logical structure of accounting, if an objective and useful method of accounting for changing prices gains universal acceptance. Of the many proposals that have been put forward for inflation accounting, the following three methods need specific consideration.

- (1) Replacement Cost Accounting also known as Entry Value Accounting.
- (2) Current Purchasing Power Accounting (CPPA). Also known as Constant Purchasing Power Accounting, General PriceLevel Accounting.
- (3) Current Cost Accounting (CCA) (Also known as 'Value to the Business' Accounting).

REPLACEMENT COST ACCOUNTING (RCA)

Replacement Cost Accounting (RCA) is also known as Entry Price or Entry Value Accounting.

Replacement cost accounting (RCA) is an accounting system in which assets are valued at current market buying prices and profit is determined by allocation based on current costs (i.e. current cost to buy).

Current replacement price represents the amount of cash or other consideration that would be required to obtain the same asset or its equivalent. The following interpretations of current entry price have been used.

Replacement cost-used is equal to the amount of cash or other consideration that would be needed to obtain an equivalent asset on the second-hand market having the same remaining useful life.

Reproduction cost is equal to the amount of cash or other consideration that would be needed to obtain an identical asset to the existing asset.

Both replacement cost and exit values are current market values. Replacement cost will usually be higher for two reasons: First, selling an asset that a firm does not ordinarily market usually results in a lower price than a regular dealer is able to obtain. The automobile market provides a good example. If a person buys a new car and immediately decides to sell it, he or she usually cannot recover full cost because of limited access to the buying side of the market. Second, disposal costs are deducted from selling price in determining net realizable values. Hence, the two different markets can result in significantly different current values.

Replacement cost is ideally measured where market values are available for similar assets. This is often the case for acquired merchandise inventories and stocks of raw materials that are used in the production process. However, market values are often unavailable for such unique fixed assets as land, buildings, and heavy equipment specially designed for a particular firm. The same is true even for used fixed assets that are not unique, although secondhand markets often exist for these assets. These same considerations of measurement difficulty, however, also apply to the exit valuation system.

In the absence of firm market prices, either appraisal or specific index adjustment can estimate replacement cost. Cost constraints may inhibit the use of appraisals, but there are specific indexes applicable to particular segments of the economy—for example, machinery and equipment used in the steel industry. Indexes are essentially averages, and if calculated for too wide a segment of the economy, they may not be good representations of replacement cost.

Accounting for holding gains and losses

The valuation of assets and liabilities at current entry prices gives rise to *holding gains and losses* as entry prices change during a period of time when they are held or owed by a firm. Holding gains and losses may be divided into two elements:

- (1) the realized holding gains and losses that correspond to the items sold or to the liabilities discharged; and
- (2) the non-realized holding gains and losses that correspond to the items still held or to the liabilities owed at the end of the reporting period.

These holding gains and losses may be classified as income when capital maintenance is viewed solely in money terms. They may also be classified as capital adjustments, because they measure the additional elements of income that must be retained to maintain the existing productive capacity. Thus, justification for the holding gains and losses on capital adjustment may be related to a particular definition of income.

Proponents of the capital-adjustment alternative favor a definition of income based on the preservation of physical capital. Such an approach would define the profit of all entity for a given period as the maximum amount that could be distributed] and still maintain the operating capability at the level that existed at the beginning of the period. Because the changes in replacement cost cannot be distributed without impairing the operating capability of the entity, this approach dictates that replacement-cost changes be classified as capital adjustments.

Proponents of this alternative favor a definition of income based on the preservation of financial capital (the money-maintenance concept). Such an approach would define profit as the maximum amount that could be distributed and still maintain the financial capital invested at the level that existed at the beginning of the period. Such an approach dictates that replacement-cost changes be classified as holding gains and losses.

Example

The following are the balance sheet of a company as on March 31, 2015 and December 31, 2016 and income statement for the year ending March 31, 2016.

The following additional information is available:

- (1) The firm uses additional LIFO inventory method.
- (2) During 2016, the replacement cost was ₹ 70,000 for the land and ₹ 80,000 for the plant.
- (3) The sales were made at the end of 2016, when the replacement cost of inventory was ₹ 20 per unit.

Company's Balance Sheet

	March 31, 2015		March 31, 2016	
	Debit (₹)	Credit (₹)	Debit (₹)	Credit (₹)
Cash	10,000		30,000	
Accounts Receivable	20,000		30,000	
Inventories	30,000	(3,000 units)	20,000	(2,000 units)
Land	40,000		40,000	
Plant (five-year life)	50,000		50,000	
Less: Allowance for Depreciation		10,000		20,000
Bonds (10% interest rate)		50,000		50,000
Common equity		50,000		50,000
Retained Earnings		40,000		50,000
Total	1,50,000	1,50,000	1,70,000	1,70,000

Company's Income Statement for the year ending March 31, 2016

	₹	₹
Sales (5,000 units @ ₹ 40 per unit)		2,00,000
Cost of Goods Sold		
Beginning inventory (3,000 units @ ₹ 10 per unit)	30,000	
Purchases (4,000 units @ ₹ 12 per unit)	48,000	
Units Available	78,000	
Ending Inventory (2,000 units @ ₹ 10 per unit)	20,000	58,000
Gross Margin		1,42,000
Operational Expenses:		
Depreciation	10,000	
Interest	5,000	
Other Expenses	1,17,000	1,32,000
Net Operating Profit		10,000

SOLUTION:

The items deserve special attention. First, holding gain on plant, and second its treatment for calculating operating profit.

	₹	₹
Plant	30,000	
Depreciation	13,000	
Accumulated Depreciation		22,000
Holding Gain		21,000

In other words, if the ₹ 30,000 increase in plant value is accrued uniformly over the year, the depreciation expense should

be ₹ 13,000 (20 percent of the average asset value of ₹ 65,000). The holding gain is equal to ₹ 30,000 less the 1½ year depreciation on the ₹ 30,000.

Second, the operating profit before holding gains and losses and the realized holding gains and losses are both based on the realization concept. Consequently, their sum is equal to the accounting profit. The added advantage of employing the current entry price is the dichotomy between the results of (1) the operational decisions involving the production and sales of goods and services, and (2) the holding decisions involving holding assets over time in expectation of an increase in their replacement cost.

Company's Income Statement under RCA

	₹	₹
Sales (5,000 units @ ₹ 40)		2,00,000
Cost of Goods Sold		
Beginning Inventory (3,000 units @ ₹ 20)	60,000	
Purchases (4,000 units @ ₹ 20)	80,000	
Goods Available	1,40,000	
Ending Inventory (2,000 units @ ₹ 20)	40,000	1,00,000
Gross Margin		1,00,000
Depreciation ($0.20 \times 80,000 + 50,000 \div 2$)	13,000	
Interest	5,000	
other Expenses	1,17,000	1,35,000
Operating Profit Before		
Holding Gains and Losses		(35,000)
Realized Holding Gains		
1. On Inventory		
(a) Purchases:		
[4,000 units $\times$ (₹ 20 – ₹ 12)]	32,000	
(b) Beginning Inventory:		
[1,000 units $\times$ (₹ 20 – ₹ 10)]	10,000	
2. On Depreciation ₹ 13,000 – ₹ 10,000)	3,000	
Unrealized Holding Gains		45,000
1. On Ending Inventory:		
(₹ 20 – ₹ 10) $\times$ (2,000 units)	20,000	
2. On Plant	18,000	
3. On Land: (₹ 70,000 – ₹ 40,000)	30,000	68,000
Net Profit		78,000

Company's Balance Sheet under

	₹	₹
Assets:		
Cash		30,000
Accounts Receivable		30,000
inventories (2,000 units @ ₹ 20)		40,000
Land		70,000
Plant	80,000	
Less: Accumulated Depreciation	(32,000)	48,000
Total Assets		2,18,000
Equities:		
Bonds		50,000
Common Equity		50,000
Retained Earnings:		
Beginning Balance		40,000
Operating Profit		(35,000)
Realized Holding Gain		45,000
Unrealized Holding Gain		68,000
Total Liabilities and Equities		218,000

Evaluation of RCA

The principal argument used to justify the replacement cost system over exit values is that if the great majority of the firm's assets were not already owned, it would be economically justifiable to acquire them. One the other hand, fixed assets are sold mainly when they become obsolete or their output is no longer needed.

It is argued that technologically improved assets are likely to replace existing assets, so that current operating profits, based on the existing mode of production, would be poor predictors of future profits. When technology is changing, investors would be misled by the current operating profit as a basis for predicting future cash flows. In many cases, the financial statements would reflect the current purchase price and depreciation expense of assets that are obsolete and which the company has no intention of purchasing. Profit would represent the existing facilities that are not expected to be continued.

But advocates of the replacement cost school of thought disagree on some important points. The main disagreement concerns interpretation of holding gains and losses, the differences between replacement cost of assets and their historical costs. The point at issue is whether these gains and losses should be run through income or closed directly to capital.

Advocates of historical cost accounting reject current cost accounting, mainly because it violates the traditional realisation principle. As far as they are concerned, if the firm intends to use an asset, as opposed to selling it, changes in its market price are irrelevant. A non-current asset is not more valuable to a firm simply because its current cost has risen. Its value ties in its service potential, not in its market (exchangeable) value. At best, it can be said that current cost accounting anticipates operating profit. However, the worst may prove to be true, which is that the expected profit will never be realised or that the increased price simply signals increased future returns in another industry.

A related problem is the subjectivity of determining the amount of the increase in cost. If there is no reliable second-hand market, then the basis for determining the current cost of a fixed asset used by the firm must be the new asset expected to replace the old. The notion of current cost calls for an adjustment to be made for any operating advantage or disadvantage between the actual asset owned and its replacement to arrive at the current cost of the former. It is no easy task to calculate the amount of any operating advantage or disadvantage.

Proponents of exit price accounting observe a number of weaknesses in current cost accounting. First, they contend that the term 'cost' implies the opportunity cost or sacrifice of the next best alternative. In almost all cases, the current sacrifice faced by a company is to sell the asset rather than use it, but not to buy it because the company already has it. Therefore, current cost, the price to purchase the item, is not the relevant amount. It is the exit price or realisable value that is the logical expression of opportunity cost.

The allocation problem continues to be an issue. Instead of allocating historical cost, the allocation is of current cost. But it is

still arbitrary and lacking in real-world counterparts. An additional point at issue is the need for backlog depreciation. Whether backlog depreciation is charge to income or to a capital account will make a difference in the amount of profit reported.¹⁰

CURRENT PURCHASING POWER ACCOUNTING (CPPA)

Known by different names such as Constant Purchasing Power Accounting (CPPA), General Price Level Accounting (GPLA), Constant Dollar Accounting (in USA), General Purchasing Power Accounting, this method adjusts historical costs for changes in the general level of prices as measured by a general pricelevel index. Changes in the general level of prices represent changes in the general purchasing power of the monetary unit. Increases in the general level of prices (inflation) reduce the general purchasing power to purchase goods and services in general; decreases in the general level of prices (deflation) increase the general purchasing power to purchase goods and services in general.

Under CPPA, by restating historical cost financial statements for changes in the general purchasing power, the adjusted financial statements would reflect the original amounts in terms of current purchasing power, which, if spent today, would command the same general purchasing power as the original reported amounts. Since historical financial statements consist of transactions at various times, such statements contain measurements that represent purchasing powers at various points in time. CPPA transforms the various historical measures into current purchasing power which represents purchasing power at the same point in time. Thus, CPPA makes all the accounting numbers comparable in terms of general purchasing power by removing the mixed purchasing power element from historical financial statements.

Methodology of CPPA

To convert the historical cost financial statements, an acceptable general price level index representing the changes in the general purchasing power of the monetary unit (rupee) is needed. Generally the most broad based consumer goods price index is used. The historical cost figures are multiplied by a conversion factor which is the ratio of the pricelevel index at the date of conversion and price level index at the transaction date. A price level index is the ratio of the average price of a group of goods or services at a given date and the average price of a similar group of goods or services at another date, known as the base year, when the price level index is equal to 100. For example, assume that a plant has been purchased on January 1, 2001 for ₹ 60,00,000 when the general price index was 150. The general price index on January 1, 2006 was 200. The cost of the plant in terms of rupees on January 1, 2006 would be ₹ 80,00,000 ($60,00,000 \times 200/150$). Since it is practically difficult to convert each figure in terms of the pricelevel index of the date of transaction, it is assumed that all transactions take place evenly throughout the year.

Balance Sheet Under CPPA

Monetary and Non-monetary Items

The working of CPPA requires that, first of all, balance sheet items should be classified into Monetary Items, and Non-Monetary Items.

Monetary Items

Monetary items are those items which are fixed by contract or otherwise remain fixed irrespective of any change in the general level of price. Monetary items may be monetary assets as well as monetary liabilities. Examples of monetary assets are cash, debtors, bills receivable, etc. Similarly debentures, creditors etc., are monetary liabilities. Financial Accounting Standards Board of USA designate certain balance sheet items as monetary and the remainder as non-monetary. FASB's classification of such items is presented in Fig. 15.1 given on next page.

It is obvious that in a period of inflation, the holders of cash or other monetary assets lose purchasing power because the cash they have or expect to receive represents amounts of less purchasing power. On the other hand, holders of monetary assets gain purchasing power during a period of deflation. These relationships are reversed for monetary liabilities. Holders of monetary liabilities gain general purchasing power during a period of inflation because they can repay the amounts due in rupees of lower purchasing power. However, holders of monetary liabilities lose purchasing power during a period of deflation. For example, suppose a firm has creditors of ₹20,000 on January 1, 2016, which are payable on December 31, 2016. It may be argued that the firm's liability of ₹20,000 represents less general purchasing power as on December 31, 2016, as compared to original liability (January 1, 2016) which possesses higher general purchasing power. Therefore, purchasing power gain arises from holding monetary liabilities during inflationary periods. Conversely, the holders of monetary assets lose in a period of inflation because of loss in general purchasing power, i.e., because a given amount of money could buy fewer goods and services. For instance, suppose a firm has ₹40,000 as cash on hand on January 1, 2016 which remained intact until December 2016. Assume that 10 per cent inflation occurred during the year. This situation implies that the firm would need ₹44,000 on December 31, 2016.

The fact that the firm only holds ₹40,000 results in a loss of general purchasing power of ₹4,000. The same purchasing power loss would also arise from holding accounts receivable or debtors or any claims to a fixed quantity of money since the amount of money expected to be received commands a decreasing amount of general purchasing power during periods of general price level increases.

Calculation of Purchasing Power Gain or Loss on Monetary Items

The CPPA method suggests the computation of the purchasing power gain or loss made by an enterprise on holding

net monetary items. Purchasing power gain or loss on monetary items can be calculated in two ways. One procedure calculates the purchasing power gain or loss associated with each monetary asset and each monetary liability and then sums up the individual gains and losses to determine the gain or loss. A second procedure calculates the gain or loss on holding all monetary items as if they were maintained in a single account. Alternatively, under the second procedure, general purchasing power gain or loss can be computed in terms of net monetary assets (monetary assets—monetary liabilities) for which the following procedures may be used.

- (i) Compute the net monetary asset position at the beginning of the period. For example, if cash and accounts payable at the beginning of the period are ₹50,000 and ₹30,000 respectively, the net monetary assets will be ₹20,000.
- (ii) Restate net monetary asset position at the beginning of the period in terms of the purchasing power at the end of the period. For example, assume the general pricelevel index was 120 at the beginning of the period and 180 at the end of the period. The net monetary asset position at the beginning of the period, which was ₹20,000 would be restated to ₹30,000 ($₹20,000 \times 180/120$).
- (iii) Restate all the monetary receipts of the year to the year end basis and add this to the restated net monetary position at the beginning of the period as calculated in (ii). Assume that sales of ₹40,000 occurred evenly during the year and the general average price index was 150, the adjusted monetary receipts would be restated to ₹48,000 ($₹40,000 \times 180/150$). This result is added to ₹30,000 as calculated in (ii) to arrive at a total restated net increase in monetary items of ₹78,000.
- (iv) Restate all the monetary payments of the year to the year end basis and deduct the result from the total restated net increase in monetary items as calculated in (iii). Assume that purchases and expenses of ₹30,000 also occurred evenly during the year. The adjusted monetary payments would be restated to ₹36,000 ($₹30,000 \times 180/150$). This result is deducted from ₹78,000 as calculated in (iii) to arrive at the adjusted computed net monetary assets at the end of the period, which is ₹42,000.
- (v) Deduct the actual net monetary assets at the end of the period from the adjusted net monetary asset at the end of the period as found in (iv) to obtain the purchasing power gain/loss. In this example, the net monetary assets at the end of the period is ₹30,000 ($20,000 + 40,000 - 30,000$) and adjusted net monetary assets as found in (iv) is ₹42,000. Therefore purchasing power loss on net monetary items is ₹12,000.

Assets	Monetary Item	Non-monetary Item
Cash on hand and demand bank deposits (U.S. dollars)	X	
Time deposits (U.S. dollars)	X	
Foreign currency on hand and claims to foreign currency	X	
Marketable securities:		
Stocks		X
Bonds (other than convertibles)	X	
Convertible bonds (until converted, these represent an entitlement to receive a fixed number of dollars)	X	
Accounts and notes receivable	X	
Allowance for doubtful accounts and notes receivable	X	
Inventories:		
Produced under fixed contracts and accounted for at the contract price	X	
Other inventories		X
Loans to employees	X	
Prepaid insurance, advertising, rent, and other pre-payments		X
Long-term receivables	X	
Refundable deposits	X	
Advances to unconsolidated subsidiaries	X	
Equity investment in unconsolidated subsidiaries or other investors		X
Pension, sinking, and other funds under an enterprise's control		X
Property, plant, and equipment		X
Accumulated depreciation of property, plant, and equipment		X
Cash-surrender value of life insurance	X	
Purchase commitments (portion paid on fixed-price contracts)		X
Advances to a supplier (not on contract)	X	
Patents, trademarks, licenses, formulas		X
Goodwill	X	
Other intangible assets and deferred charges		X
Liabilities		
Accounts and notes payable	X	
Accrued expenses payable (for example, wages)	X	
Accrued vacation pay (if it is to be paid at the wage rates as of the vacation dates and if those rates may vary)		X
Cash dividends payable	X	
Obligations payable in foreign currency	X	
Sales commitments (portion collected on fixed-price contracts)		X
Advances from customers (not on contract)	X	
Accrued losses of firm purchase commitments		X
Deferred income	X	
Refundable deposits	X	
Bonds payable and other long-term debts	X	
Unamortized premiums or discounts and prepaid interest on bonds and notes payable	X	
Convertible bonds	X	
Accrued pension obligations		X
Obligations under warranties	X	
Deferred income-tax credits	X	
Deferred investment-tax credits		X
Preferred stock:		
Carried at an amount equal to a fixed liquidation or redemption price	X	
Carried at an amount less than fixed liquidation or redemption price		X
Common stockholder's equity		X

Fig. 15.1: Classification of Items as Monetary or Non-monetary

Source: Adapted from FASB Statement No. 33.

Treatment of Purchasing Power Gain and Loss

It has been widely suggested that the purchasing power gain or loss should be included in current income.

Example

Compute the net monetary result of X Company Ltd. as at 31st December, 2015. The relevant data are given below:

	1st January, 2015	31st December, 2015
	₹	₹
Cash	5,000	10,000
Book debts	20,000	25,000
Creditors	15,000	20,000
Loan	20,000	20,000
Retail Price Index Numbers:		
January 1, 2015	200	
December 31, 2015	300	
Average for the year	240	

SOLUTION**Calculation of Purchasing Power Gain/Loss**

Particulars	Unadjusted ₹	Conversion Factor	Adjusted ₹
Net monetary assets as at January 1, 2015	(-) 10,000	300/200	(-) 15,000
Add: Increase in monetary receipts	(+) 10,000	300/240	(+) 12,500
	Nil		(-) 2,500
Less: Increase in monetary liabilities	(-) 5,000	300/240	(-) 6,250
Net monetary assets (or net monetary liabilities)	(-) 5,000		(-) 8,750

Purchasing Power gain on monetary items ₹ 8750 – ₹ 5000 = ₹ 3750

Note: The amount of net monetary liabilities as on December 31, 2008 should be ₹ 8750 during inflation. However, such liabilities are only ₹ 5000. Therefore, the company is making purchasing power gain of ₹ 3750.

Alternative Solution

Purchasing power gain can be computed following another method, as shown below:

Statement showing the Net Monetary Result on Account of Price Level Changes

Monetary Liabilities:			
(i) Monetary liabilities as on 1st January, 2015 should have gone up with increase in price indices (₹ 35,000 × 1.5)		52,500	
(ii) Increases in monetary liabilities during 2015 which should have gone up with increase in price indices (5000 × 1.25)		6,250	
Monetary liabilities on 31st December, 2015 should have stood at:		58,750	
However, the liabilities on 31st December, 2015 stood at:		40,000	
Gain on holding of monetary liabilities			18,750
Monetary Assets:			
(iii) Monetary assets as on 1st January, 2015 should have gone up with increase in price indices (₹ 25,000 × 1.5)		37,500	
(iv) Increase in monetary assets during 2015 should have gone up with increase in price indices (₹ 10,000 × 1.25)		12,500	
Monetary assets on 31st December, 2015 should have stood at:		50,000	
However, the monetary assets on 31st December, 2015 stood at:		35,000	
Loss on holding monetary assets			(-) 15,000
Net gain on monetary items			3,750

Working Notes:

- (i) Conversion factors:
 (a) For items as on 1st January, 2015: $300/200 = 1.5$
 (b) For items arising during 2015: $300/240 = 1.25$
 (ii) Increase in monetary assets/liabilities during 2015

	as on 1st January 2015	as on 31st December 2015	Increasing during 2015
(a) Monetary assets	25,000	35,000	10,000
(b) Monetary liabilities	35,000	40,000	5,000

Non-monetary Items

All assets and liabilities that lack the properties of monetary items are classified as non-monetary. Non-monetary assets include inventories, building, plant and equipment, and claims to cash in amounts dependent on future prices. Whereas the holding of monetary items (like cash and accounts receivable) results in purchasing power gain or loss, the mere holding of non-monetary items (like inventory and equipment) does not result in purchasing power gain or loss because they do not represent a fixed amount to be received or paid and thus their prices in terms of the monetary unit may change over time. While most liabilities are monetary, non-monetary liabilities include equity capital and retained earnings. Non-monetary liabilities do not represent fixed claims to pay cash. The monetary assets and liabilities at the end of the year will appear at the same amounts, whereas non-monetary items are reported at their adjusted amounts in the CPPA adjusted balance sheet. The restatement of non-monetary items is done by applying the following conversion factor.

$$\frac{\text{Current year index}}{\text{Index when the non-monetary items were acquired}}$$

For example, assume that a plant was purchased for ₹ 2,00,000 on January 1, 2011 when the general price index was 100. The estimated useful life of the asset was 10 years. If the general price level index on December 31, 2015 is 150, the adjustments of the plant amount would be as follows:

Adjustment of Plant Amount as on December 31, 2008

	Unadjusted (₹)	Conversion Factor	Adjusted (₹)
Plant	2,00,000	150/100	3,00,000
Accumulated depreciation	1,00,000	150/100	1,50,000
Net Plant	1,00,000		1,50,000

The adjustment of the owners equity, with the exception of retained earnings, is similar to the non-monetary items. The original invested capital is multiplied by the following conversion factor:

$$\frac{\text{Current year index}}{\text{Index when the capital was invested}}$$

Retained earnings, which cannot be adjusted by a single conversion factor represent net income after dividends accumulated since the business firm was created. Retained earnings may be restated as follows:

- (i) The first time when historical cost financial statements are restated in terms of current general purchasing power, retained earnings may be determined simply as a residual after all other items in the balance sheet have been restated.
 (ii) In the following periods, the adjusted end-of-period retained earnings may be determined by (a) net income as reported in the general price-level income statement (including general price-level gains and losses on monetary items), and (b) adjustments resulting from general price-level gains or losses on monetary shareholders equity items.

Profit and Loss Account Under CPPA

In CPPA profit and loss account, adjustments are needed about the following items:

- (a) Opening inventory,
 (b) Transactions during the year,
 (c) Depreciation written off for the year and,
 (d) Closing inventory

The method to be followed for restating historical cost-income statement under CPPA is basically the same as suggested for adjusting other historical amounts in terms of current purchasing power, usually applying the following conversion factor:

$$\frac{\text{Current year index}}{\text{Index applicable to the item at the beginning or when it was created}}$$

For example, for restating opening inventories, opening price level-index is relevant whereas average price index for the year can be used for adjusting transactions occurring evenly throughout the year. Purchases are adjusted using price-level index when the purchases were made. Alternatively, average price index is used if specific price index relating to the purchases are not available. In order to calculate depreciation under CPPA, first of all, assets are restated in terms of CPPA, and then the depreciation rate is applied on the restated values of assets. Closing inventory is restated using a price level index depending on the cost flow assumption (FIFO, LIFO or average costing) used by a business firm.

Example

From the following information, find out (i) cost of sales, (ii) closing inventory, under the CPP method assuming the firm is following FIFO method:

Opening stock on January 1, 2015	₹ 40,000
Purchases during 2015	₹ 2,00,000
Closing Stock	₹ 30,000
Price level index:	
Opening	80
Average	125
Last quarter purchases resulting into closing stock	120
Closing Index	140

Inventory as on January 1, 2015	₹ 80,000
Purchases during 2015	4,80,000
Inventory as on 31st December	1,20,000
Price index, January 1, 2015	100
Price index, December 31, 2015	140
Average price index 2015	125

SOLUTION**Cost of Sales and Closing Inventory**

	Historical cost	Conversion factor	Adjusted under CPP
Opening inventory	₹ 40,000	140/80	₹ 70,000
Add: Purchases	2,00,000	140/125	2,24,000
	2,40,000		2,94,000
Less: Closing inventory	30,000	140/120	35,000
Cost of goods sold	2,10,000		2,59,000

SOLUTION**Cost of Sales and Closing Inventory**

	Historical cost	Conversion factor	Adjusted under CPP
Opening Inventory	₹ 80,000	140/100	1,12,000
Add: Purchases	4,80,000	140/125	5,37,600
	5,60,000		6,49,600
Less: Closing inventory			
From Opening Inventory	80,000	140/100	1,12,000
From Current Purchases	40,000	140/125	44,800
Cost of goods sold	4,40,000		4,29,800

Example

From the following data, calculate cost of the sales and closing inventory under CPP method assuming that the firm is following LIFO method for inventory valuation:

Illustrative Problem 1

The following is the balance sheet of ABC company for the year ending December 31, 2008 and December 31, 2016.

Balance Sheet for the year ending December 31, 2015 and Dec. 31 2016

Liabilities	2015 ₹	2016 ₹	Assets	2015 ₹	2016 ₹
Liabilities (10%)	50,000	50,000	Monetary assets	30,000	60,000
Capital	1,00,000	1,00,000	Inventories	30,000	20,000
Retained earnings		10,000	(2008, 3000 units)		
Accumulated depreciation		10,000	(2009, 2000 units)		
			Land	40,000	40,000
			Plant & Equipment	50,000	50,000
	1,50,000	1,70,000		1,50,000	1,70,000

The income statement of ABC company for the year ending December 31, 2016 is as follows:

	₹	₹
Sales (5000 units @ ₹ 40)		2,00,000
Less: Cost of goods sold:		
Beginning inventory		
(3000 units @ ₹ 10)	30,000	
Add: Purchases (4000 units @ ₹ 12)	48,000	
	78,000	
Less: Closing inventory	20,000	
(2000 units @ ₹ 10)		

Gross margin	58,000
Less: Expenses:	1,42,000
Interest expense	5,000
Selling and administrative expenses	1,17,000
Depreciation	10,000
Net Income	1,32,000
	10,000

The following additional information is available:

- (i) On December 31, 2015 the price-level index was 100. The price-level index as on December 31, 2016 was 180 and the average price index for 2016 had been 120.

- (ii) The inventory purchases were made at a date when the price-level index was 150.
- (iii) All revenues and costs were incurred evenly throughout the year, with the exception of the cost of goods sold and the depreciation expense.
- (iv) LIFO has been assumed.
- (v) Depreciation for plant and equipment was accumulated by the straight line method on a five-year life.

SOLUTION**Calculation of Purchasing Power Gains or Losses**

	<i>Unadjusted</i> ₹	<i>Conversion</i>	<i>Adjusted</i> ₹
Net monetary assets on January 1, 2016	(20,000)	180/100	(36,000)
Add: Monetary receipts during 2016, sales	2,00,000	180/120	3,00,000
Net monetary items	1,80,000		2,64,000
Less: Monetary payments:			
Purchases	48,000	180/150	57,600
Interest	5,000	180/120	7,500
Selling and administrative expenses	1,17,000	180/120	1,75,500
Total	1,70,000		2,40,600
Computed net monetary assets on December 31, 2016	10,000		23,400
Less: Actual net monetary assets December 31, 2016			10,000
Purchasing power loss on monetary assets			13,400

Adjusted Income Statement of ABC Company for the year ending 2016

	<i>Unadjusted</i> ₹	<i>Conversion</i>	<i>Adjusted</i> ₹
Sales (5,000 units @ ₹ 40)	2,00,000	180/120	3,00,000
Less: Cost of goods sold:			
Beginning inventory (3000 units)	30,000	180/100	54,000
Purchases (4000 units)	48,000	180/150	57,600
Goods available for sale	78,000		1,11,600
Closing inventory (2000 units)	20,000	180/100	36,000
Cost of goods sold	58,000		75,600
Gross margin	1,42,000		2,24,400
Other expenses:			
Interest expenses	5,000	180/120	75,000
Depreciation expense	10,000	180/100	18,000
Selling and administrative expense	1,17,000	180/120	1,75,500
	1,32,000		2,01,000
Net operating income	10,000		23,400

Reconciliation of Adjusted Retained Earnings

	₹
Retained earnings, January 1, 2016	—
Adjusted net operating income	23,400
Less: Purchasing power loss	13,400
Net Income transferred to balance sheet	10,000

2015 Balance Sheet of ABC Company Adjusted to 2016 Price Levels

Liabilities	Unadjusted (₹)	Factor	Adjusted (₹)	Assets	Unadjusted (₹)	Factor	Adjusted (₹)
Liabilities				Monetary Assets	30,000	180/100	54,000
Capital	50,000	180/100	90,000	Inventories	30,000	180/100	54,000
Retained earnings	1,00,000	180/100	1,80,000	Land	40,000	180/100	72,000
				Plant & equipment	50,000	180/100	90,000
Total	1,50,000		2,70,000		1,50,000		2,70,000
Liabilities (10%)	50,000	180/180	50,000	Monetary Assets	60,000	180/180	60,000
Capital	1,00,000	180/100	1,80,000	Inventories	20,000	180/100	36,000
Retained earnings	10,000		10,000*	Land	40,000	180/100	72,000
				Plant & equipment	50,000	180/100	90,000
				Accumulated Depreciation	(10,000)	180/100	(18,000)
Total	1,60,000		2,40,000		1,60,000		2,40,000

*Alternatively, adjusted retained earnings ₹ 23,400 could be written on the liabilities side and purchasing power loss of ₹ 13,400 on the asset side. However, the net result will be the same, i.e., ₹ 10,000.

EVALUATION OF CPPA

CPPA restates historical costs in terms of current purchasing power. This accounting model attempts to stabilise the measuring unit a constant value that prevails on the latest balance sheet date. CPP does not create a new basis of valuation or profit determination; it merely restates the actual costs that were incurred in currency units of different values into currency units of a constant value, thus making them properly comparable and additive. It, however, has depressive effect on profits. In the long run, total profits shown by CPPA accounts will be smaller than those shown by HCA.

ARGUMENTS IN FAVOUR OF CPPA

A number of arguments have been advanced in favour of CPPA which are as follows:

- Inflation is concerned with changes in the general level of prices, therefore, only CPPA can be regarded as a true form of inflation accounting. Those who consider inflation as an increase in general price levels and a decline in the purchasing power of the money, favour CPPA as the best approach to inflation accounting.
- As CPPA uses uniform purchasing power as the measuring unit, it possesses the qualities of objectivity and comparability. It has the further advantage of being based on historical costs used in conventional accounting system presently in use. Therefore, it retains all the characteristics of historical cost accounting except for the change in unit of measurement. Also it does not involve the sometimes subjective measurements required by the current value and current cost methods.
- Several authors, e.g., Mathews¹¹, Ijiri¹², Agrawal and Hallbaur¹³, have demonstrated that the adoption of CPPA helps maintain the capital of the entity in terms of its general purchasing power. The accompanying retention of additional resources is accomplished by expensing

the inflation-adjusted costs of non-monetary assets and recognising a loss on holding net monetary assets in the computation of distributable income.

- CPPA provides useful information about the comparable impact of inflation across firms. Inflation affects firms differently, depending on the age and composition of their assets and equities. Highly capital intensive firms are likely to report significantly larger depreciation expense under CPPA method than nominal depreciation expense. Highly leveraged firms will report a larger purchasing power gain during periods of increasing prices than firms that use relatively little debt. CPPA reports these differing effects of inflation across firms.
- CPPA improves the relevance and measurement of net income as it provides a better matching of revenues and expenses because of a constant and common measuring unit. On the contrary, conventional historical accounting does not measure income properly as a result of the matching of rupees of different size (purchasing power) on the income statement.
Also, a gain or loss under CPPA is explicitly recognised for the changes in the general purchasing power of monetary assets and liabilities held. Income before the purchasing power gain or loss must exceed any loss of purchasing power of monetary assets and equities if the purchasing power of the monetary or financial, capital of the firm is to be maintained.¹⁴
- CPPA provides relevant information for management evaluation and use. Purchasing power gain and loss resulting from holding monetary items reflect management's response to inflation. The restated non-monetary items indicate the approximate purchasing power needed to replace the assets.
- CPPA presents to users, in general, the impact of general inflation on profit and provides more realistic return on

investment. Financial data adjusted for pricelevel changes provide a basis for a more intelligent, better informed allocation of resources, whether those resources are in the hands of individuals, business entities or government.¹⁵ Baran, Lakouishok and Ofer¹⁶ examined the extent to which GPL data contain information not available in historic cost data. Information content was defined as the degree of association between the market systematic risk and the accounting data. They found the associations between market betas and GPL adjusted betas were significantly higher than those observed between market and historic cost betas and concluded that “the results obtained in this study appear to support the hypothesis that pricelevel data contains information which is not included in the financial reports currently provided”.

ARGUMENTS AGAINST CPPA

The following arguments have been advanced against CPPA.

- (i) CPPA accounts only for changes in the general pricelevel and does not account for changes in the specific pricelevel. Since specific price movements are not necessarily synchronised with movements of the general price level index, the restatement in terms of general purchasing power does not reflect the current value of the resources of the firm. If the general price index has increased, many specific price changes will be running at a lower level than the general index, whilst many others will be running at a higher level. Furthermore, the discrepancies between specific price and general price changes are likely to be even more pronounced when the general price index is based on consumer goods, and the specific price index relates to producer goods, such as those represented by the assets of a typical business enterprise. Thus, a general price index will not be relevant to any business entity which needs to make adjustments to asset valuations in order to maintain the value of capital in the long run. Gynther¹⁷ finds that there is no such thing as generalized purchasing power. In fact, the purchasing power of money should be related to those items on which money is intended to be spent. A unit of measurement which relies for its validity on the purchasing power of money assessed by reference to a set of goods and services will not be equally useful to all individuals and entities. Hendriksen¹⁸ also observes:

“The restatement (to constant dollars) is not intended to represent current values, but merely the historical cost restated for changes in general purchasing power. However, interpretation remains difficult because historical cost represents the number of dollars paid for a specific item, but the restated amount does not represent the amount that would have been paid for the item if the current price-level and the current price structure were then known. And since it is not intended

to be a surrogate or current value, there is a difficulty in attaching any current market or utility valuation interpretation to it.”

It is apparent, therefore, that this method is not designed to convey current values although users may believe that the restated values correspond to current values.

- (ii) Furthermore, there is a problem of choice of an appropriate general price-level index. A general price-level index that is applied must necessarily be a broad measure of purchasing power for a comprehensive market basket of goods. Unfortunately, broad indices are generally not well suited to specific industries, *e.g.*, individual companies and investors do not buy market baskets but rather have specific spending and investment needs. Each of these needs is affected differently by inflation and changes in other economic conditions. The application of general indices may be most useful from a standpoint of overall economic evaluation, broad strategic planning and policymaking, management, and employee and investor education. But its usefulness is limited for budgeting, investment, and operating decision making.

Some doubt may be expressed about the accuracy of index numbers prepared by government agencies. It may show a downward bias because there is a desire to report as low a degree of inflation as possible. Therefore, the ability of index numbers to measure what they intend to, is doubted.

- (iii) CPPA requires the identification and classification of assets and liabilities as monetary or non-monetary. The treatment of monetary items has been a source of criticism under CPPA. Not only is there conceptual disagreement, but there is strong objection to the idea of ‘rewarding’ highly leveraged (indebted) firms with a reported increase in profits based solely on indebtedness. Many companies feel that CPPA ‘gain on borrowing’ which is added to profit, would lead to the overstatement of their profits in a period of inflation, since the gain to shareholders is a loss to lenders. Also, while there is general agreement on how most items should be classified, some items are subject to different interpretations. Examples are deferred income taxes, preference shares, foreign currency items, and convertible debt.
- (iv) The capital maintenance concept of CPPA is a proprietary one, *i.e.*, maintenance of financial capital in real terms in contrast to entity approach to capital maintenance. CPPA does not solve the problem of gradual depletion of operating capital of an enterprise in periods of inflation. The balance sheet prepared on the basis of CPPA does not reflect the current worth of an enterprise. Users of financial statements are interested in a firm’s ability to maintain its operating capability, in

terms of goods and services that it normally purchases. If the general pricelevel index does not reflect the specific pricelevel changes of particular goods and services sold by the firm, the restated income statement provides a measure of income that is difficult to interpret, even though it may serve to reduce the 'paper profit' resulting in historical cost model in a period of general inflation. Because of the dubious assumptions underlying the computation of purchasing power gains and losses on holding monetary items, the inclusion of such gains and losses would only produce a more confusing and potentially misleading measure of performance.¹⁹

- (v) Most empirical studies have concluded that general price-level information is not relevant and useful, and there are better ways to disclose the effect of inflation on a specific company, its assets, operations, and its future.²⁰ The Sandilands Committee (UK) summarises its view of CPPA as follows:

"It (CPPA) fails to show the company's 'operating profit', it is potentially misleading in including net gains on monetary items which exist only in terms of current purchasing power units and not in terms of monetary units, and it shows how far the 'purchasing power' of a shareholder's investment has been maintained in a sense which is not useful to him for any practical purpose. If CPPA does not provide useful information for shareholders, from whose point of view it is conceived, it is unlikely to provide useful information for other users of account."²¹

Solomons²² comments:

"...because CPPA retains historical cost as the attribute to be measured, it measures very imperfectly the amount by which an enterprise or its owners are better or worse off at the end of a period compared with the beginning, so that an appearance of maintaining real financial capital may be no more than that appearance."

Truly speaking, CPPA is pure inflation accounting. It is a logical method of dealing with the effects of inflation when all prices have changed in the same proportion, so that there is no problem of reporting relative or specific price changes. Also, CPPA has been generally favoured when inflation has been at a high

rate, so that the rise in the general level of prices has been seen to be large. CPPA offers a relatively simple and objective solution to the problem of accounting for inflation which would appeal to the professional auditors, but which might not satisfy users of accounts in period of significant relative (specific) price changes.

Example:

Sylvia Haywood purchased a tract of land at a cost of ₹ 1,20,000 when the price index was at 90. She anticipated that the land, along a feeder route to an inter-state highway, could be sold later at a profit. Seven years later with the price index at 150, she was offered ₹ 2,35,000 for the tract.

Required:

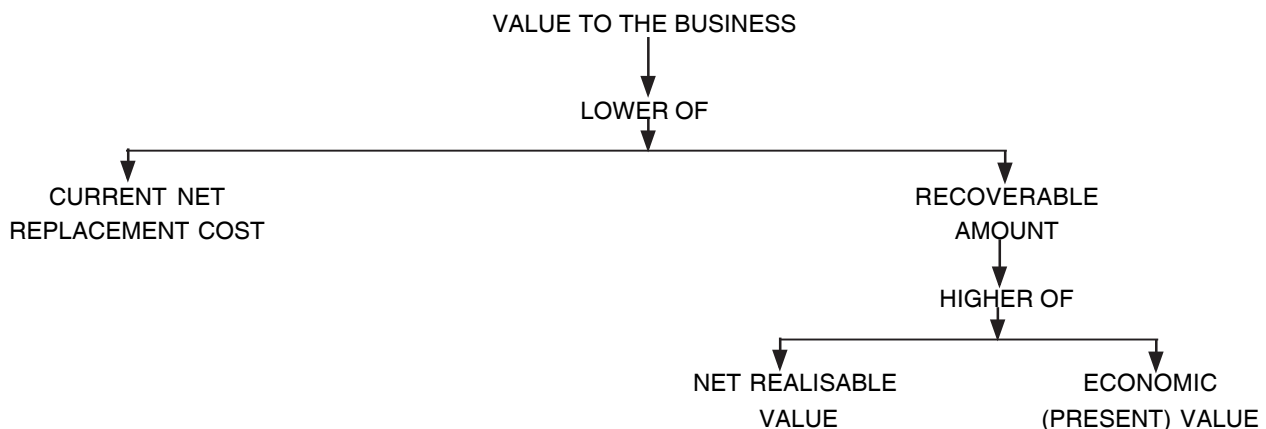
- Adjust the cost of the land to a current price basis by index numbers. Does this amount agree with the current value of the land?
- How much of the gain or loss is a real gain or loss? How much of the difference is attributable to a price level change? (M.Com., Delhi)

Solution

- Adjusted cost of land = ₹ 1,20,000 ? = ₹ 2,00,000
Does this adjusted cost agree with the current value of land.....No.
- Total gain = ₹ 2,35,000 – ₹ 1,20,000 = ₹ 1,15,000
Real gain = ₹ 2,35,000 – ₹ 2,00,000 = ₹ 35,000
Purchasing power gain = ₹ 1,15,000 – ₹ 35,000 = ₹ 80,000 or,
₹ 2,00,000 – ₹ 1,20,000 = ₹ 80,000

CURRENT COST ACCOUNTING (CCA) OR VALUE TO THE BUSINESS ACCOUNTING (VBA)

Current cost accounting uses 'value to the business' as the measurement basis. Value to the business is defined as (a) net current replacement cost or, if a permanent diminution to below net current replacement cost has been recognised; (b) recoverable amount. Recoverable amount is the greater of net realisable value of an asset and, where applicable, the amount recoverable from its further use. The 'value to the business' concept is illustrated in the following figure:



Where an asset will normally be replaced it is shown at the net current replacement cost, and charged on this basis in the profit and loss account. However, where it is not to be replaced or where replacement cost is higher than both net realisable value and present value, the higher of net realisable value and present value is usually used as the measurement basis. The replacement cost of a specific asset is normally derived from the current acquisition cost of a similar asset, new or used, or of an equivalent productive capacity or service potential. Net realisable value usually represents the net current selling price of the asset. Present value represents a current estimate of future net receipts attributable to the asset, appropriately discounted.

Objective of CCA

Current Cost Accounting (CCA) aims to maintain capital of a business enterprise in terms of its operating capability. Operating capability is denoted by the net operating assets of the enterprise in terms of shareholders funds. As an equation,

$$\text{Net Operating assets} = \text{Total tangible assets} + \text{Net monetary working capital} \\ (\text{current assets} - \text{current liabilities})$$

A change in the input prices of goods and services used and financed by the business will affect the amount of funds required to maintain the operating capability of the business enterprise. Therefore, maintaining the operating capability is the objective which is attempted to be achieved under CCA while preparing profit and loss account and balance sheet. CCA is based on UK accounting standard, SSAP 16 Current Cost Accounting, issued in 1980. CCA aims to prepare the following:

(A) Current Cost Profit and Loss Account (to determine Current Cost Operating profit)

(B) Current Cost Balance Sheet

Current Cost Profit and Loss Account

In CCA, the profit and loss account is prepared to determine the current cost operating profit (CCOP). CCOP is determined after allowing for the impact of price changes, on the funds needed to continue the existing business and maintain its operating capability whether financed by share capital or borrowing. CCOP is calculated before interest on net borrowings and taxation. CCOP is determined after making the following three adjustments to historical cost profit before interest and taxes:

- (1) Depreciation Adjustment
- (2) Cost of Sales Adjustment (COSA)
- (3) Monetary Working Capital Adjustment (MWCA)

After determining CCOP, interest and taxes are considered in current cost profit and loss account to finally ascertain net income under CCA. Net income under CCA can be defined as the surplus amount which can be distributed to proprietor or shareholders after keeping the operating capability of an enterprise intact.

(1) *Depreciation Adjustment*— This reflects the difference between depreciation calculated on the current cost of fixed assets and depreciation charged in computing the historical cost income. The accounting policy adopted for the purposes of calculating the historical cost profit should be followed when calculating the depreciation on the current cost of fixed assets. The current cost depreciation charge may be calculated by revising the depreciation charge in accordance with change in the appropriate index level between the year of purchase of the asset and current year. This is illustrated by the following example.

A plant was purchased on January 1, 2012 for ₹ 1,20,000 when the price index was 100. The life of the plant was estimated to be 10 years having no scrap value. On December 31, 2016 the relevant price index was 150. The following calculations will be made to arrive at depreciation adjustment figure on December 31, 2016.

	Historical cost	Index factors	Current cost
Value of plant	₹ 1,20,000	150 / 100	₹ 1,80,000
Accumulated depreciation	₹ 60,000		₹ 90,000
	<u>60,000</u>		<u>90,000</u>
Depreciation adjustment			
Current cost depreciation			
p.a. 10% of ₹ 1,80,000 =		₹ 18,000	
Historical cost depreciation			
p.a. 10% of ₹ 1,20,000 =		<u>₹ 12,000</u>	
Depreciation Adjustment		<u>₹ 6,000</u>	

When fixed assets are revalued every year, there will also be a shortfall of depreciation representing the effect of price rise during the current year on the accumulated depreciation till date. This shortfall is called backlog depreciation which is the amount needed to cover total depreciation provision based on current cost at the year end. This backlog depreciation arising out of increase in current costs could be charged either to the general reserves or against the related revaluation surplus on fixed assets. The former will ensure that the enterprise maintains its operating capital at the time of replacement of fixed assets. The latter procedure has been recommended in the UK Standard (SSAP 16).

(2) *Cost of the Sales Adjustment (COSA)*— The cost of the sales adjustment refers to the difference between current cost of inventories at the date of sale and amount charged as the cost of goods sold in computing the historical cost profit. Theoretically, current cost of sales should be determined on an item by item basis. In a real world situation, however, it would be impracticable to do so and therefore, groups of similar items may be used.

The following example illustrates cost of sales adjustment. The following data relate to a company:

Opening inventory	₹ 2,000
Add: Purchases	4,000
	₹ 6,000
Less: Closing inventory	1,000
	₹ 5,000
Cost of goods sold at historical cost	
Price levels during the year:	
Beginning	100
Closing	120
Average	110

SOLUTION

(1) Opening and closing inventory to be revised in terms of average cost of the year

Opening inventory	₹ 2,000 × 110/100 = ₹ 2,200
Closing inventory	₹ 1,000 × 110/120 = ₹ 917

(2) Computing current cost of sales using revised amounts for opening and closing inventories.

	₹
Opening inventory	2,200
Add: Purchases	4,000
	6,200
Less: Closing inventors	917
	5,283
Cost of sales on current cost basis	
(3) Calculating cost of sales adjustment	
Cost of sale on current cost basis	5,283
Less: Cost of sales on historical cost basis	5,000
	283
Cost of sales adjustment	

(3) *Monetary Working Capital Adjustment (MWCA)*— The MWCA reflects the amount of additional (or reduced) finance needed for monetary working capital as a result of changes in the input prices of good and services used and financed by the business. Monetary working capital (usually represented by the difference between trade debtors and trade creditors) is an integral part of the net operating asset of the business. In times of rising prices, a business needs more funds to finance monetary working capital. The adjustment reflects this additional need for funds.

MWCA is calculated if debtors are more than the creditors. If creditors are more than the debtors, this is a *minus* net working capital. The *minus* excess (creditors-debtors) is not regarded as funding working capital and excluded. It is included in net borrowing for the purpose of calculating gearing ratio and gearing adjustment.

The MWCA is made in the calculation of current cost operating profit and takes the form of a charge or credit to profit and loss account with the corresponding credit or charge to the current cost reserve. SSAP 16 of UK requires that MWCA should include items used in daytoday operating activities of the business. It includes trade debtors (including trade bills receivables, prepayments) and trade creditors (including trade bills payable, accruals, expense creditors). MWCA should not include creditors or debtors relating to fixed assets bought or sold or under construction.

Calculating MWCA

- (i) Determine the items to be included in MWCA.
- (ii) Determine separately the relevant indices to be used in adjusting debtors and creditors:
 - (a) The index for debtors should reflect changes in the current cost of goods and services sold attributable to change in input prices over the period the debt is outstanding. Indices of selling prices may be used where these provide a fair approximation of cost changes in amount and time.
 - (b) The index for creditors should reflect similar changes in the cost of items which have been financed by those creditors over the period the credit is outstanding.
 - (c) Where the percentage changes in the indices to be used on debtors and creditors are similar, a single index can be used and the adjustment can be determined in one calculation.
- (iii) Apply relevant index or indices to debtors and creditors to determine MWCA. In principle, in calculating the adjustment on debtors the profit element in debtors should be excluded. However, the total amount of debtors can be used where this gives a fair approximation.
- (iv) An averaging method, compatible with the method used for COSA, may be used to calculate the adjustment.

The following example illustrates the calculation of monetary working capital adjustment:

Historical Cost Balance Sheet

	Jan. 1 (₹)	Dec. 31 (₹)
Trade Debtors	1,20,000	1,60,000
Trade Creditors	1,00,000	1,30,000
Net monetary working capital	20,000	30,000
Specific price indexes of		
Finished Goods — Opening	100	
— Closing	120	

Net Monetary Working Capital in terms of current cost (Jan.

1) $20,000 \times 110/100 = ₹ 22,000$

(Dec. 31) $30,000 \times 110^*/120 = ₹ 27,500$

Change due to volume = ₹ 27,500 – ₹ 22,000 = ₹ 5,500

Total change = ₹ 30,000 – ₹ 20,000 = ₹ 10,000

Monetary working capital adjustment

= ₹ 10,000 – ₹ 5,500 = ₹ 4,500

The following journal entry is made to record monetary working capital adjustment:

Profit and Loss A/c Dr.	4,500	
To Current Cost Reserve A/c.		4,500

(Monetary Working Capital Adjustment)

*110 becomes the average price index.

Gearing Adjustment

The current cost operating profit (CCOP) determined after making the above three adjustments is the true amount of profit from operations (ordinary activities of an enterprise) which can help the enterprise to continue to maintain its operating capability. However, the net operating assets which are used to indicate operating capability of a firm are likely to be financed partly by borrowings. Therefore, the effect of the borrowings is considered while determining profit which can be distributed to shareholders. This effect is measured through calculating gearing ratio and subsequently the amount of gearing adjustment. No gearing adjustment arises, where a company is wholly financed by shareholder's capital. A company that has a large proportion of fixed interest and fixed dividend bearing capital to ordinary capital is said to be highly geared. While repayment obligations in respect of borrowings are normally fixed in monetary amount, the proportion of net operating assets so financed by borrowings increases or decreases in value to the business. Thus, when these assets have been realised either by sale or use in the business, repayment of borrowing could be made so long as the proceeds are not less than the historical costs of those assets. It is, therefore, suggested that the current cost profit attributable to shareholders should be determined by taking into account the method of financing the net operating assets. The current cost profit attributable to shareholders reflects surplus for the period after making allowance for the impact of price changes on funds needed to maintain the shareholder's proportions of the net operating assets.

Thus, gearing adjustment is made where a proportion of the assets of business is financed by borrowing. Net borrowing is defined as the amount by which liabilities exceed assets. Liabilities and assets for the purpose of gearing adjustment are defined as follows:

Liabilities are the aggregate of all liabilities and provisions (including convertible debentures and deferred tax but excluding dividends) other than those included within monetary working capital. Assets are the aggregate of all current assets other than those that are subject to a cost of sales adjustment and those that are included within monetary working capital.

The gearing adjustment itself results from the application of the gearing ratio to the net adjustment made in converting the historical cost income to current cost income. The gearing ratio is found in the relationship between net borrowings and average net operating assets. Average net operating assets is obtained from the opening and closing net operating assets divided by two. The gearing ratio formula is:

$$\text{Gearing ratio} = \frac{\text{Average net borrowings}}{\text{Average net operating assets}}$$

Net borrowings = All liabilities and provisions including convertible debentures and deferred tax but excluding dividends and items included in MWCA

minus

All current assets* other than items included in MWCA and COSA.

*If the total of current assets (bank balance) is more than the current liabilities, no gearing adjustment is calculated.

Sometimes, gearing ratio is calculated using average equity capital, as follows:

$$\text{Gearing ratio} = \frac{\text{Average net borrowings}}{\text{Average net borrowings} + \text{Average equity capital}}$$

Current Cost Reserve

Current cost accounting suggests the creation of a reserve account, known as current cost reserve account. The current cost reserve includes (i) current cost adjustments, i.e., depreciation backlog adjustment, cost of sales adjustment and monetary working capital adjustment, (ii) gearing adjustment, (iii) unrealised revaluations surpluses on fixed assets, closing stock and investment. The gearing adjustment amount is credited to profit and loss account and debited to Current Cost Reserve Account.

Example:

Assume a company has a capital mix of 40 per cent debt and 60 per cent equity. The following amounts of adjustments have been found using CCA method:

Cost of sales adjustment	₹ 10,000
Depreciation adjustment	₹ 20,000
Monetary working capital adjustment	₹ 25,000
Total	₹ 55,000

In the above case debt constitutes 40 per cent of the total capital. Therefore, the amount of gearing adjustment will be ₹ 22,000 (₹ 55,000 × 40%). It means only ₹ 33,000 which represents shareholders' share will be charged to Profit and Loss account. The Current Cost Reserve Account will be credited with the amount of ₹ 33,000 on account of three adjustments. Alternatively, more preferably, ₹ 55,000 is charged to Profit and Loss account. Since the amount of gearing adjustment is credited to Profit and Loss account, the net effect is that only ₹ 33,000 stands charged to Profit and Loss account. Also, gearing adjustment is debited to Current Cost Reserve account.

Preparation of Current Cost Balance Sheet

Under current cost accounting, current cost balance sheet is prepared. Balance sheet items are treated in the following manner:

(1) *Fixed Assets* — The fixed assets should be shown in the balance sheet at their value to the business. The value of the business of an asset is the amount which the business would lose if it were deprived of that asset. Determining the value to the business, i.e., generally the current cost of fixed assets, involves great difficulty, because usually the assets now in use were acquired long ago than is typically the case with inventory, and

the assets in use, if replaced currently, would be replaced by different assets.

Thus, if a used asset of like age and condition to the asset in use can be priced, that will set the current cost. If a new asset has to be used as the basis for pricing the old asset, adjustments have to be made for the differences in life expectancy, productive capacity, quality of service, and operating costs between the new and the old asset. The concepts of gross and net current replacement cost are important in this context. The gross current replacement cost of an existing asset is the cost that would have to be incurred at the date of the valuation to obtain and install a substantial identical asset in new conditions. For example if a plant purchased on January 1, 2007 for ₹ 80,000 can be purchased on December 31, 2009, for ₹ 1,00,000, its gross current replacement cost on December 31, 2009, will be ₹ 1,00,000. The net current replacement cost of an existing asset refers to that part of the gross current replacement cost which represents its unexpired service potential. For example, suppose the plant in the above example is estimated to have an economic life of five years. Since it has been used for three years, its net current replacement cost would be ₹ 40,000 (assuming that the equipment will have a zero scrap value at the end of its economic life).

In circumstances, where the asset in use would not be replaced, if for any reason it were taken out of service, its value to the business is not its current cost but a lower recoverable amount. This recoverable amount is its value if sold or its value if used, whichever is higher. Its value if sold is its realisable value, net of selling costs. Its value in use is the net present value of future cash flows (including the ultimate proceeds of disposal) expected to be derived from the use of the asset by the enterprise.

(2) *Land and Buildings*—The land and buildings occupied by the owner himself, should be shown in the balance sheet at their value to the business which will normally be the open market value for their existing uses, *plus* estimated acquisition costs. However, in cases where an open market valuation of the land and buildings as a whole cannot be made, the net replacement cost of the buildings and the open market value of land for its existing use *plus* the estimated acquisition costs should be taken as their value to the business. The valuation should be made by professionally qualified valuers at periodic intervals.

(3) *Inventories*—In the balance sheet, inventories should normally be shown at the lower of the current replacement cost as on the date of balance sheet and the net realisable value.

Revaluation Surplus Transferred to Current Cost Reserve Account

Increase in the value of fixed assets like plant and machinery, land and building, closing stock, investment is credited to current cost reserve account. The increase in value of fixed asset is arrived at by deducting the net historical cost of the asset from its net current cost at the end of the year, both sums being calculated before taking depreciation into account.

To take an example, assume a plant was purchased for ₹ 1,20,000 having a useful life of ten years. Its replacement cost now is ₹ 1,80,000. In the fifth year, the amount to be transferred to current cost reserve account will be ₹ 36,000, calculated as follows:

Net book value after 5 years (₹) + Depreciation for 5th year = Net book value before depreciation (₹)			
Current cost	₹ 90,000	+	₹ 18,000 = ₹ 1,08,000
Historical cost	₹ 60,000	+	₹ 12,000 = ₹ 72,000
Net credit to current cost reserve a/c			₹ 36,000

The profit and loss account, balance sheet and current cost reserve account under current cost accounting will appear as follows:

Current Cost Accounting (CCA) Profit and Loss Account

	₹
Historical profit before interest and tax	—
Less: Current cost operating adjustments:	
(i) Depreciation adjustment	—
(ii) Cost of sales adjustment (COSA)	—
(iii) Monetary working capital adjustment (MWCA)	—
Current cost operating profit	—
Less: Interest on borrowings including debentures and dividend on preference shares	—
Current cost profit after interest	—
Add: Gearing adjustment*	—
Current cost profit before tax	—
Less: Provision for tax	—
Current cost profit after tax (attributable to shareholders)	—
Less: Dividends proposed	—
Current cost profit retained	—
Note: Amount of gearing adjustment is generally deducted from interest.	

***Notes:**

1. Alternatively, gearing adjustment amount could be deducted from the total of current cost operating adjustments (dep. adjustment, COSA and MWCA). The result will be the same if gearing adjustment is deducted from current cost adjustments, or if not deducted from current cost operating adjustment and subsequently added to current cost profit.
2. Gearing adjustment is calculated only when a firm is financed partly by borrowing. No gearing adjustment arises when a company is wholly financed by shareholders' capital. To find

out the net borrowings, cash balance is deducted from total borrowings. Or if cash balance is more than the borrowings, there will be no gearing adjustment.

The above profit and loss account (prepared in a statement format) can be shown in a 'T' format, as below:

Profit and Loss Account

To Depreciation adjustment		By Historical profit before interest and taxes	
To Current cost reserve:		By Current cost reserve (gearing adjustment)	
COSA			
MWCA*			
To Interest			
To Profit before tax			
Total		Total	

* MWCA will be shown on credit side of profit and loss account in case of negative adjustment. In this case entry will be:

Current Cost Reserve A/c
 To Profit and Loss A/c

Entry for revaluation of assets is as follows:

Plant and Machinery A/c
 To Current Cost Reserve A/c

Balance Sheet under CCA

Profit and Loss A/c	—	Plant and Machinery (or similar assets)	—
Current Cost Reserve (balance)	—	(Revalued amount)	—

Current Cost Reserve A/c

To P & L A/c (gearing adjustment)	—	By Fixed Assets (revalued surplus amount)	—
To Depreciation (backlog)		By P & L A/c (COSA)	
To Balance c/d	—	By P & L A/c (MWCA)	—

Illustrative Problem 2: A company buys and sells goods. During the three months ending March 31, 2016, the company enter into the following transactions:

2016
January 1 By 500 units costing ₹ 750
January 31 Sell 400 units for ₹ 2000 and replace them with units costing ₹ 1400.
February 28 Sell 200 units for ₹ 1000. Buy 50 units costing ₹ 200.
March 31 Sell 200 units for ₹ 1100. Buy 100 units costing ₹ 500.

The retail price index during the period was as follows:

January 1, 2016	200
January 31, 2016	220
February 28, 2016	230
March 31, 2016	240

You are required to prepare trading accounts under the following situations:

- (1) Historical Cost Accounting.
- (2) Current Purchasing Power Accounting.
- (3) Current Cost Accounting.

SOLUTION**Trading A/c for the 3 months ending March 31, 2016**

(1) Historical Cost Accounts			₹
Sales January 31			2,000
February 28			1,000
March 31			1,100
			4,100
Less: Cost of Sales			
January 31 (4/5 ? 750)		600	
February 28 (1/5 ? 750 + 1/4 ? 1400)		500	
March 31 (2/4 ? 1400)		700	1,800
Gross Profit			2300
(2) Current Purchasing Power Accounting			₹
Sales January 31		2000 × 240/220	2,182
February 28		1000 × 240/230	1,043
March 31			1,100
			4,325
Less: Cost of Sales			
January 1		₹ 750 × 240/200 = 900	
January 31		₹ 1050 × 240/220 = 1,145	
(3/4 × 1400)			2,045
Gross Profit			2,280
(3) Current Cost Accounting			₹
Sales (as per historical cost)			4,100
Cost of sales			
31 Jan.		1,400	
28 Feb. $\left(\frac{200}{50} \times 200\right)$		800	—
31 Mar. $\left(\frac{200}{100} \times 500\right)$		1,000	
			3,200
Gross Profit			900

Illustrative Problem 3: The following are the profit and loss account for the year ending December 31, 2015 and balance sheets as at December 31, 2015 and December 31, 2016 prepared on historical cost basis.

Profit and Loss A/c for the year ending Dec. 31, 2016

	₹	₹
Sales		3,00,000
Opening stock	66,000	
Add: Purchases	1,80,000	
	2,46,000	
Less: Closing stock	72,000	
Cost of sales		1,74,000
		1,26,000
Less: Expenses	73,500	
Interest	1,500	
Depreciation	10,500	
		85,500
Net profit for 2016		40,500

Balance Sheets as on December 31, 2015 and 2016

<i>Liabilities</i>	<i>2015</i> ₹	<i>2016</i> ₹	<i>Assets</i>	<i>2015</i> ₹	<i>2016</i> ₹
Equity Capital			Cash	15,000	48,500
10,000 shares	1,00,000	1,00,000	Debtors	43,500	59,500
of ₹ 10 each			Stock	66,000	72,000
10% debentures	15,000	15,000	Freehold premises		
Creditors and accruals	25,500	30,000	(at cost)	30,000	30,000
Retained earnings	47,000	87,500	Plant and machinery		
			(at cost)	75,000	75,000
			Less: Depreciation	(42,000)	(52,500)
Total	1,87,500	2,32,500	Total	1,87,500	2,32,500

The following additional information has been provided.

- (i) The general purchasing power price-level indices for 2015 and 2016 were as follows:
- | | | |
|------|------------------|------------|
| | <i>Beginning</i> | <i>End</i> |
| 2015 | 112 | 116 |
| 2016 | 116 | 120 |
- (ii) Fixed assets were acquired when the purchasing power index was 100.
- (iii) All transactions, sales and purchases occurred evenly throughout the year.
- (iv) Stock at January 1, 2016 was acquired evenly during the last three months of 2015.
- (v) Stock at December 31, 2016 was acquired evenly during the last three months of 2016.
- (vi) Depreciation of plant and machinery is at the rate of 14% on cost.
- (vii) The specific price indices relating to plant and machinery were as follows:
- | | | |
|------|------------------|------------|
| | <i>Beginning</i> | <i>End</i> |
| 2015 | 120 | 140 |
| 2016 | 140 | 160 |
- (viii) The specific price index was 100 when the plant and machinery was purchased.
- (ix) The specific price indices for stock were as follows:
- | | | |
|------|------------------|------------|
| | <i>Beginning</i> | <i>End</i> |
| 2015 | 115 | 131 |
| 2016 | 131 | 151 |
- (x) The specific price indices used for stock are to be used in computing the monetary working capital adjustment.
- (xi) The freehold premises were valued on an existing use basis, the value being ₹ 45,000 at December 31, 2015 and ₹ 75,000 at December 31, 2016.
- (xii) The aggregate monetary working capital adjustment to December 31, 2015 was ₹ 2,130 and the aggregate cost of sales adjustment was ₹ 6,907. The accumulated depreciation adjustment to December 31, 2015 is to be charged equally between the profit and loss account and the current cost reserve.
- (xiii) The debenture interest was paid on December 31, 2016.

SOLUTION

Adjustment to 2015 balance sheet			
(1) Revaluation of freehold property			₹
Freehold property A/c	Dr.	15,000	
To Current cost reserve A/c		15,000	
(2) Revaluation of plant and machinery			
Cost ₹ 75,000 × 140/100		1,05,000	
Cost		75,000	
Revaluation surplus		30,000	
Plant and machinery A/c	Dr.	30,000	
To Current cost reserve A/c	Dr.	30,000	
(3) Revaluation of accumulated depreciation			
Historical cost depreciation 42,000 × 140/100 =		58,800	
Less: Historical cost depreciation		42,000	
Depreciation revaluation		16,800	
Current cost reserve A/c	Dr.	8,400	
Profit and Loss A/c	Dr.	8,400	
To Depreciation		16,800	
(4) Revaluation of stock			
Average index during last 3 months of 2015			
$115 + (131 - 115) \times 21/24 = 129$			
Stock at historical cost 66,000			
Stock at replacement cost 66000 × =		67,023	
		1,023	
Stock A/c	Dr.	1,023	
To Current cost reserve		1,023	
(5) Cost of sales adjustment			
Profit and Loss A/c	Dr.	6,907	
To Current cost reserve A/c	6,907		
(6) Monetary working capital adjustment			
Profit and Loss A/c	Dr.	2,130	
To Current Cost Reserve A/c		2130	

Current Cost Reserve A/c

	₹		₹
To Depreciation	8,400	By Freehold Property	15,000
To Balance c/d	46,660	By Plant and Machinery	30,000
		By Stock	1,023
		By Profit and Loss	6,907
		By Profit and Loss	2,130
	55,060		55,060

Profit and Loss A/c

	₹		₹
To Depreciation	8,400	By Balance as per Historical A/c	47,000
To Current Cost Reserve	6,907		
To Current Cost Reserve	2,130		
To Balance c/d	29,563		
	47,000		47,000

Current Cost Balance Sheet as on December 31, 2015

<i>Liabilities</i>	<i>Amount ₹</i>	<i>Assets</i>	<i>Amount ₹</i>
Capital and Reserves:		Cash	15,000
Share Capital	1,00,000	Debtors	43,500
Profit and Loss A/c	29,563	Stock	67,023
Current Cost Reserve	46,660	Freehold Premises	45,000
Creditors and Accruals	25,500	Plant & Machinery	1,05,000
Debentures (10%)	15,000	Less: Depreciation	58,000
Total	2,16,723	Total	2,16,723

Necessary adjustment for 2016: After opening current cost balance sheet has been prepared, the following four current cost adjustments will be calculated.

- (1) Current cost depreciation adjustment
HCA depreciation $10,500 \times 150/100 =$
Less: HCA depreciation
Current cost adjustment
150 is the average index for 2014.

₹ 15,750
10,500
5,250

In addition to this adjustment, it is necessary to take account of the impact in the changes in current costs between the average and year-end index used in calculating accumulated depreciation in the balance sheet.

Depreciation for year based on Closing index		16,800
HCA depreciation		(10,500)
Current cost adjustment		(5,250)
Backlog to be charged to Current cost reserve		<u>1,050</u>
Profit and Loss A/c	Dr.	5,250
Current Cost reserve A/c	Dr.	1,050
To Depreciation A/c		6,300

- (2) Cost of sales adjustment
Opening stock $6600 \times 141/129$
Purchases
Closing stock $7200 \times 141/148.5$
Current cost of sales
Historical cost of sales
Cost of sales adjustment
Profit and Loss A/c
To Current cost reserve

71,140
1,80,000
2,52,140
68,364
1,83,776
1,74,000
9,776
9,776

Dr. 9,776

- (3) Monetary Working Capital Adjustment

	<i>Opening</i>	<i>Closing</i>
Debtors	43,500	59,500
Creditors	25,500	30,000
NMWC	<u>18,000</u>	<u>29,500</u>
	$\times 141/131$	$\times 141/151$
Current cost net Monetary working capital	19,374	27,546
Change due to volume $(27546 - 19374) =$		<u>8,172</u>
Total change		11,500
Momentary Working Capital Adjustment		<u>3,328</u>
Profit and Loss A/c	Dr.	3,328
To Current cost reserve A/c		3,328

- (4) *Gearing adjustment* — The cash balances of ₹ 15,000 and ₹ 48,500 match or exceed the opening and closing borrowings of ₹ 15,000. Hence, there is no gearing adjustment in this case. Had there been no cash balances, the adjustment would have been calculated as shown below:

$$\text{Average net borrowing} = \frac{15,000 + 15,000}{2} = ₹ 15,000$$

$$\text{Average net operating assets} = \frac{1,76,223 + 2,47,213}{2} = ₹ 2,11,718$$

$$\text{Shown on a current cost basis gearing ratio} = \frac{15,000 + 15,000}{2,11,718} = 7.1\%$$

Adjustments to 2016 (closing) balance sheet

- (1) Revaluation of freehold property

Opening revalued amount of ₹ 45,000 to ₹ 75,000

Freehold property A/c	Dr.	30,000
To Current cost reserve A/c		30,000

- (2) Revaluation of plant and machinery

Cost 75,000 × 160/100 =	1,20,000

Revalued amounts on December 31, 2015 =	1,05,000

Revaluation surplus	15,000

Profit and Loss A/c	Dr.	15,000

To Current cost reserve A/c		15,000

- (3) Revaluation of accumulated depreciation

Balance 52,500 × 160/100 =	84,000

Less: Brought forward	58,800

Shortage	25,200

Profit and Loss A/c charge	16,800

Backlog	8,400

The backlog depreciation arises from revaluation of costs incurred in prior years, and is charged to current cost reserve.

	₹	₹
Current cost reserve A/c	Dr.	8,400
To Depreciation		8,400
(4) Revaluation of stock to replacement cost		
Average index 131 – (151 – 131) × 21/24 = 148.5		
Closing stock at historical cost		72,000
Stock at replacement cost 72,000 × 151/148.5 =		73,213
Revaluation adjustment		1,213
Profit and Loss A/c	Dr.	1,023
To Current cost reserve A/c		1,023
Stock A/c	Dr.	1,213
To Current cost reserve A/c		1,213

**Current cost profit and Loss A/c for the period ending
31st December, 2016**

		₹
Profit before interest and taxation on historical cost basis (2008, profit ₹ 40,500 + 1,500 interest)		42,000
Less: Current cost operating adjustments:		
Depreciation	5,250	
Cost of sales	9,776	
Monetary working capital	3,328	
		18,354
Current cost operating profits		23,646
Gearing adjustments	—	
Debenture interest	1,500	
		1,500
Current cost profit attributable to shareholders for the year		22,146

Current Cost Reserve A/c

	₹		₹
To Profit and Loss	1,023	By Balance b/d	46,660
To Depreciation	1,050	By Freehold property	30,000
To Depreciation	8,400	By Plant and Machinery	15,000
To Balance c/d	95,504	By Stock	1,213
		By Profit and Loss (MWCA)	3,328
		By Profit and Loss (COSA)	9,776
Total	1,05,977	Total	1,05,977

Current Cost Balance Sheet as on Dec. 31, 2016

<i>Liabilities</i>	<i>Amount</i>	<i>Assets</i>	<i>Amount</i>
Capital and reserves:		Cash	48,500
Share capital	1,00,000	Debtors	59,500
Profit & Loss A/c b/d	29,563	Stock	73,213
Profit for 2009	22,146	Freehold premises	75,000
Current cost reserve	95,504	Plant & Machinery	1,20,000
Creditors and accruals	30,000	Less: Depreciation	84,000
10% debentures	15,000		36,000
Total	2,92,213	Total	2,92,213

Evaluation of Current Cost Accounting

The adoption of current cost or lower recoverable amount in place of historical cost as the attribute to be used for measuring assets and if relevant, liabilities also, would greatly increase the relevance of information conveyed in financial reports, and it would increase its utility and representational faithfulness. It is important that the value of an item to the business must be capable of being determined reliably; if this cannot be done, a surrogate for it must be found satisfactorily.

The basic objective of current cost accounts is to provide more useful information than that available from historical cost accounts for the guidance of management of the business, the shareholders and others on such matters as the financial viability of the business, return on investment; pricing policy, cost control and distribution decisions; and gearing.

The current cost accounting possesses the merit of closely approximating the impact of specific price changes on the business enterprise because it makes use of specific indices. The CCA measures an individual company's experience of inflation by reference to that company's specific pattern of expenditure. As such, the method seeks to maintain the operating capability of the enterprise during inflation. The same tools of analysis as those applied to historical cost accounts are generally appropriate. The ratios derived from current cost accounts for such items as gearing, asset cover, dividend cover and return on capital employed will often differ substantially from those revealed in historical cost accounts but should be more realistic indicators when assessing an entity or making comparisons between entities.

SSAP 16 (U.K.) points the limitations of CCA as follows:

“As with historical cost accounts, CCA (based on value to the business concept) is not a substitute for forecasting when such matters as a change in the size or nature of the business are consideration. It assists cash flow forecasts, but does not replace them. It does not measure the effect of changes in the general value of money or translate the figures into currency of purchasing power at a specific date. Because of this it is not a system of accounting for general inflation. Further, it does not show changes in the value of the business as a whole or the market value of the equity.”

An important weakness of this model is that it seems to possess an element of subjectivity inherent in periodic revaluations, specially where specific price indices are not generated by an authoritative agency.

Furthermore, perhaps the largest problem is the aggregation problem. The value to the firm principle has its theoretic roots in the valuation of the individual assets, not the firm as a whole, but accounts, whether balance sheets or profit and loss accounts, are aimed at the assessment of the performance of the business as a whole. Other important problems include the precise definition of replacement cost under conditions of economic and technological change: replacement cost is fundamental to the value to the firm method.

INFLATION ACCOUNTING IN DIFFERENT COUNTRIES

The topic of accounting for price changes has been a matter of great debate among accounting researchers, writers, accounting

bodies, accountants associations and is still an unresolved, controversial subject. Efforts are being made in several countries by accounting professions and accounting bodies to find satisfactory solutions to financial accounting and reporting problems caused by specific and general price level changes. Here, an attempt is made to analyse recent inflation accounting standards currently in effect or proposed in United States, United Kingdom, and India

UNITED STATES OF AMERICA (USA)

Accounting bodies in USA have been concerned with the impact of price changes on financial reporting since many years ago. However, considerable attention could be given to inflation accounting only in 1969 when the Accounting Principles Board (APB) issued Statement No. 3 "Financial Statements Restated for General Price Changes" which recommended supplementary disclosure of general price level information. Since then this topic gained interest and in 1974, the Financial Accounting Standards Board issued an Exposure Draft, Financial Reporting in Units of General Purchasing Power, which proposed mandatory supplementary disclosure of general price level adjusted statement. While this FASB's Exposure Draft was under study, Securities and Exchange Commission, in 1976, issued Accounting Series Release No. 190 (ASR 190) which required large firms to disclose particular replacement cost data. Shortly, after ASR 190 was issued, the FASB withdrew its 1974 Exposure Draft and in September 1979 issued Statements of Financial Accounting Standards No. 33 (SFAS 33), "Financial Reporting and Changing Prices". Shortly after the issuance of FASB Statement No. 33 the SEC announced its decision to withdraw the replacement cost disclosure rules set forth by ASR No. 190.

SFAS 33

Before discussing SFAS 33, it should be understood that in United States financial reporting has a dual regulatory structure, with the FASB and the SEC being the primary authorities. The SEC has been given statutory power by the Securities Acts of 1933 and 1934 to ensure satisfactory financial reporting to serve the public interest. In setting standards and disclosure rules, the SEC aims "to assure the public availability in an efficient and reasonable manner on a timely basis of reliable, firm-oriented information, material to informed investment, and corporate strategic decision making".

The SEC had usually relied on the accounting profession to establish generally accepted accounting principles with respect to annual reports and statements filed with it. By issuing SFAS 33, which requires mandatory supplemental information pertaining to the effects of changing prices on business operations, the general objective of the FASB has been to improve the relevant informational content of financial statements. In SFAS 33's statement of objectives, four specific uses of the SFAS 33 information are stated:

- (1) Assessment of future cash flows. When prices are changing, measurements that reflect current prices are

likely to provide useful information for the assessment of future cash flows.

- (2) Assessment of enterprise performance. Measurements that reflect current prices can provide a basis for assessing the extent to which past decision on the acquisition of assets have created opportunities for earning future cash flows. The growth in value of assets held (holding gain) is to be regarded as one aspect of performance even though it may be distinguished from operating performance. This clearly points to a measurement of comprehensive income and operating performance could be measured by the 'earnings' concept.
- (3) Assessment of the erosion of operating capability. Information on the current prices of resources that are used to generate revenues can help users to assess the extent to which and the manner in which operating capability has been maintained. This concedes the potential usefulness of a physical capital maintenance concept.
- (4) Assessment of erosion of general purchasing power. Investors typically are concerned with assessing whether an enterprise has maintained the purchasing power of its capital.

The first three of these uses point to a current cost or current value accounting system, whereas the fourth points to general price level adjustment (CPP). However, it does not necessarily point to general price level adjustment of traditional historical cost accounts, if the case for a current valuation basis were accepted.

Disclosure Requirements

The following data are required to be disclosed in accordance with SFAS 33:

- (1) Income from continuing operations adjusted for the effects of general inflation.
- (2) Income from continuing operations on a current cost basis.
- (3) Purchasing power gains and losses on holding monetary items reported separately (*i.e.*, not included in the income from continuing operations).
- (4) Holding gains on non-monetary items net of inflation and reported separately as "increases or decreases" on non-monetary items.
- (5) Current costs or lower recoverable amount of inventory and property, plant and equipment at the end of the current fiscal year.
- (6) A five-year summary of specific relevant financial data expressed in constant dollars.

The above disclosure requirements establish minimum disclosure levels and companies are encouraged to provide

additional information. The detailed disclosures required in SFAS 33 are mentioned here.

1. Supplementary Income Statement for Current Year

The supplementary income statement must include both constant dollar and current cost information; in particular, the following disclosures are required as a minimum (SFAS 33, paras 2930):

Constant Dollar Disclosures

- (a) Information on income from continuing operations for the current year on a historical cost/constant dollar basis.
- (b) The purchasing power gain or loss on net monetary assets for the current fiscal year (which must not be included in income from continuing operations).

Current Cost Disclosures

- (a) Information on income from continuing operations for the current fiscal year on a current cost basis.
- (b) The current cost amounts of inventory and property, plant and equipment at the end of the current fiscal year.
- (c) Increases or decreases for the current fiscal year in the current cost amounts of inventory and property, plant and equipment, net of inflation (such increases and decreases, or realisable holding gains should not be included in income from continuing operations).

When income from continuing operations on a current cost basis is not materially different from income on a historical cost/constant dollar basis, then the current cost disclosures may be omitted, provided that the omission is noted in a footnote (SFAS 33, para 31). This materiality rule is effective in exempting many financial institutions and other enterprises holding relatively small amounts of inventory, property, plant, and equipment from the current cost disclosure requirements.

Income from continuing operations is defined as “income after applicable income taxes but excluding the results of discontinued operations, extraordinary items and cumulative effect of accounting changes.” [SFAS 33, para 22 (g)]. In addition, income from continuing operations excludes purchasing power gains and losses on net monetary items and increases or decreases in the current cost of inventory and property, plant and equipment.

2. Five Year Summary of Financial Data Adjusted for Changing Prices

A five year summary must disclose the following information for each of the most recent fiscal years (SFAS 33, para 35):

- (a) Net sales and other operating revenues.
- (b) Historical cost/constant dollar information.
 - (i) Income from continuing operations

- (ii) Income per common share from continuing operations.
 - (iii) Net assets at fiscal year end.
- (c) Current cost information.
 - (i) Income from continuing operations.
 - (ii) Income per common share from continuing operations.
 - (iii) Net assets at fiscal year end.
 - (iv) Increases or decreases in the current cost amount of inventory and property, plant and equipment, net of inflation.
- (d) Other information.
 - (i) Purchasing power gain or loss on net monetary items.
 - (ii) Cash dividends declared per common share.
 - (iii) Market price per common share at fiscal year end.

3. Required Footnote Disclosures

In addition to the supplementary income statement and the five year summary, FAS 33 requires the following disclosures in footnotes (paras 3334):

- (i) The aggregate amount of depreciation, on both historical cost/constant dollar basis and a current cost basis, in the event that depreciation expense is allocated among several expense categories (as when depreciation expense is allocated between cost of goods sold and separate expense item).
- (ii) The principal types of information used to calculate the cost of (a) inventory, (b) property, plant, and equipment, (c) cost of goods sold, and (d) depreciation, depletion, and amortisation.
- (iii) Any difference between (a) the depreciation methods, estimates of useful lives, and salvage values of assets used for calculations of historical cost/constant dollar depreciation and current cost depreciation, and (b) the methods and estimates used for calculation of depreciation in the primary financial statements.
- (iv) The exclusion from the computations of supplementary information of any adjustments to or allocations of the amount of incometax expense in the primary financial statements.

A closer examination of the SFAS 33 disclosure provisions reveals that it requires the disclosure of income from continuing operations on a historical cost/constant dollar basis. In order to make this adjustment, a general price level index is used, which is an average measure of the individual price changes taking place in the economy. SFAS 33 requires the disclosure of general purchasing power gains from holding monetary liabilities and monetary assets, respectively, during a period of inflation. However, the purchasing power gain or loss on net monetary items is not included in measuring the income of the period. Additionally, SFAS 33 requires the disclosure of holding gains

and losses from inventories, property, plant and equipment less the general inflation component that produces an illusory, fictitious gain or loss. To the extent that a portion of these assets are financed through debt, part of the realised holding gain can be treated as income attributable to the present shareholders. SFAS 33, however, does not have any provisions for a gearing or financing adjustment.

SFAS 33 requires the reporting of income from continuing operations on a current cost basis (or lower recoverable value). Although SFAS 33 does not provide a monetary working capital adjustment, the current cost income from continuing operations may be viewed as “distributable” or “sustainable”, indicating the amount the firm can sustain in the future or distribute as dividends while maintaining its capital and continuing normal operations. Such data should be relevant for investment decision making to the extent that such income measures can help investors to predict cash flows.

Applicability of SFAS 33 Requirements

SFAS 33 is applicable to

.....public enterprises that prepare their primary financial statements in US dollars and in accordance with US generally accepted accounting principles and that have, at the beginning of the fiscal year when financial statements are being presented, either.

- (a) Inventories and property, plant and equipment (before deducting accumulated depreciation, depletion and amortisation) amounting in aggregate to more than \$ 125 million, or
- (b) Total assets amounting to more than \$1 billion (after deducting accumulated depreciation).

SFAS 33 is applicable to most of the large companies and is also applicable to large financial institutions (commercial bank, thrift institutions, and insurance companies). However, SFAS 33 encourages other companies and organizations to present such supplemental disclosures. FAS 33 provides for the different treatment of certain assets in special industries, *e.g.*, oil and gas reserves, timberlands, mining properties, and income producing real estate.

SFAS 82

In November 1984, the FASB issued Statement of Financial Accounting Standards No. 82 (FAS 82) ‘Financial Reporting and Changing Prices Elimination of Certain Disclosures’ which supersede some portions and amends other portions of SFAS 33. The major effect of SFAS 82 is to eliminate the requirement for disclosure of constant dollar information for firms that report current cost/constant purchasing power data. That is, disclosure of income from continuing operations, income per share, and net assets on an historical cost/constant dollar basis is no longer required for firms that report current cost data adjusted for the effects of changes in the purchasing power of the monetary unit. Disclosure of purchasing power and net holding gains and losses is still required.

The FASB’s issuance of SFAS 82 integrates the two different approaches to deal with the problem of changing prices. Current cost accounting is an attempt to deal with problems created by changes in specific prices, while historical cost/constant purchasing power accounting is an attempt to deal with problems created by changes in the general price level. Current cost/constant purchasing power accounting is considered by many to be theoretically superior to either current cost or historical cost/constant purchasing power accounting.

The changes required by SFAS 82 suggest that the Financial Accounting Standards Board (FASB) believes the current cost/constant purchasing power disclosures will be more useful. These disclosures, however, will still be supplementary. While the changes brought about by FAS 82 will facilitate the evaluation of the current cost/constant purchasing power model, SFAS 82 does nothing to change the advantages favouring historical cost data in future empirical tests.

SFAS 89

After SFAS 33, the FASB issued SFAS 89 in 1986 entitled as “Financial Reporting and Changing Prices.” According to SFAS 89, current cost income measurement, purchasing power gain or loss and holding gain information (as well as the five year summary of selected financial disclosure) are encouraged but not required. SFAS 89 was made voluntary in 1986. The FASB, thus, beat a hasty retreat from the problem of accounting for changing prices. The obvious factor leading to the retreat in accounting for changing prices was the slowing down of the inflation rate

SFAS No. 157

SFAS No. 157, *Fair Value Measurement*, affects accounts that “require or permit fair value measurement” on the balance sheet though the standard has little to say about related income statement considerations. The statement is grounded in the belief that current values (now called fair values) are more relevant for decision—making purposes than historical costing for all users and user groups.

The fair value system of SFAS No. 157 is basically an exit-value system, but one that is grounded in revenue generating potential rather than a liquidity measurement in an orderly liquidation circumstance. SFAS No. 157 defines fair value as “the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants the measurement date” (para. 5), at the highest and best value for an asset and at the lowest price for a liability.

Market participants are assumed to be independent of the reporting enterprise, knowledgeable, and able and willing to enter into the transaction (para 10).

Asset prices are supposed to be derived for the asset in the market where the asset has “the highest and best use” (para. 8). Similarly, liability prices are specific to where liabilities have the lowest prices. The asset price should come from the asset’s

principal market, but there is some confusion if a higher price comes from an auxiliary market.

UNITED KINGDOM

The first UK attempt to account for inflation was made through a Statement of Standard Accounting Practice (No. 7) favouring general price level adjusted historical cost accounting (otherwise known as CPP accounting) issued in 1974. This statement was similar to the FASB's 1974 Exposure Draft, which also supported general price level accounting. In 1975, a government appointed committee on inflation accounting headed by FEP Sandilands proposed a current cost accounting system having no provisions for the impact of general inflation on monetary items. Sandilands Report faced lot of criticism. Therefore, a new Steering Group was formed. In 1976, the Steering Group prepared an Exposure Draft (ED 18), which was essentially a proposal for a current cost system with supplementary disclosure of adjustments for general inflation on the monetary holdings of a firm. ED 18 was criticised particularly by financial institutions, because of its inadequate treatment of monetary items, and was subsequently abandoned as a result. A more refined approach to the treatment of monetary items was proposed in 1977 by the Hyde Committee, known as the Hyde Guidelines. Finally ED 24 became the basis for the present U.K. Standard on inflation accounting, popularly known as SSAP 16.

Objectives of SSAP 16

The basic objective of the UK's Statement of Standard Accounting Practice No. 16, 'Current Cost Accounting' (SAAP 16) is to provide more useful information than that available from historical cost accounts alone for the guidance of the management, shareholders, and others on such matters as

- (a) the financial viability of the business;
- (b) return on investment;
- (c) pricing policy, cost control, and distribution decisions; and
- (d) gearing.

Disclosures required in SSAP 16

SSAP 16 requires the following disclosures.

(1) Current cost profit and loss and balance sheet accounts both in addition to historical cost accounts.

(2) Current cost profit and loss account should show operating profit derived after making depreciation, cost of sales, and monetary working capital adjustment and the current cost profit attributable to shareholders derived after making a gearing adjustment for debt financing.

(3) In the current cost balance sheet, property, plant, and equipment and inventory should generally be included at their value to the business (normally, depreciated current replacement cost). The 'value to the business' concept is equivalent to the lower of the current (replacement) cost or the recoverable amount of the asset, as in USA's SFAS 33.

SSAP 16 requires current cost income statement and current cost balance sheet. CCA income statement, as given in 15.2, shows the current cost operating profit by deducting current cost adjustments for the cost of sales, depreciation, and monetary working capital. The current cost operating profit is based on the concept of physical capital maintenance, which emphasises the operating capacity of the firm. By adding the 'gearing adjustment' to the current cost operating profit, the current cost profit attributable to shareholders is measured. The gearing adjustment is a measure of the benefit (or cost) accruing to the shareholders for having financed part of the operating assets through debt.

Profit before interest and taxation on the historical cost basis		—
Less: Current cost operating adjustment:		
Cost of sales	—	
Monetary working capital	—	
Depreciation	—	
		—
Current cost operating profit		—
Add: Gearing adjustment	—	
Less: Interest expense (net of interest receivables)	—	
		—
Current cost profit before taxation		—
Less: Taxation		—
Current Cost profit attributable to shareholders		—

Fig. 15.2: ABC Company: Current Cost Profit & Loss Account for the year ending Dec. 31, 2016

Source: Statement of Standard Accounting Practice No. 16-Current Cost Accounting, 1980, Appendix.

SSAP16 requires the presentation of a current cost balance sheet, the assets of which are shown "at their value to the business based on current price levels."

Evaluating SSAP 16

SSAP 16 has been criticised on the following grounds:

- (1) The valuation base has been subject to much discussion. Some variant of value to the firm has always been adopted, with subjective assessment of value in use being the main practical problem. The precise definition of the operating capacity which has to be maintained, in defining replacement cost, has also proved elusive, especially under conditions of technical change.
- (2) The most difficult area has been the treatment of monetary assets and liabilities.
- (3) There has been a problem of selection of suitable indices for valuing specialist plant. Also, sometimes the valuation of such plant becomes more difficult when no obvious market exists and for which no suitable index is prepared.

- (4) The calculation of a cost of consumption where an asset is not to be replaced is difficult.
- (5) This accounting model is difficult to apply in case of specialised industries such as commodity trading and shipping, where the concept of operating capital maintenance is not obviously relevant.
- (6) The most controversial aspect of SSAP 16 is the gearing adjustment which is heavily attacked from both theoretical and practical viewpoints. In addition, there are major international comparability problems as this adjustment frequently produces very different results from the purchasing power adjustment recommended in the US standard. This is a very important difference in the case of multinational companies with strong UK and US interests.

Developments after SSAP 16

There was considerable criticism of SSAP 16 by companies and accountancy bodies in UK. Accordingly, the ASC issued a new exposure draft, ED 35, 'Accounting for the Effects of Changing Prices', in July 1984. Its recommendations were similar to those of SSAP 16, although there were some changes of emphasis. For example, the following was suggested:

- (1) All public limited companies should be subject to the new standard, except for wholly owned subsidiaries and financial companies. There would be no size test as in SSAP 16, the private companies would not be affected by the standard.
- (2) Where current cost accounts are not shown as the main accounts, the information disclosed should be given in a note to the main accounts and not in supplementary current cost statements (as in SSAP 16).
- (3) Adjustment calculations should be very similar to those required in SSAP 16, although it is suggested that two additional methods of calculating the gearing adjustment should be accepted.
- (4) A balance sheet should not be regarded as essential, although information should be provided regarding CCA figures for fixed assets and inventories

These recommendations were attacked from many quarters in the latter part of 1984, and there were expected to be some significant changes before a new standard proved to be acceptable. At the end of 1984, the target date for the new standard was the second quarter of 1985, in order to replace SSAP 16 before its expiry. However, because of the opposition which the new exposure draft produced, ED was abandoned. Shortly afterwards, the ASC announced that compliance with SSAP 16 which, technically, remained in force, was to become voluntary for all listed companies. Thus, SSAP 16 was withdrawn in 1985 without immediate replacement and the search for an acceptable solution to the problem of inflation amounting started again.

SSAP 16 is no longer mandatory. However, it is being retained as an authoritative reference on accounting under the current

cost invention. The Accounting Standards Committee reaffirms its view that where historical cost accounts are materially affected by changing prices, information about the effects of changing prices is necessary for an appreciation of a company's results and financial positions. ASC also remains of the view that current cost accounting is the most appropriate way of measuring the effect of changing price levels on the great majority of economic entities. It, therefore, urges listed companies and large enterprises generally to keep in mind the long term persistence of inflationary effects on their capital and, where these are judged material, to disclose information about them by reference to current cost. The non mandatory position of SSAP 16, the ASC feels, will free the way for innovation and development of appropriate disclosures. The ASC has announced that it intends to develop a new accounting standard on accounting for the effects of changing prices to take the place of SSAP 16 in due course. It is intended that the proposed new standard will allow more choice of method than SSAP 16 and that the SSAP 16 methodology will be one of those that would comply with the new standard. The ASC issued an "official handbook" entitled as *Accounting for the Effects of Changing Prices: A Handbook in 1986*. The major proposals of the Handbook are:

- (1) It is considered 'most appropriate' for companies to disclose information about current results and financial position on the basis of current cost valuation.
- (2) The information in 1 may be incorporated into a company's main accounts, or in notes thereto.
- (3) Companies which publish five or ten year historical summaries should restate certain items in units of CPP.

The ASC Handbook specifies the constraints of the HCA method and then proceeds to formulate remedial steps. In so doing it departs from the CCA vs. CPP theme. An alternative to HCA does not necessarily lie in a straight choice between these two models, argues the Handbook. Instead of opting for a particular reporting technique it included consideration of the following three variables when selecting an accounting system:

1. Basis to be adopted for valuing assets.
2. Capital maintenance concepts to be used.
3. Unit of measurement to be used.

The Handbook regards current cost asset valuation basis as more relevant than the historical cost basis.

Two different approaches may be taken in measuring the capital of a company. These are the operating capital maintenance concept which views capital in physical terms and the financial capital maintenance concepts which views capital in financial terms. The operating capital maintenance concept is in principle the CCA approach. The Handbook expresses the opinion that both the operating capital and financial capital maintenance concepts are useful, the operating capital maintenance concept being appropriate for manufacturing companies and the financial capital maintenance concept being appropriate for value based companies whose operations are not dependent on the

replacement of fixed assets. With regard to unit of measurement, the Handbook suggests monetary measurement and units of constant purchasing power as the alternatives, *i.e.*, it supports either Real Term Accounting (RTA) or CCA systems.

USA'S SFAS 33 VS. UK'S SSAP 16

SFAS 33 (USA) and SSAP 16 (UK) differ in the following respects:

1. General Requirements

SSAP 16 calls for a complete profit and loss account and complete balance sheet on a current cost basis that may be presented as supplementary information or as the "main accounts with supplementary historical cost accounts" or as "the only accounts accompanied by adequate historical cost information."

In contrast, SFAS 33 does not tamper with the primary financial statements. The FASB has expressly indicated its intention to introduce any major changes in measurement concepts by requiring supplementary disclosures rather than by changing the basic financial statements. Further, the supplementary information required by SFAS 33 is characterised explicitly as experimental. The FASB is committed to monitoring the presentation of that information and conducting research to assess the usefulness of that information as a basis for comprehensive review after a period of not more than five years.

Although enterprises may choose to present complete supplementary financial statements, FASB Statement No. 33 requires only that cost of sales and depreciation be presented in terms of units of general purchasing power and in items of current cost in determining supplemental measures of income or loss from continuing operations and that only inventory and property, plant and equipment be presented separately in terms of current cost.

2. Primary Focus

SSAP 16 retains the conventional nominal monetary unit as the unit of measure but changes the conventional historical amounts to some form of 'current values model or to a model that substitutes measures based on 'current cost' or 'value to the business' for measures based on historical costs. SSAP 16 acknowledges the possible need for addressing the unit of measure, particularly in presenting comparative information for different years, but that cannot be said to be part of its primary thrust. Instead, SSAP 16 states explicitly that the current cost accounting set forth "is not a system of accounting for general inflation"

SFAS 33 of USA requires supplementary disclosures and has primary thrust on the following:

- (i) It retains the conventional historical cost accounting but changes the unit of measure from nominal monetary units to units of general purchasing power.
- (ii) It also changes both the unit of measure and the historical cost accounting model.

SFAS 33 requires constant dollar disclosures (current purchasing power disclosures) and current cost disclosures. The constant dollar disclosure changes only the unit of measure: the current cost disclosure involves changes in both the unit of measure and the attribute measured. SFAS 33 recognises the related purchasing power gain or loss on net monetary items and 'real' rather than nominal changes in current cost of inventories and property, plant and equipment. Prior period amounts must also be restated in terms of the same current monetary units if information is provided for comparative purposes, for example, in a five year or ten year summary. These unique features of measuring in terms of units of general purchasing power are present in the current cost disclosures required by FASB Statement No. 33.

3. Current Cost Operating Profit

The current cost accounting prescribed in the UK standard SSAP 16 highlights two measures: (i) current cost operating profit, and (ii) current cost profit attributable to shareholders. FASB Statement No. 33 highlights three measures: (i) current cost income from continuing operations, (ii) purchasing power gain or loss on net monetary items, and (iii) increases or decreases in the current cost amounts of inventory and property, plant, and equipment, net of inflation, or what is frequently referred to as 'real holding gains and losses.'

The 'current cost operating profit' of SSAP 16 and the 'current cost income from continuing operations' of FASB Statement No. 33 are similar conceptually except in one significant aspect, the monetary working capital adjustment that is deducted in determining SSAP 16's current cost operating profit. The monetary working capital adjustment represents the amount of additional balances of cash and trade accounts receivable, less additional balances of trade accounts payable that are needed for monetary working capital as a result of changes in the prices of goods and services used and financed by the business.

Current cost operating profit (calculated in SSAP 16) is measured by making a series of deductions from revenues (sales). In general, those deductions represent asset that have been consumed (or liabilities that have been incurred) in the ordinary activities of the business. The monetary working capital adjustment is an exception; it represents not a reduction in assets but an increase in assets. For example, if maintaining operating capability in the face of higher prices requires a larger cash balance, that increase in the amount of cash held is deducted as an expense in arriving at current cost operating profit.

Similar increases in other assets that also may be essential to sustain a given physical volume of sales or services under conditions of increasing prices, however, are not deducted in measuring current cost operating profit; *e.g.*, revaluation of land, plant and machinery, and inventories of raw materials, work in progress, and finished goods. The increased investment in inventories necessary to maintain them at their existing physical volume seems especially analogous to the increased net investment in cash balances, trade receivables, and trade payables.

4. Current Cost Profit Attributable to Shareholders

Measuring SSAP 16's current cost operating profit involves deductions for (i) the excess of current cost over the historical cost of goods sold, (ii) the excess of current cost depreciation over historical cost depreciation, and (iii) the additional net monetary working capital necessary to maintain operating capability. A portion of the additional cost of goods sold, additional depreciation, and additional monetary working capital is then added back to current cost operating profit to arrive at current cost profit attributable to shareholders. The portion added back is referred to as a 'gearing adjustment' and is determined by the ratio of net borrowing to net borrowing plus shareholders' equity. The 'gearing adjustment' represents a measure of the extent to which those realised higher costs—realised in the sense that they have been deducted in determining current cost operating profit—have accrued to the benefit of shareholders because they are financed by borrowing. The gearing adjustments has no counterpart in FAS 33 measure of income from continuing operations.

5. Gearing Adjustment vs. Purchasing Power Gain and Loss

Some have suggested that a gearing adjustment such as the one called for by SSAP 16 is similar to or serves the same function as the purchasing power gain or loss on net monetary items called for by SFAS 33. Mechanically, both may be included in measures of profit and shareholders equity, but conceptually they have utterly nothing in common. The gearing adjustment is based on nominal increases in assets—specifically, nominal increases in monetary working capital and nominal increases in the current cost of inventories and depreciable assets. It is unrelated to or independent of inflation. For example, even in the complete absence of inflation, a gearing adjustment would be required when ever specific prices of inventories and depreciable assets change; even if there was significant inflation during the period, there would be no gearing adjustment if the specific prices of those assets did not change; and if the specific prices of those assets decline during a period of inflation, the gearing adjustment would be in the opposite direction from a purchasing power gain on net monetary liabilities.

The purchasing power gain or loss, on the other hand, is based on a change in the general purchasing power of the monetary unit in which fixed nominal amounts of receivable are collected, fixed nominal amounts of payables are settled, and fixed nominal amounts of cash are held. It is unrelated to or independent of changes in the specific prices of particular assets held by the enterprise, such as inventories and depreciable assets. In the complete absence of inflation there would be a complete absence of purchasing power gain or loss, no matter how much the specific prices of inventories and depreciable assets, or any other assets, might change. On the contrary, inflation produces a purchasing power gain on net monetary liabilities even if the specific prices of inventories and depreciable assets do not change or decline.

Furthermore, regardless of the rate of inflation and changes in specific prices, a gearing adjustment is not applicable if an enterprise is in a net monetary asset position rather than a net borrowing position. On the other hand, during periods of inflation purchasing power losses are incurred by enterprises in net monetary asset positions, as well as purchasing power gains by those in net monetary liabilities positions. Indeed, the FASB itself reports a purchasing power loss in its financial statements because it is in a net monetary asset position.

6. Holding Gains and losses

Under SSAP 16, nominal increases in current cost amounts of inventories and property, plant and equipment and monetary working capital adjustments are reflected initially in a 'current cost reserve', that reserve is a component of shareholders equity. A distinction is maintained within the current cost reserve between those amounts that have been realised in the sense that they have been included as adjustments in measuring current cost operating profits and those amounts that remain unrealised in the sense that they have not yet been included as such adjustments. Because monetary working capital adjustments are included in their entirety in measuring current cost operating profit, they are reflected immediately in the current cost reserve but increases in the current cost amounts of inventories and property, plant and equipment are reflected initially in the unrealised to the realised current cost reserve. The gearing adjustment then transfers from the realised current cost reserve. As costs of sales adjustments and depreciation adjustments are included in determining current cost operating profit, equivalent amounts are transferred from the unrealised to the realised current cost reserve. The gearing adjustment then transfers from the realised current cost reserve to the current period's profit attributable to shareholders that portion of the cost of sales adjustments, depreciation adjustments, and monetary working capital adjustment deemed to be financed by borrowing. The remainder of those adjustments are never included in current cost profit attributable to shareholders but do enhance common equity by residing permanently in the realised current cost reserve.

In contrast, SFAS 33 highlights a separate measure of the periodic increases or decreases in the current cost amounts of inventory and property, plant and equipment, net of inflation—that is, a separate measure of the 'real holding gains' during the current period. No distinction is required to be made between real holding gains that have been 'realised' by consuming assets in operations during the period and real holding gains that remain 'unrealised' in the sense that they relate to assets still on hand at the end of the period. Recognised holding gains enhance shareholders' equity in exactly the same way whether they are 'realised' or 'unrealised' and regardless of the financial structure of the enterprise. The effect is to report real holding gains and losses as a separate item in the period in which changes in the specific prices of those assets occur and to report current cost income from continuing operations strictly on the basis of current revenue and current costs.

7. Capital Maintenance Concept

SSAP 16 is based on physical capital maintenance and SFAS 33 implies financial capital maintenance concept. Physical capital maintenance concept views capital as a physical capital in terms of the capacity to produce goods or services. By contrast, financial capital maintenance concept is concerned with the original capital invested in the firm; the excess of the cash over the original capital invested is treated as income that can be consumed or distributed. Thus, financial capital maintenance concept aims to keep the original financial capital intact. In physical capital maintenance concept the objective is to maintain the firm's ability to replace its physical productive assets. The main difference between the two capital concepts is that holding gains are regarded as income of the given period under financial capital maintenance concept, whereas under the physical capital maintenance concept, holding gains are treated as 'capital maintenance adjustments' and shown in the equity capital section of the balance sheet.

INFLATION ACCOUNTING IN INDIA

Guidance Note, 1982

Recognising the importance of the effect of changing prices on the financial statements of business enterprises, the Research Committee of the Institute of Chartered Accountants of India (ICAI) has brought out a Guidance Note on Accounting for Changing Prices in 1982. In preparing the Guidance Note, the Research Committee of ICAI has drawn heavily on the various publications on the subject by various international professional bodies and more particularly those by the Accounting Standards Committee in the U.K. The main objective of the Guidance Note is to encourage the adoption of accounting for changing prices, and to suggest a methodology relevant in the prevailing economic environment in India. The Guidance Note discusses the three proposals for accounting for changing prices, viz., (i) Periodical revaluation of fixed assets alongwith the adoption of LIFO formula for inventory valuation (ii) Current purchasing power accounting method (CPPA); and, (iii) Current Cost Accounting (UK's SSAP 16) method.

After discussing the above three methods of inflation accounting, the guidance Note gives some recommendations which are listed as follows:

(1) The adoption of a system of accounting for changing prices would require a considerable amount of time, money and specialised skills. Also the various techniques are still in the process of development. However, in view of the importance of the subject, it is recommended that enterprises particularly the large enterprises, may develop the necessary system to prepare and present this information.

(2) Of the various methods of accounting for changing prices, the Current Cost Accounting (based on SSAP 16) method seems to be most appropriate in the context of the economic environment in India. The periodic revaluations of fixed assets and the adoption

of LIFO formula for inventory valuations are partial responses to the problem of accounting for changing prices. Current Purchasing Power Accounting, though simple to apply, does not ensure the maintenance of the operating capability of an enterprise. Current Cost Accounting, on the other hand, is a rational and comprehensive system of accounting for changing prices, as it considers the specific effects of changing prices on individual enterprises and, thus, ensures that profits are reported only after maintaining the operating capability. However, the introduction of a fullfledged system of Current Cost Accounting on a wide scale in India will inevitably take some time. During this transitional phase, periodic revaluations of fixed assets along with the adoption of LIFO formula for inventory valuation would reflect the impact of changing prices substantially in the case of manufacturing and trading enterprises.

(3) Adequate database has presently not been developed in India for accounting for changing prices. Therefore, every enterprise may has to select the price indices depending on its own circumstances. The detailed price indices published in its monthly bulletin by the Government of India can be adopted in a number of cases. There is no doubt that further steps will have to be taken for the timely publication of statistical information required by various industries for the implementation of accounting for changing prices.

(4) Considering the importance of the information regarding the impact of changing prices it is recommended that while the primary financial statements should continue to be prepared and presented on the historical cost basis, supplementary information reflecting the effects of changing prices may also be provided in the financial statements on a voluntary basis, at least by large enterprises.

(5) Since the presentation of statements adjusted for the impact of changing prices is voluntary, the enterprises may or may not get this information audited. However, the audit of such statements would enhance their credibility.

(6) Apart from its utility in external reporting, accounting for changing prices may also provide useful information for internal management purposes. Accounting information system is designed, primarily, to provide relevant information to various levels of management with a view to assist in managerial decision making, control and evaluation. However, in periods of rapid and violent fluctuations in prices, the information provided by historical costbased accounting system may need to be supplemented by information regarding the impact of changing prices. The areas in which such information may be of prime importance to management include investment decisions and allocation of resources, divisional and overall corporate performance evaluation, pricing policy, dividend policy, etc.

(7) In countries like the United Kingdom, there have been some reforms in the tax structure in the wake of introduction of accounting for changing prices. Though the tax legislation in India, at present, does not give recognition to such an accounting system, even then accounting for changing prices would be useful

for generating relevant information for internal and external decision making.

Ind AS 29, Financial Reporting in Hyperinflationary Economies, February 2015.

In February 2015, Ind AS 29 has been issued by the Ministry of Corporals Affairs, as an attempt toward accepting IFRSs. This standard contains the following guidelines on accounting for changing prices.

1. Scope

(1) This Standard shall be applied to the financial statements, including the consolidated financial statements, of any entity whose functional currency is the currency of a hyperinflationary economy.

(2) In a hyperinflationary economy, reporting of operating results and financial position in the local currency without restatement is not useful. Money loses purchasing power at such a rate that comparison of amounts from transactions and other events that have occurred at different times, even within the same accounting period, is misleading.

(3) This Standard does not establish an absolute rate at which hyperinflation is deemed to arise. It is a matter of judgement when restatement of financial statements in accordance with this Standard becomes necessary.

Hyperinflation is indicated by characteristics of the economic environment of a country which include, but are not limited to, the following:

- (a) the general population prefers to keep its wealth in non-monetary assets or in a relatively stable foreign currency. Amounts of local currency held are immediately invested to maintain purchasing power;
- (b) the general population regards monetary amounts not in terms of the local currency but in terms of a relatively stable foreign currency. Prices may be quoted in that currency;
- (c) sales and purchases on credit take place at prices that compensate for the expected loss of purchasing power during the credit period, even if the period is short;
- (d) interest rates, wages and prices are linked to a price index; and
- (e) the cumulative inflation rate over three years is approaching, or exceeds, 100%.

(4) It is preferable that all entities that report in the currency of the same hyperinflationary economy apply this Standard from the same date. Nevertheless, this Standard applies to the financial statements of any entity from the beginning of the reporting period in which it identifies the existence of hyperinflation in the country in whose currency it reports.

2. The restatement of financial statements

(1) Prices change over time as the result of various specific or general political, economic and social forces. Specific forces such as changes in supply and demand and technological changes may cause individual prices to increase or decrease significantly and independently of each other. In addition, general forces may result in changes in the general level of prices and therefore in the general purchasing power of money.

(2) Entities that prepare financial statements on the historical cost basis of accounting do so without regard either to changes in the general level of prices or to increases in specific prices of recognised assets or liabilities. The exceptions to this are those assets and liabilities that the entity is required, or chooses, to measure at fair value. For example, property, plant and equipment may be revalued to fair value and biological assets are generally required to be measured at fair value. Some entities, however, present financial statements that are based on a current cost approach that reflects the effects of changes in the specific prices of assets held.

(3) In a hyperinflationary economy, financial statements, whether they are based on a historical cost approach or a current cost approach, are useful only if they are expressed in terms of the measuring unit current at the end of the reporting period. As a result, this Standard applies to the financial statements of entities reporting in the currency of a hyperinflationary economy. Presentation of the information required by this Standard as a supplement to unrestated financial statements is not permitted. Furthermore, separate presentation of the financial statements before restatement is discouraged.

(4) The financial statements of an entity whose functional currency is the currency of a hyperinflationary economy, whether they are based on a historical cost approach or a current cost approach, shall be stated in terms of the measuring unit current at the end of the reporting period. The corresponding figures for the previous period required by Ind AS 1, *Presentation of Financial Statements*, and any information in respect of earlier periods shall also be stated in terms of the measuring unit current at the end of the reporting period. For the purpose of presenting comparative amounts in a different presentation currency, paragraphs 42(b) and 43 of Ind AS 21, *The Effects of Changes in Foreign Exchange Rates*, apply.

(5) The gain or loss on the net monetary position shall be included in profit or loss and separately disclosed.

(6) The restatement of financial statements in accordance with this Standard requires the application of certain procedures as well as judgement. The consistent application of these procedures and judgements from period to period is more important than the precise accuracy of the resulting amounts included in the restated financial statements.

3. Historical cost financial statements

Balance sheet

(1) Balance sheet amounts not already expressed in terms of the measuring unit current at the end of the reporting period are restated by applying a general price index.

(2) Monetary items are not restated because they are already expressed in terms of the monetary unit current at the end of the reporting period. Monetary items are money held and items to be received or paid in money.

(3) Assets and liabilities linked by agreement to changes in prices, such as index linked bonds and loans, are adjusted in accordance with the agreement in order to ascertain the amount outstanding at the end of the reporting period. These items are carried at this adjusted amount in the restated balance sheet.

(4) All other assets and liabilities are non-monetary. Some non-monetary items are carried at amounts current at the end of the reporting period, such as net realisable value and fair value, so they are not restated. All other non-monetary assets and liabilities are restated.

(5) Most non-monetary items are carried at cost or cost less depreciation; hence they are expressed at amounts current at their date of acquisition. The restated cost, or cost less depreciation, of each item is determined by applying to its historical cost and accumulated depreciation the change in a general price index from the date of acquisition to the end of the reporting period. For example, property, plant and equipment, inventories of raw materials and merchandise, goodwill, patents, trademarks and similar assets are restated from the dates of their purchase. Inventories of partly-finished and finished goods are restated from the dates on which the costs of purchase and of conversion were incurred.

(6) Detailed records of the acquisition dates of items of property, plant and equipment may not be available or capable of estimation. In these rare circumstances, it may be necessary, in the first period of application of this Standard, to use an independent professional assessment of the value of the items as the basis for their restatement.

(7) A general price index may not be available for the periods for which the restatement of property, plant and equipment is required by this Standard. In these circumstances, it may be necessary to use an estimate based, for example, on the movements in the exchange rate between the functional currency and a relatively stable foreign currency.

(8) Some non-monetary items are carried at amounts current at dates other than that of acquisition or that of the balance sheet, for example property, plant and equipment that has been revalued at some earlier date. In these cases, the carrying amounts are restated from the date of the revaluation.

(9) The restated amount of a non-monetary item is reduced, in accordance with appropriate Ind ASs, when it exceeds its recoverable amount. For example, restated amounts of property, plant and equipment, goodwill, patents and trademarks are reduced

to recoverable amount and restated amounts of inventories are reduced to net realisable value.

(10) An investee that is accounted for under the equity method may report in the currency of a hyperinflationary economy. The balance sheet and statement of profit and loss of such an investee are restated in accordance with this Standard in order to calculate the investor's share of its net assets and profit or loss. When the restated financial statements of the investee are expressed in a foreign currency they are translated at closing rates.

(11) The impact of inflation is usually recognised in borrowing costs. It is not appropriate both to restate the capital expenditure financed by borrowing and to capitalise that part of the borrowing costs that compensates for the inflation during the same period. This part of the borrowing costs is recognised as an expense in the period in which the costs are incurred.

(12) An entity may acquire assets under an arrangement that permits it to defer payment without incurring an explicit interest charge. Where it is impracticable to impute the amount of interest, such assets are restated from the payment date and not the date of purchase.

(13) At the beginning of the first period of application of this Standard, the components of owners' equity, except retained earnings and any revaluation surplus, are restated by applying a general price index from the dates the components were contributed or otherwise arose. Any revaluation surplus that arose in previous periods is eliminated. Restated retained earnings are derived from all the other amounts in the restated balance sheet.

(14) At the end of the first period and in subsequent periods, all components of owners' equity are restated by applying a general price index from the beginning of the period or the date of contribution, if later. The movements for the period in owners' equity are disclosed in accordance with Ind AS 1.

Statement of profit and loss

(1) This Standard requires that all items in the statement of profit and loss are expressed in terms of the measuring unit current at the end of the reporting period. Therefore, all amounts need to be restated by applying the change in the general price index from the dates when the items of income and expenses were initially recorded in the financial statements.

Gain or loss on net monetary position

(2) In a period of inflation, an entity holding an excess of monetary assets over monetary liabilities loses purchasing power and an entity with an excess of monetary liabilities over monetary assets gains purchasing power to the extent the assets and liabilities are not linked to a price level. This gain or loss on the net monetary position may be derived as the difference resulting from the restatement of non-monetary assets, owners' equity and items in the statement of profit and loss and the adjustment of index linked assets and liabilities. The gain or loss may be estimated by applying the change in a general price index to the weighted average for the period of the difference between monetary assets and monetary liabilities.

(3) The gain or loss on the net monetary position is included in profit or loss. The adjustment to those assets and liabilities linked by agreement to changes in prices is offset against the gain or loss on net monetary position. Other income and expense items, such as interest income and expense, and foreign exchange differences related to invested or borrowed funds, are also associated with the net monetary position. Although such items are separately disclosed, it may be helpful if they are presented together with the gain or loss on net monetary position in the statement of profit and loss.

4. Current cost financial statements

Balance sheet

Items stated at current cost are not restated because they are already expressed in terms of the measuring unit current at the end of the reporting period. Other items in the balance sheet are restated.

Statement of profit and loss

The current cost statement of profit and loss, before restatement, generally reports costs current at the time at which the underlying transactions or events occurred. Cost of sales and depreciation are recorded at current costs at the time of consumption; sales and other expenses are recorded at their money amounts when they occurred. Therefore all amounts need to be restated into the measuring unit current at the end of the reporting period by applying a general price index.

Gain or loss on net monetary position

The gain or loss on the net monetary position is included in profit or loss.

5. Taxes

The restatement of financial statements in accordance with this Standard may give rise to differences between the carrying amount of individual assets and liabilities in the balance sheet and their tax bases. These differences are accounted for in accordance with Ind AS 12, *Income Taxes*.

6. Statement of cash flows

This Standard requires that all items in the statement of cash flows are expressed in terms of the measuring unit current at the end of the reporting period.

7. Corresponding figures

Corresponding figures for the previous reporting period, whether they were based on a historical cost approach or a current cost approach, are restated by applying a general price index so that the comparative financial statements are presented in terms of the measuring unit current at the end of the reporting period. Information that is disclosed in respect of earlier periods is also expressed in terms of the measuring unit current at the end of the reporting period.

8. Consolidated financial statements

(1) A parent that reports in the currency of a hyperinflationary economy may have subsidiaries that also report in the currencies of hyperinflationary economies. The financial statements of any such subsidiary need to be restated by applying a general price index of the country in whose currency it reports before they are included in the consolidated financial statements issued by its parent. Where such a subsidiary is a foreign subsidiary, its restated financial statements are translated at closing rates. The financial statements of subsidiaries that do not report in the currencies of hyperinflationary economies are dealt with in accordance with Ind AS 21.

(2) If financial statements with different ends of the reporting periods are consolidated, all items, whether non-monetary or monetary, need to be restated into the measuring unit current at the date of the consolidated financial statements.

9. Selection and use of the general price index

The restatement of financial statements in accordance with this Standard requires the use of a general price index that reflects changes in general purchasing power. It is preferable that all entities that report in the currency of the same economy use the same index.

10. Economies ceasing to be hyperinflationary

When an economy ceases to be hyperinflationary and an entity discontinues the preparation and presentation of financial statements prepared in accordance with this Standard, it shall treat the amounts expressed in the measuring unit current at the end of the previous reporting period as the basis for the carrying amounts in its subsequent financial statements.

11. Disclosures

(1) The following disclosures shall be made:

- (a) the fact that the financial statements and the corresponding figures for previous periods have been restated for the changes in the general purchasing power of the functional currency and, as a result, are stated in terms of the measuring unit current at the end of the reporting period;
- (b) whether the financial statements are based on a historical cost approach or a current cost approach; and
- (c) the identity and level of the price index at the end of the reporting period and the movement in the index during the current and the previous reporting period.
- (d) the duration of the hyperinflationary situation existing in the economy.

(2) The disclosures required by this Standard are needed to make clear the basis of dealing with the effects of inflation in the financial statements. They are also intended to provide other information necessary to understand that basis and the resulting amounts.

INTERNATIONAL ACCOUNTING STANDARDS COMMITTEE (IASC)

Because of the wide range of approaches to the problem of inflation accounting in the various member countries of the International Accounting Standards Committee, it has not been practical for IASC to draft a detailed proposal for an International Accounting Standard. In June 1977, IAS 6, Accounting Responses to Changing Prices, was issued. IAS 6 simply requires that the published accounts should include a description of the methods used to account for inflation or, where appropriate a statement that no inflation accounting procedures have been adopted. In November 1981, IAS 15, Information Reflecting the Effects of Changing Prices, was issued. IAS 15 applies to enterprises whose levels of revenues, profit, asset or employment are significant in the economic environment in which they operate. When both parent company and consolidated financial statements are presented, the information called for by this standard need only be presented on the basis of consolidated information. The information required by this standard is designed to make users of financial statements aware of the effects of changing prices on the results of its operations. Financial statements, however, IAS 15 explains, whether prepared under the historical cost method or under a method that reflects the effects of changing prices, are not intended to indicate directly the value of the enterprises as a whole. IAS 15 contains the following pronouncements on inflation accounting:

(1) This statement deals with information reflecting the effects of changing prices on the measurements used in the determination of an enterprise's results of operation and financial position. In most countries, such information is supplementary to, but not a part of, the primary financial statements. This statement does not apply to the accounting and the reporting policies required to be used by an enterprise in the preparations of its primary financial statements, unless those financial statements are presented on a basis that reflects the effects of changing prices.

(2) The information called for by this standard is not required for a subsidiary operating in the country of domicile of its parent, if consolidated information on this basis is presented by the parent. For subsidiaries operating in a country other than the country of domicile of the parent, the information called for by this Standard is only required when it is accepted practice for similar information to be presented by enterprises of economic significance in that country.

(3) Presentation of information reflecting the effects of changing prices is encouraged for other entities in the interest of promoting more informative financial reporting.

(4) The items to be presented are:

- (a) the amount of the adjustment to or the adjusted amount of depreciation of property, plant and equipment;
- (b) the amount of the adjustment to or the adjusted amount of cost of sales;

- (c) the adjustments relating to monetary items, the effect of borrowing, or equity interests when such adjustments have been taken into account in determining income under the accounting method adopted; and
- (d) the overall effect on results of the adjustments described in (a) and (b) and where appropriate, (c) as well as any other items reflecting the effects of changing prices that are reported under the accounting method adopted.

(5) When a current cost method is adopted, the current cost of property, plant and equipment, and of inventories, should be disclosed.

(6) Enterprises should describe the methods adopted to compute the information called for in points 4 and 5, including the nature of any indices used.

(7) The information required by points 4 to 6 should be provided on a supplementary basis unless such information is presented in the primary financial statements.

(8) Enterprises are encouraged to provide additional disclosures, and in particular a discussion of the significance of the information in the circumstances of the enterprises. Disclosure of any adjustments to tax provisions or tax balance is usually helpful.

The IASC in its IAS 15 discusses both CPP and CCA approaches to inflation accounting problem, and considers variations between different types of CCA approach. IAS 15 replaces IAS 6; both were designed to promote wider disclosure without seeking to impose any specific approach.

In 2003, the IASB has withdrawn IAS 15, Information Reflecting the Effects of Changing Prices.

IAS 29

IAS 29, Financial Reporting in Hyperinflationary. Economics has been adopted by IASB in April 2001. This IAS 29 is identical to Ind AS 29, with regard to all provisions and rules discussed above in this chapter.

INFLATION ACCOUNTING DISCLOSURE BY INDIAN COMPANIES

Indian companies generally follow Current Cost Accounting method based on UK's SSAP 16 and Guidance Notes on Accounting for Changing Prices issued by the Institute of Chartered Accountants of India. The disclosures made by Indian companies include current cost profit and loss account, current cost balance sheet and some other information relating to items subject to accounting for changing prices.

An example is given here of current cost accounts prepared by Oil India Ltd. and Infosys Ltd. and reported in their published annual reports (Figure 15.3 and Figure 15.4).

Oil India Ltd.

Current Cost Account 2005—2006

1. INTRODUCTION

During the last few decades, the world has experienced severe inflationary conditions. In recent years, in the West, inflation has been brought under control and therefore financial statements are prepared under historical cost convention and revaluation is restricted to fixed assets. In India, though inflation has been brought under control It still remains a cause of concern. Conventional accounting system does not reflect the steeply increased replacement cost of capital assets nor does it reflect the increased requirement of working capital needed to sustain the same level of business activity. Inflation adjusted financial statements, though based on certain broad assumptions and therefore. Indicative of inflationary effect, remove inherent limitations of historical cost based accounting statements Considering that the effect of inflation on its working result should be reported, OIL has been incorporating inflation adjusted financial statements in Its annual report since 198384 as supplemental information.

2. BASIS

Current Cost Accounts have been prepared in accordance with principles recommended in the publication Accounting for the Effects of Changing Prices” and reflect Operating Capital Maintenance Concept.

3. METHODOLOGY

a. Fixed Assets

- (i) Land have been revalued by the Company’s experts at present day market value
- (ii) Buildings, Plant & Machinery and all other, Fixed Assets have been revalued by applying broad based price indices as published by Reserve Bank of India (RBI)
- (iii) For providing depreciation on revalued assets, gross historical cost depreciation charge has been enhanced in the same proportion as gross replacement cost of each group of asset

b. Capital Work-in-Progress

Capital Work-in-Progress has been revalued by applying the same price indices as applied to each type of asset

c. Exploration Expenditure

During the year 199495 OIL switched over to the “Successful Efforts Method” of accounting In compliance with the International Standards of Accounting Cost of unsuccessful/dry wells which do not lead to discovery of hydrocarbon reserves are expended. Cost of

successful exploratory wells and development wells are capitalized and appropriately depleted over the period

d. Producing Properties

On the basis that OIL experts consider the life of well at 14 years, Producing Properties have been revalued by assuming average age of all the wells as 7 years. Broad based price indices as published by RBI have been used for revaluation.

Gross depletion charge at historical cost has been enhanced in proportion which the gross replacement cost of properties bears to the gross historical cost of the producing properties

e. Pre-producing Properties

Considering the age analysis of the Pre-producing Properties at all locations including Rajasthan. the average of Preproducing Properties is estimated as 3 years old and appropriately revalued by applying broad based price indices as published by the Reserve Bank of India.

f. Investments

Investments have been valued at lower of cost or realisable value.

g. Current Assets and Liabilities

Insurance Spares have been revalued In proportion with gross block of plant and machinery at Current Cost bears to gross block of Plant and Machinery at historical cost. Stores and spare parts, sundry debtors and loans to employees have been restated considering their agewise build up by applying appropriate price indices published by RBI

h. Cost of Sales Adjustment

Cost of Sales Adjustment is undertaken to adjust historical cost of sales to current cost of sales and thereby charge against revenue the current cost of product sold at the time of sale. in the case of OIL time lag between the date of production and date of sale being negligible. no cost of sales adjustment is being undertaken

i. Monetary Working Capital Adjustment

Trade debtors. inventories not subject to cost of sale adjustment, loans and advances and current liabilities relevant to business operations have been considered for effecting monetary working capital adjustment.

j. Gearing Adjustment

Gearing adjustment has been undertaken.

Current Cost Balance Sheet as on 31st March, 2006				₹ in Lakhs
		2005-2006		2004-2005
Sources of Funds Shareholder's fund				
Share Capital	21400.44		21400.44	
Current Cost Reserve	673669.41		613912.35	
Other Reserves	274580.82		220501.87	
(including retained profits under Operating Capital Maintenance concept)		969650.67		855814.66
Loan Funds		33410.02		31826.55
		<u>1003060.69</u>		<u>887641.21</u>
Application of Funds				
Fixed Assets				
Gross Block	582429.39		536539.19	
Less: Depreciation	407836.56		315825.20	
Net Block		174592.83		220713.98
Capital work in progress		31532.85		24341.58
Producing Properties				
Gross Amount	693066.46		607790.30	
Less: Depletion	319729.32		271103.27	
Net Amount		373337.14		336687.03
Pre-producing Properties		39975.32		17570.43
Investments		43015.33		18193.59
Current Assets				
Inventories	39894.55		26078.22	
Sundry Debtors	53407.64		55433.13	
Cash & Bank Balances	310150.23		186403.89	
Short Term Deposits	1500.00		26800.00	
Loan & Advances	52330.59		59616.43	
		457283.01		354334.67
Less: Current Liabilities & Provision		116675.79		87196.26
Net Current Assets		340607.22		267138.47
Miscellaneous Expenditure		53830.59		2996.19
		<u>1003060.69</u>		<u>887641.21</u>
Current Cost Profit & Loss Account as on 31st March, 2006				₹ in Lakhs
		Year Ended 31st March 2006		Year Ended 31st March 2005
Turnover		603655.65		409714.95
Production & Transportation Expenditure including Geological and Geophysical Expenditure, Carrying Cost, Abandonment and Write-off. Depreciation, Depletion & Prior Period Adjustments		334597.21		245735.45
		<u>269058.44</u>		<u>163979.50</u>
Less: Current Cost Operating Adjustments				
Additional Depreciation	22819.15		16982.00	
Additional Depletion	28503.95		16494.02	
Additional Write-off of Exploratory/Dry wells	6792.72		833.05	
Monetary Working Capital Adjustment	1344.56		2961.33	
	59460.38		37270.41	
Less: Gearing Adjustment	2908.75	56551.63	1742.65	35527.76
Current Cost Operating Profit		212506.81		128451.74
Less: Interest	1618.67		1665.11	
Provision for Taxation	98446.70		56146.00	
Proposed Dividend	64664.90	164730.27	38964.00	96775.15
Retained Current Cost Profit for the year		<u>47776.54</u>		<u>31676.59</u>

Fig. 15.3: Oil India Ltd.

Source: Oil India Ltd., Annual Report, 2005-06, pp. 189, 191, 193, 195.

Infosys Technologies Ltd.

Current-cost-adjusted financial statements

Current Cost Accounting ("CCA") seeks to state the value of assets and liabilities in a balance sheet at their value, and measure the profit or loss of an enterprise by matching current costs against current revenues. CCA is based on the concept of "operating capability", which may be viewed as the amount of goods and services that an enterprise is capable of providing with the existing resources during a given period. In order to maintain its operating capability, an enterprise should remain in command of resources that form the basis of its activities. Accordingly, it becomes necessary to take into account the rising cost of assets consumed in generating these revenues. CCA takes into account the changes in specific prices of assets as they affect the enterprise.

The balance sheet and profit and loss account of Infosys for fiscal 2003, prepared in substantial compliance with the current cost basis are presented below. The methodology prescribed by the *Guidance Note on Accounting for Changing Prices* issued by the Institute of Chartered Accountants of India is adopted in preparing the statements.

BALANCE SHEET AS OF MARCH 31

in ₹ crore

	2003	2002
Assets Employed:		
Fixed assets		
Original cost	1,374.20	858.44
Accumulated depreciation	(644.94)	(284.46)
	729.26	573.98
Capital work-in-progress	76.56	150.67
Net fixed assets	805.82	724.65
Investments	33.20	44.44
Deferred tax assets	36.81	24.22
Current assets, loans and advances		
Cash and bank balances	1,336.23	772.22
Loans and advances	872.78	643.87
Monetary working capital	178.04	210.62
	2,387.05	1,626.71
Less: Other liabilities and provisions	(387.98)	(333.30)
Net current assets	1,999.07	1,293.41
	2,874.90	2,086.72
Financed by:		
Share capital and reserves		
Share capital	33.12	33.09
Reserves:		
Capital reserve	5.94	5.94
Share premium	338.83	325.34
Current cost reserve	46.95	32.70
General reserve	2,450.06	1,689.65
	2,874.90	2,086.72
Profit and loss account for the year ended March 31,		
Total income	3,622.69	2,670.00
Historic cost profit before tax	1,158.93	943.39
Less: Current cost operating adjustments	(56.79)	(1.76)
	1,102.14	941.63
Less: Gearing adjustment	—	—
Current cost profit before tax	1,102.14	941.63
Provision for taxation		
Earlier years	1.50	—
Current year	199.50	135.43
Current cost profit after tax	901.14	806.20
Appropriations		
Dividend		
Interim	82.76	49.63
Final (proposed)	96.05	82.73
Dividend tax	12.30	5.06
Amount transferred-general reserve	710.03	668.78
	901.14	806.20
Statement of retained profits/reserves		
Opening balance of reserves	1,722.35	1,040.64
Retained current cost profit for the year	710.03	668.78
Movements in current cost reserves during the year	64.63	12.93
	2,497.01	1,722.35

Note:

1. The cost of technology assets comprising computer equipment decreases over time. This is offset by an accelerated depreciation charge to the financial statements. Accordingly, such assets are not adjusted for changes in prices.
2. The above data is provided solely for information purposes. The management accepts no responsibility for any direct, indirect or consequential losses or damages suffered by any person relying on the same.

Fig. 15.4: Infosys Technologies Ltd.

Source: Infosys Technologies Ltd., Annual Report, 2002-2003, pp. 154-155.

REFERENCES

1. R.K. Mautz, "A Few Words for Historical Cost", *Financial Executive* (January I 1973), pp. 9398.
2. Y. Ijiri "In Defence of Historical Cost Accounting" in R R Sterling (Ed.), *Asset Valuation and Income Determination*, Scholars Book, 1971, pp. 114.
3. Quoted from B. Merino (Ed.), *Business Income and Price Levels*, Anno Press New York, 1980, p. 4.
4. Financial Accounting Standards Board, FAS 33, Financial Reporting and Changing Prices, FASB, 1979, p. 14.
5. Allan H. Seed III, *Inflation: Its Impact on Financial Reporting and Decision Making*, Financial Executives Research Foundation, 1978, pp. 24.
6. R.J. Chambers, "Fair Financial Reporting in Law and Practice" in the Emanuel Saxe Distinguished Lectures in Accounting, 197677, p. 12.
7. David Solomons, *Making Accounting Policy*, Oxford University Press, 1986, p.170.
8. L. Douglas Smith and John J. Anderson, "Inflation Accounting and Comparisons of Corporate Returns on Equity", *Accounting and Business Research* (Spring 1986), p.114.
9. Michael O. Alexander, "Effects of Changing Prices and Values", in John C. Burton *et al* (Eds.), *Handbook of Accounting and Auditing*, Warren, Gorham and Lanont, 1981, p. 83.
10. Jayne Godfrey, Allan Hodgson, Scott Holmes and Ann Tarca, *Accounting Theory*, VIth Edition, 2006, John Wiley and Sons, pp. 190-193.
11. R. Mathews, "PriceLevel Changes and Useless Information", *Journal of Accounting Research* (Spring 1965), pp. 133-155.
12. Y. Ijiri, "Theory of Accounting Measurement: Studies in Accounting," *Research No. 10*, Sarasota: American Accounting Association, 1975.
13. S.P. Agrawal and R.C. Hallbaur, "Inflation: Implications for Management Accounting," *Cost and Management* (Nov.Dece. 1976), pp. 5-13.
14. Clyde P. Stickney, "Adjustments for Changing Prices" in Sidney Davidson and Roman Weil (Eds.), *Handbook of Modern Accounting*, New York: McGraw-Hill Book Company, 1983, p. 31-30.
15. American Institute of Certified Public Accountants, "Reporting the Financial Effects of Price Level Changes," *Accounting Research Study No. 6*, New York: AICPA, 1969, p. 16.
16. A Baran. J Lakouishok and A.R. Ofer, "The Informational Content of General Price Level Adjusted Earnings: Some Empirical Evidence," *The Accounting Review*(January 1980), p. 34.
17. R.S. Gynther, "Why Use General Purchasing Power Accounting," *Accounting and Business Research* (Spring 1974), pp. 142-156.
18. Eldon S. Hendriksen, *Accounting Theory*, Homewood: Richard D. Irwin, 1982, p. 223.
19. Robert Bloom and Arya Debessay, *Inflation Accounting*, New York: Praeger Publishers, 1984, p. 125.
20. (a) Russel J. Peterson, "A Portfolio Analysis of General Price Level Re-statement," *The Accounting Review* (July 1975) p. 532, (b) R.C. Morris, "Evidence of the Impact of Inflation Accounting on Share Prices," *Accounting and Business Research* (Spring 1975) p.90 (c) Morton Backer, *Financial Reporting for Security Investment and Credit Decisions*, New York: National Association of Accountants, 1970, pp. 233240.
21. *Report of the Inflation Accounting Committee*, London: HMSO, CMD Paper 6225, 1975, pp. 131132.
22. David Solomons, *Making Accounting Policy*, New York: Oxford University Press, 1986, p. 153.

QUESTIONS

1. "Financial statements based on historical cost basis are meaningless and highly distorted." Discuss in brief the steps taken recently in the United Kingdom to make adjustments for inflation in the financial statements. (M.Com., Delhi)
2. Various companies make adjustments for changing prices in their financial statements. What steps have recently been taken in the USA in this connection?
Do you think, statements prepared under FAS33 can be adopted by Indian companies? Give reasons. (M.Com., Delhi, 1984)
3. Discuss the measure that have recently been adopted in USA for reporting the effects of price changes in the financial statements of business enterprises to investors, creditors and others. (M.Com., Delhi)
4. Distinguish between financial statements restated for general pricelevel changes and currentvalue financial statements.
Which of these two approaches would you suggest for making adjustments for price level changes in financial statements for a developing country like India? Give reasons. (M.Com., Delhi)
5. Define and present the computation procedures for general price level gain or loss.
6. Distinguish between monetary assets and liabilities and non-monetary assets and liabilities.
7. Distinguish between purchasing power gain and loss and monetary working capital adjustment.
8. Discuss the arguments in favour of and against 'current cost or lower recoverable amount) accounting.
9. Explain the computation procedures and adjustments necessary under U.K.'s SSAP 16. (M.Com., Delhi, 1996)
10. "In India there has been unsatisfactory response by the Indian Companies towards accounting for inflation in their financial statements." Do you agree with this statement? Give reasons.
11. What is the main objective of CCA? Discuss briefly the rationale of various adjustments that are required in determining current cost profit for an accounting period. (M.Com., Delhi, 2010, 2011)
12. Concern with incorporating the effects of changing prices in the accounting system historically rises or falls in direct proportion to the rate of inflation." Explain with illustration from different countries. Should India adopt some form of price varying accounting now? Give reasons. (M.Com., Delhi, 1992, 1990)
13. What is the current status of accounting for price changes in UK and USA? (M.Com., Delhi, 1992)
14. State briefly the recommendations made by ICAI in its 'Guidance Note on Accounting for Changing Prices' in India. (M.Com., Delhi)
15. Distinguish between USA's SFAS 33 and UK's SSAP 16 on accounting for changing prices. What developments have taken place in India in this regard? (M.Com., Delhi, 1995)

16. As the rate of inflation in India during the current year is around 8 per cent, there is no need for continuing the search for the best method of accounting for changing prices. Comment.
(M.Com., Delhi, 1993)
17. State the adjustments suggested by Sandiland's Committee for arriving at current cost income from historical cost income.
(M.Com., Delhi; 1993)
18. Give arguments in favour of historical cost as a method of asset valuation and income determination. (M.Com., Delhi, 1996)
19. What is the main objective of CCA? Discuss briefly the rationale of various adjustments that are required in determining current cost profit for an accounting period. State whether CCA method has been used by some companies in India for financial reporting.
(M.Com., Delhi, 1998)
20. What are the main points of criticism of Current Purchasing Power Accounting (CPPA)? Can they be justified?
(M.Com., Delhi, 1999)
21. State three distortions in financial reporting due to inflation.
(M.Com., Delhi, 1999)
22. Explain the meaning of Monetary assets and Monetary liabilities. Give suitable examples. (M.Com., Delhi, 2003)
23. Distinguish between USA's FAS 33 and UK's SSAP 16 on accounting for changing prices. (M.Com., Delhi, 2008)
24. Explain the different adjustments required under CCA method of accounting for changing prices.
(M.Com., Delhi, 2013)
25. Discuss CPPA and CCA methods of accounting for changing prices.
(M.Com., Delhi, 2012)
3. During a period of deflation an entity would have the greatest gain in general purchasing power by holding
 - (a) Cash
 - (b) Plant and equipment.
 - (c) Accounts payable.
 - (d) Mortgages payable.
4. The valuation basis used in conventional financial statements is
 - (a) Market value.
 - (b) Original cost.
 - (c) Replacement cost.
 - (d) A mixture of costs and value.
5. In the context of general pricelevel adjustments, which of the following is a non-monetary item ?
 - (a) Receivables under capitalised leases.
 - (b) Obligations under capitalised leases.
 - (c) Minority interest.
 - (d) Unamortised discount on bonds payable.
6. When computing information on a historical cost/constant rupee basis, which of the following is classified as non-monetary?
 - (a) Cash surrender value of life insurance.
 - (b) Longterm receivables.
 - (c) Allowance for doubtful accounts.
 - (d) Inventories, other than inventories used on contract.
7. On January 2, 2015, the Manix Corporation mortgaged one of its properties as collateral for a ₹ 10,00,000, 7%, fiveyear loan. During 2015, the general price level increased evenly, resulting in a 5% rise for the year. In preparing a balance sheet expressing financial position in terms of the general pricelevel at the end of 2015, at what amount should Manix report its mortgage note payable?
 - (a) ₹ 9,50,000.
 - (b) ₹ 10,00,000.
 - (c) ₹ 10,25,000.
 - (d) ₹ 10,50,000
8. When computing information on a historical cost/constant rupee basis, which of the following is classified as non-monetary?
 - (a) Obligations under warranties.
 - (b) Accrued expenses payable.
 - (c) Unamortised premium on bonds payable.
 - (d) refundable deposits.
9. In accordance with FASB statement No. 33, purchasing power gain or loss results from which of the following?

	<i>Monetary Assets and Liabilities</i>	<i>Non-monetary Assets and Liabilities</i>
(a)	Yes	Yes
(b)	Yes	No
(c)	No	Yes
(d)	No	No

MULTIPLE CHOICE QUESTIONS

Select the correct answer for each of the following multiplechoice questions.

1. Following are four observations regarding the amount reported in financial statements that have been adjusted for general pricelevel changes. Which observation is valid?
 - (a) The amount obtained by adjusting an asset's cost for general price-level changes usually approximates its current fair value.
 - (b) The amounts adjusted for general pricelevel changes are not departures from historical cost.
 - (c) When inventory increases and prices are rising, lastin firstout (LIFO) inventory accounting has the same effect on financial statements as amounts adjusted for general pricelevel changes.
 - (d) When inventory remains constant and prices are rising, LIFO inventory accounting has the same effect on financial statements as amounts adjusted for general pricelevel changes.
2. A method of accounting based on measures of historical prices in rupee, each of which has the same general purchasing power, is
 - (a) Current cost/constant rupee accounting.
 - (b) Current cost/nominal rupee accounting.
 - (c) Historical cost/constant rupee accounting.
 - (d) Historical cost/nominal rupee accounting.
10. In preparing constant rupee financial statements, monetary items consist of
 - (a) Cash items plus all receivables with a fixed maturity date.
 - (b) Cash, other assets expected to be converted into cash, and current liabilities.
 - (c) Assets and liabilities whose amounts are fixed by contract or otherwise in terms of rupee regardless of pricelevel changes.

- (d) Assets and liabilities which are classified as current or, the balance sheet.
11. In preparing constant rupee financial statements, a non-monetary item would be
- Accounts payable in cash.
 - Longterm bonds payable.
 - Accounts receivable.
 - Common stock.
12. Gains and losses on non-monetary assets usually are reported in historical amount financial statements when the items are sold. Gains and losses on the sale of non-monetary assets should be reported in constant amount financial statements.
- In the same period, but the amount will probably differ.
 - In the same period and the same amount.
 - Over the life of the non-monetary asset.
 - Partly over the life of the non-monetary asset and the remainder when the asset is sold.
13. If land were purchased in 2001 for ₹ 1,00,000 when the general pricelevel index was 100 and sold at the end of 2010 for ₹ 1,60,000 when the index was 170, the general pricelevel statement of income for 2010 would show
- A general pricelevel gain of ₹ 70,000 and a loss on sale of land of ₹ 10,000.
 - A gain on sale of land of ₹ 60,000.
 - A general pricelevel loss of ₹ 10,000.
 - A loss on sale of land of ₹ 10,000.
14. If land were purchased at a cost of ₹ 20,000 in January 2009 when the general pricelevel index was 120 and sold in December 2015 when the index was 150, the selling price that would result in no gain or loss would be
- ₹ 30,000.
 - ₹ 24,000
 - ₹ 20,000.
 - ₹ 25,000.
15. If the base year is 2010 (when price index 100) and land is purchased for ₹ 50,000 in 2016 when the general price index is 108.5, the cost of the land restated to 2001 general purchasing power (rounded to the nearest whole rupee) would be
- ₹ 54,250
 - ₹ 50,000
 - ₹ 46,083.
 - ₹ 45,750.
16. Assume the same facts as in item 15. The cost of the land restated to December 31, 2010, general purchasing power when the price index was 119.2 ('rounded to the nearest whole rupee) would be
- ₹ 59,600.
 - ₹ 54,931.
 - ₹ 46,083.
 - ₹ 45,512.
17. When constant rupee balance sheets are prepared, they should be presented in terms of
- The general purchasing power of the rupee at the latest balance sheet date.
 - The general purchasing power of the rupee in the base period.
 - The average general purchasing power of the rupee for the latest fiscal period.
 - The general purchasing power of the rupee at the time the financial statements are issued.
18. The restatement of historical rupee financial statements to reflect general pricelevel changes results in presenting assets at
- Lower of cost or market values.
 - Current appraisal values.
 - Cost adjusted for purchasing power changes.
 - Current replacement cost.
19. When preparing constant rupee financial statements; it would not be appropriate to use
- Cost or market, whichever is lower, in the valuation of inventories.
 - Replacement cost in the valuation of plant assets.
 - The historical cost basis in reporting incometax expense.
 - The actual amounts payable in reporting liabilities on the balance sheet.
20. For comparison purposes constant rupee balance sheets of earlier periods should be restated to the general purchasing power amount of
- The beginning of the base period.
 - An average for the current period.
 - The beginning of the current period.
 - The end of the current period.
21. When computing purchasing power gain or loss on net monetary items, which of the following accounts is classified as non-monetary
- Advances to unconsolidated subsidiaries.
 - Allowance for uncollectible accounts.
 - Unamortized premium on bonds payable.
 - Accumulated depreciation of equipment.
- Ans. (d)**
22. During a period of inflation in which a liability account balance remains constant, which of the following occurs?
- A purchasing power gain, if the item is a non-monetary liability.
 - A purchasing power gain, if the item is a monetary liability.
 - A purchasing power loss, if the item is a non-monetary liability.
 - A purchasing power loss, if the item is a monetary liability.
- Ans. (b)**
23. The following information pertains to each unit of merchandise purchased for resale by Vend Co.:
- March 1, 2016*
- | | | |
|-------------------|---|-----|
| Purchase price | ₹ | 8 |
| Selling price | ₹ | 12 |
| Price level index | | 110 |
- December 31, 2016*
- | | | |
|-------------------|---|-----|
| Replacement cost | ₹ | 10 |
| Selling price | ₹ | 15 |
| Price level index | | 121 |

Under current cost accounting, what is the amount of Vend's holding gain on each unit of this merchandise?

- (a) 0
- (b) 0.80
- (c) 1.20
- (d) 2.00

Ans. (d)

24. Kerr Company purchased a machine for ₹ 1,15,000 on January 1, 2016, the company's first day of operations. At the end of the year, the current cost of the machine was ₹ 1,25,000. The machine has no salvage value, a fiveyear life, and is depreciated by the straightline method. For the year ended December 31, 2016, the amount of the current cost depreciation expense which would appear in supplementary current cost financial statements is

- (a) ₹ 14,000
- (b) ₹ 23,000
- (c) ₹ 24,000
- (d) ₹ 25,000

Ans. (c)

25. At December 31, 2016, Jannis Co. owned two assets as follows:

	<i>Equipment</i>	<i>Inventory</i>
Current cost	₹ 1,00,000	₹ 80,000
Recoverable amount	₹ 95,000	₹ 90,000

Jannis voluntarily disclosed supplementary information about current cost at December 31, 2016. In such a disclosure, at what amount would Jannis report total assets?

- (a) 1,75,000
- (b) 1,80,000
- (c) 1,85,000
- (d) 1,90,000

Ans. (a)

26. Could current cost financial statements report holding gains for goods sold during the period and holding gains on inventory at the end of the period?

	<i>Goods sold</i>	<i>Inventory</i>
(a)	Yes	Yes
(b)	Yes	No
(c)	No	Yes
(d)	No	No

Ans. (a)

27. Manhof Co. prepares supplementary reports on income from continuing operations on a current cost basis in accordance with SFAS 89, Financial Reporting and Changing Prices. How should Manhof compute cost of goods sold on a current cost basis?

- (a) Number of units sold times average current cost of units during the year.
- (b) Number of units sold times current cost of units at year end.
- (c) Number of units sold times current cost of units at the beginning of the year
- (d) Beginning inventory at current cost *plus* cost of goods purchased less ending inventory at current cost.

Ans. (a)

28. A company that wishes to disclose information about the effect of changing prices in accordance with USA SFAS 89, Financial Accounting and Changing Prices, should report this information in

- (a) The body of the financial statements.
- (b) The notes to the financial statements.
- (c) Supplementary information to the financial statements.
- (d) Management's report to shareholders.

Ans. (c)



Fair Value Measurement

RATIONALE AND MEANING

One of the central questions that financial reporting standards address is “How should a reporting entity’s recognized assets and liabilities be measured?” Answering that question is not simply a matter of specifying which units of *measurement* (i.e., currency units) the reporting entity should use. More fundamentally, financial reporting standards must specify an approach (or approaches) to quantifying the economic worth of each asset and the economic burden of each liability.

There has been a long-running debate among participants in the financial reporting supply chain over various approaches to measuring the items that are recognized in financial statements. In recent years, one particular issue has become the focal point of that debate: whether *fair value* is an appropriate basis (or part of an appropriate basis) for measuring assets and liabilities.

During 1980s, many standard setters such as International Accounting Standards Committee (IASC), Financial Accounting Standards Board (USA), began shifting their emphasis from the income statement to the balance sheet. Most recently, this balance sheet, or asset/ liability, approach has become the major driver of changes in the standards issued by both bodies. Both have suggested that current economic values, as shown on the balance sheet, rather than assets and liabilities stated at historical cost, are what investors really require to make informed decisions.’ Both bodies have also expressed dissatisfaction with the traditional “matching concept,” which computes net income as the total of actual or expected cash flows from transactions minus the costs expended to produce that revenue (costs associated with unrealized revenue are deferred and carried in the asset section of the balance sheet). Instead, the standard setters now emphasize that balance sheet values provide a more conceptually valid basis for determining the revenue and expense that should be reported in the income statement. If assets and liabilities were recorded at their economic values at the end of a period, the amounts reported as revenue and expense would be obvious: the difference between the economic values at the beginning and end of the period less additional investments by and plus distribution to shareholders.¹

The evolution of the fair value as a tool of measurement as against the cost or lower of cost or market value is the result of the conscious efforts to improve the relevance of the information presented in the financial statements.

‘Fair value’ is different from ‘mark to market’ accounting. “Mark to market” refers to valuing assets and liabilities at their market values, based on actual and verifiable market prices, at the end of the accounting period and taking any gains, or losses over

book values directly to income. When there are no transaction-based market prices, fair values are used instead. Fair value is defined as “the amount at which an asset (liability) could be bought (incurred) or sold (settled) in a current transaction between willing parties, that is, other than in a forced or liquidation sale [SFAS 133, paragraph 5401, where settled means paid off or relieved of the burden of the liability.”² The objective of fair value measurement is to estimate the market prices of assets and liabilities in the absence of actual market transactions by the firm, simulating as much as possible the characteristics and workings of a relevant market, including the absence of duress on the market participants. Similarly, SFAS 157 and Ind AS 113 defines fair value as “the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date”

The purpose of fair value accounting is to disclose information that reflects current market values as adequately as possible.

FAIR VALUE AS A MEASUREMENT ATTRIBUTE

A *measurement attribute* is a quantitative characteristic that can be observed, calculated, or estimated for items in the financial statements. Familiar measurement attributes include *historical cost*, *replacement cost*, and *salvage value*. Of course, several different measurement attributes may be associated with a given item. For example, a specific asset may have a historical cost, a replacement cost, and a salvage value, along with other measurement attributes. That puts the onus on standard-setters to prescribe which measurement attributes should be used for which items under which circumstances.

The FASB and IASB have distinguished between two major kinds of measurement attributes: those that are *values* versus those that are *prices*. A value is “an entity-specific assessment of economic worth,” whereas a price is “a value that is objectified through the operation of the marketplace.” The distinction between values and prices has significant implications for measurement:

- Measured values tend to be subjective in nature and are likely to be based on calculations and estimates rather than objective observations. For example, the expected cash flows associated with a financial instrument or other contractual arrangement could be used as the basis for establishing a balance sheet item’s value. Expectations of cash flows from a given arrangement may vary from entity to entity, and the same stream of expected cash flows may have different values to different entities if an entity-specific discount rate is used to discount the future cash flows to their present value.

- Measured prices are based on actual or hypothetical market transactions from the perspective of the reporting entity. There are two fundamental kinds of prices: entry prices and exit prices. An entry price is the price that an entity pays to purchase an asset or receives to assume a liability from another entity. An exit price is the price that an entity receives to sell an asset or pays to have a third-party entity assume a liability. In the case of actual transactions, prices are observable, objective measurements. However, in the case of hypothetical transactions, prices may exhibit less objectivity. Depending on the liquidity and level of activity in the relevant market, it may not be possible to make an objective observation of price for a hypothetical transaction, and therefore it may be necessary to rely on calculations or estimates, which may or may not be based on objective inputs.³

In addition to the value price distinction, the second key property of measurement attributes is time duration, that is a 'past, present or future' characterization of the transaction, event or to which a measurement attribute refers.

Ind AS 113, Fair Value Measurement, issued in February 2015 provides the following:

(1) Fair value is a market-based measurement. not an entity-specific measurement. For some assets and liabilities, observable market transactions or market information might be available. For other assets and liabilities, observable market transactions and market information might not be available. However, the objective of a fair value measurement in both cases is the same—to estimate the price at which an *orderly transaction* to sell the asset or to transfer the liability would take place between *market participants* at the measurement date under current market conditions (*i.e.*, an *exit price* at the measurement date from the perspective of a market participant that holds the asset or owes the liability).

(2) When a price for an identical asset or liability is not observable, an entity measures fair value using another valuation technique that maximises the use of relevant *observable* inputs and minimises the use of *unobservable* inputs. Because fair value is a market-based measurement, it is measured using the assumptions that market participants would use when pricing the asset or liability, including assumptions about risk. As a result, an entity's intention to hold an asset or to settle or otherwise fulfill a liability is not relevant when measuring fair value.

(3) The definition of fair value focuses on assets and liabilities because they are a primary subject of accounting measurement. In addition, this Ind AS shall be applied to an entity's own equity instruments measured at fair value.

ACCOUNTING STANDARDS ON FAIR VALUE MEASUREMENTS INDIA

Ministry of Corporate Affairs Govt. of India, has approved Ind AS 113, Fair Value Measurement, in February 2015 as a move

toward convergence of global accounting standards. The features of this Ind AS are as follows :

Ind AS 113, Fair Value Measurement, (February 2015)

1. Scope

This Ind AS applies when another Ind AS requires or permits fair value measurements or disclosures about fair value measurements (and measurements, such as fair value less costs to sell, based on fair value or disclosures about those measurements).

Measurement and disclosure requirements of this Ind AS do not apply to the following:

- share-based payment transactions within the scope of Ind AS 102, *Share based Payment*;
- leasing transactions within the scope of Ind AS 17, *Leases*; and
- measurements that have some similarities to fair value but are not fair value, such as net realisable value in Ind AS 2, *Inventories*, or value in use in Ind AS 36, *Impairment of Assets*.

The disclosures required by this Ind AS are not required for the following:

- plan assets measured at fair value in accordance with Ind AS 19, *Employee Benefits*;
- assets for which recoverable amount is fair value less costs of disposal in accordance with Ind AS 36.

The fair value measurement framework described in this Ind AS applies to both initial and subsequent measurement if fair value is required or permitted by other Ind ASs.

2. Measurement

The asset or liability

A fair value measurement is for a particular asset or liability. Therefore, when measuring fair value an entity shall take into account the characteristics of the asset or liability if market participants would take those characteristics into account when pricing the asset or liability at the measurement date. Such characteristics include, for example, the following:

- the condition and location of the asset; and**
- restrictions, if any, on the sale or use of the asset.**

The effect on the measurement arising from a particular characteristic will differ depending on how that characteristic would be taken into account by market participants.

The asset or liability measured at fair value might be either of the following:

- a stand-alone asset or liability (e.g. a financial instrument or a non financial asset); or
- a group of assets, a group of liabilities or a group of assets and liabilities (e.g. a cash-generating unit or a business).

Whether the asset or liability is a stand-alone asset or liability, a group of assets, a group of liabilities or a group of assets and liabilities for recognition or disclosure purposes depends on its *unit of account*. The unit of account for the asset or liability shall be determined in accordance with the Ind AS that requires or permits the fair value measurement except as provided in this Ind AS.

The transaction

A fair value measurement assumes that the asset or liability is exchanged in an orderly transaction between market participants to sell the asset or transfer the liability at the measurement date under current market conditions.

A fair value measurement assumes that the transaction to sell the asset or transfer the liability takes place either:

- (a) **in the principal market for the asset or liability; or**
- (b) **in the absence of a principal market, in the most advantageous market for the asset or liability.**

An entity need not undertake an exhaustive search of all possible markets to identify the principal market or, in the absence of a principal market, the most advantageous market, but it shall take into account all information that is reasonably available. In the absence of evidence to the contrary, the market in which the entity would normally enter into a transaction to sell the asset or to transfer the liability is presumed to be the principal market or, in the absence of a principal market, the most advantageous market.

If there is a principal market for the asset or liability, the fair value measurement shall represent the price in that market (whether that price is directly observable or estimated using another valuation technique), even if the price in a different market is potentially more advantageous at the measurement date.

The entity must have access to the principal (or most advantageous) market at the measurement date. Because different entities (and businesses within those entities) with different activities may have access to different markets, the principal (or most advantageous) market for the same asset or liability might be different for different entities (and businesses within those entities). Therefore, the principal (or most advantageous) market (and thus, market participants) shall be considered from the perspective of the entity, thereby allowing for differences between and among entities with different activities.

Although an entity must be able to access the market, the entity does not need to be able to sell the particular asset or transfer the particular liability on the measurement date to be able to measure fair value on the basis of the price in that market.

Even when there is no observable market to provide pricing information about the sale of an asset or the transfer of a liability at the measurement date, a fair value measurement shall assume that a transaction takes place at that date, considered from the perspective of a market participant that holds the asset or owes the liability. That assumed transaction establishes a basis for estimating the price to sell the asset or to transfer the liability.

3. Market participants

An entity shall measure the fair value of an asset or a liability using the assumptions that market participants would use when pricing the asset or liability, assuming that market participants act in their economic best interest.

In developing those assumptions, an entity need not identify specific market participants. Rather, the entity shall identify characteristics that distinguish market participants generally, considering factors specific to all the following:

- (a) the asset or liability;
- (b) the principal (or most advantageous) market for the asset or liability; and
- (c) market participants with whom the entity would enter into a transaction in that market.

4. The price

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction in the principal (or most advantageous) market at the measurement date under current market conditions (i.e. an exit price) regardless of whether that price is directly observable or estimated using another valuation technique.

The price in the principal (or most advantageous) market used to measure the fair value of the asset or liability shall not be adjusted for *transaction costs*. Transaction costs shall be accounted for in accordance with other Ind ASs. Transaction costs are not a characteristic of an asset or a liability; rather, they are specific to a transaction and will differ depending on how an entity enters into a transaction for the asset or liability.

Transaction costs do not include transport costs. If location is a characteristic of the asset (as might be the case, for example, for a commodity), the price in the principal (or most advantageous) market shall be adjusted for the costs, if any, that would be incurred to transport the asset from its current location to that market.

5. Application to non-financial assets

Highest and best use for non-financial assets

A fair value measurement of a non financial asset takes into account a market participant's ability to generate economic benefits by using the asset in its highest and best use or by selling it to another market participant that would use the asset in its highest and best use.

The highest and best use of a non-financial asset takes into account the use of the asset that is physically possible, legally permissible and financially feasible, as follows:

- (a) A use that is physically possible takes into account the physical characteristics of the asset that market participants would take into account when pricing the asset (e.g. the location or size of a property).
- (b) A use that is legally permissible takes into account any legal restrictions on the use of the asset that market participants would take into account when pricing the

asset (e.g. the zoning regulations applicable to a property).

- (c) A use that is financially feasible takes into account whether a use of the asset that is physically possible and legally permissible generates adequate income or cash flows (taking into account the costs of converting the asset to that use) to produce an investment return that market participants would require from an investment in that asset put to that use.

Highest and best use is determined from the perspective of market participants, even if the entity intends a different use. However, an entity's current use of a non-financial asset is presumed to be its highest and best use unless market or other factors suggest that a different use by market participants would maximise the value of the asset.

To protect its competitive position, or for other reasons, an entity may intend not to use an acquired non-financial asset actively or it may intend not to use the asset according to its highest and best use. For example, that might be the case for an acquired intangible asset that the entity plans to use defensively by preventing others from using it. Nevertheless, the entity shall measure the fair value of a non financial asset assuming its highest and, best use by market participants.

6. Valuation premise for non-financial assets

The highest and best use of a non-financial asset establishes the valuation premise used to measure the fair value of the asset, as follows:

- (a) The highest and best use of a non-financial asset might provide maximum value to market participants through its use in combination with other assets as a group (as installed or otherwise configured for use) or in combination with other assets and liabilities (e.g., a business).
- (i) If the highest and best use of the asset is to use the asset in combination with other assets or with other assets and liabilities, the fair value of the asset is the price that would be received in a current transaction to sell the asset assuming that the asset would be used with other assets or with other assets and liabilities and that those assets and liabilities (i.e., its complementary assets and the associated liabilities) would be available to market participants.
- (ii) Liabilities associated with the asset and with the complementary assets include liabilities that fund working capital, but do not include liabilities used to fund asset other than those within the group of assets,
- (iii) Assumptions about the highest and best use of a non-financial asset shall be consistent for all the assets (for which highest and best use is relevant) of the group of assets or the group of assets and liabilities within which the asset would be used.

- (b) The highest and best use of a non-financial asset might provide maximum value to market participants on a stand-alone basis. If the highest and best use of the asset is to use it on a stand alone basis, the fair value of the asset is the price that would be received in a current transaction to sell the asset to market participants that would use the asset on a stand-alone, basis.

The fair value measurement of a non-financial asset assumes that the asset is sold consistently with the unit of account specified in other Ind ASs (which may be an individual asset). That is the case even when that fair value measurement assumes that the highest and best use of the asset is to use it in combination with other assets or with other assets and liabilities because a fair value. measurement assumes that the market participant already holds the complementary assets and the associated liabilities.

7. Application to liabilities and an entity's own equity instruments

General principles

A fair value measurement assumes that a financial or non financial liability or an entity's own equity instrument (e.g., equity interests issued as consideration in a business combination) is transferred to a market participant at the measurement date. The transfer of a liability or an entity's own equity instrument assumes the following:

- (a) A liability would remain outstanding and the market participant transferee would be required to fulfil the obligation. The liability would not be settled with the counterparty or otherwise extinguished on the measurement date.
- (b) An entity's own equity instrument would remain outstanding and the market participant transferee would take on the rights and responsibilities associated with the instrument. The instrument would not be cancelled or otherwise extinguished on the measurement date.

Even when there is no observable market to provide pricing information about the transfer of a liability or an entity's own equity instrument (e.g., because contractual or other legal restrictions prevent the transfer of such items), there might be an observable market for such items if they are held by other parties as assets (e.g., a corporate bond or a call option on an entity's shares).

In all cases, an entity shall maximise the use of relevant observable inputs and minimise the use of unobservable inputs to meet the objective of a fair value measurement, which is to estimate the price at which an orderly transaction to transfer the liability or equity instrument would take place between market participants at the measurement date under current market conditions.

Liabilities and equity instruments held by other parties as assets

When a quoted price for the transfer of an identical or a similar liability or entity's own equity instrument is not available and the identical item is held by another party as an asset, an entity shall measure the fair value of the liability or equity instrument from the perspective of a market participant that holds the identical item as an asset at the measurement date.

In such cases, an entity shall measure the fair value of the liability or equity instrument as follows:

- (a) using the quoted price in an *active market* for the identical item held by another party as an asset, if that price is available.
- (b) if that price is not available, using other observable inputs, such as the quoted price in a market that is not active for the identical item held by another party as an asset.
- (c) if the observable prices in (a) and (b) are not available, using another valuation technique, such as:
 - (i) an *income approach* (e.g., a present value technique that takes into account the future cash flows that a market participant would expect to receive from holding the liability or equity instrument as an asset).
 - (ii) a *market approach* (e.g., using quoted prices for similar liabilities or equity instruments held by other parties as assets).

An entity shall adjust the quoted price of a liability or an entity's own equity instrument held by another party as an asset only if there are factors specific to the asset that are not applicable to the fair value measurement of the liability or equity instrument. An entity shall ensure that the price of the asset does not reflect the effect of a restriction preventing the sale of that asset. Some factors that may indicate that the quoted price of the asset should be adjusted include the following:

- (a) The quoted price for the asset relates to a similar (but not identical) liability or equity instrument held by another party as an asset. For example, the liability or equity instrument may have a particular characteristic (e.g., the credit quality of the issuer) that is different from that reflected in the fair value of the similar liability or equity instrument held as an asset.
- (b) The unit of account for the asset is not the same as for the liability or equity instrument. For example, for liabilities, in some cases the price for an asset reflects a combined price for a package comprising both the amounts due from the issuer and a third-party credit enhancement. If the unit of account for the liability is not for the combined package, the objective is to measure the fair value of the issuer's liability, not the fair value of the combined package. Thus, in such cases, the entity would adjust the observed price for the asset to exclude the effect of the third-party credit enhancement.

Liabilities and equity instruments not held by other parties as assets

When a quoted price for the transfer of an identical or a similar liability or entity's own equity instrument is not available and the identical item is not held by another party as an asset, an entity shall measure the fair value of the liability or equity instrument using a valuation technique from the perspective of a market participant that owes the liability or has issued the claim on equity.

(40) For example, when applying a present value technique an entity might take into account either of the following:

- (a) the future cash outflows that a market participant would expect to incur in fulfilling the obligation, including the compensation that a market participant would require for taking on the obligation.
- (b) the amount that a market participant would receive to enter into or issue an identical liability or equity instrument, using the assumptions that market participants would use when pricing the identical item (e.g., having the same credit characteristics) in the principal (or most advantageous) market for issuing a liability or an equity instrument with the same contractual terms.

8. Non-performance risk

The fair value of a liability reflects the effect of non-performance risk. Non-performance risk includes, but may not be limited to, an entity's own credit risk (as defined in Ind AS 107, *Financial Instruments: Disclosures*). Non-performance risk is assumed to be the same before and after the transfer of the liability.

When measuring the fair value of a liability, an entity shall take into account the effect of its credit risk (credit standing) and any other factors that might influence the likelihood that the obligation will or will not be fulfilled. That effect may differ depending on the liability, for example:

- (a) whether the liability is an obligation to deliver cash (a financial liability) or an obligation to deliver goods or services (a non-financial liability).
- (b) the terms of credit enhancements related to the liability, if any.

The fair value of a liability reflects the effect of non-performance risk on the basis of its unit of account. The issuer of a liability issued with an inseparable third-party credit enhancement that is accounted for separately from the liability shall not include the effect of the credit enhancement (e.g., a third-party guarantee of debt) in the fair value measurement of the liability. If the credit enhancement is accounted for separately from the liability, the issuer would take into account its own credit standing and not that of the third party guarantor when measuring the fair value of the liability.

9. Restriction preventing the transfer of a liability or an entity's own equity instrument

When measuring the fair value of a liability or an entity's own equity instrument, an entity shall not include a separate input or an adjustment to other inputs relating to the existence of a restriction that prevents the transfer of the item. The effect of a restriction that prevents the transfer of a liability or an entity's own equity instrument is either implicitly or explicitly included in the other inputs to the fair value measurement.

For example, at the transaction date, both the creditor and the obligor accepted the transaction price for the liability with full knowledge that the obligation includes a restriction that prevents its transfer. As a result of the restriction being included in the transaction price, a separate input or an adjustment to an existing input is not required at the transaction date to reflect the effect of the restriction on transfer. Similarly, a separate input or an adjustment to an existing input is not required at subsequent measurement dates to reflect the effect of the restriction on transfer.

10. Financial liability with a demand feature

The fair value of a financial liability with a demand feature (e.g., a demand deposit) is not less than the amount payable on demand, discounted from the first date that the amount could be required to be paid.

11. Application to financial assets and financial liabilities with offsetting positions in market risks or counterparty credit risk

An entity that holds a group of financial assets and financial liabilities is exposed to market risks (as defined in Ind AS 107) and to the credit risk (as defined in Ind AS 107) of each of the counterparties. If the entity manages that group of financial assets and financial liabilities on the basis of its net exposure to either market risks or credit risk, the entity is permitted to apply an exception to this Ind AS for measuring fair value. That exception permits an entity to measure the fair value of a group of financial assets and financial liabilities on the basis of the price that would be received to sell a net long position (i.e., an asset) for a particular risk exposure or paid to transfer a net short position (i.e., a liability) for a particular risk exposure in an orderly transaction between market participants at the measurement date under current market conditions. Accordingly, an entity shall measure the fair value of the group of financial assets and financial liabilities consistently with how market participants would price the net risk exposure at the measurement date.

12. Fair value at initial recognition

When an asset is acquired or a liability is assumed in an exchange transaction for that asset or liability, the transaction price is the price paid to acquire the asset or received to assume the liability (an *entry price*). In contrast, the fair value of the asset or liability is the price that would be received to sell the asset or paid to transfer the liability (an *exit price*). Entities do not necessarily sell assets at the prices paid to acquire them. Similarly, entities do not necessarily transfer liabilities at the prices received to assume them.

In many cases the transaction price will equal the fair value (e.g., that might be the case when on the transaction date the transaction to buy an asset takes place in the market in which the asset would be sold).

When determining whether fair value at initial recognition equals the transaction price, an entity shall take into account factors specific to the transaction and to the asset or liability.

If another Ind AS requires or permits an entity to measure an asset or a liability initially at fair value and the transaction price differs from fair value, the entity shall recognise the resulting gain or loss in profit or loss unless that Ind AS specifies otherwise.

13. Valuation techniques

An entity shall use valuation techniques that are appropriate in the circumstances and for which sufficient data are available to measure fair value, maximising the use of relevant observable inputs and minimising the use of unobservable inputs.

The objective of using a valuation technique is to estimate the price at which an orderly transaction to sell the asset or to transfer the liability would take place between market participants at the measurement date under current market conditions. Three widely used valuation techniques are the market approach, the cost approach and the income approach.

In some cases a single valuation technique will be appropriate (e.g., when valuing an asset or a liability using quoted prices in an active market for identical assets or liabilities). In other cases, multiple valuation techniques will be appropriate (e.g., that might be the case when valuing a cash-generating unit). If multiple valuation techniques are used to measure fair value, the results (i.e., respective indications of fair value) shall be evaluated considering the reasonableness 'of the range of values indicated by those results. A fair value measurement is the point within that range that is most representative of fair value in the circumstances.

If the transaction price is fair value at initial recognition and a valuation technique that uses unobservable inputs will be used to measure fair value in subsequent periods, the valuation technique shall be calibrated so that at initial recognition the result of the valuation technique equals the transaction price. Calibration ensures that the valuation technique reflects current market conditions, and it helps an entity to determine whether an adjustment to the valuation technique is necessary (e.g., there might be a characteristic of the asset or liability that is not captured by the valuation technique). After initial recognition, when measuring fair value using a valuation technique or techniques that use unobservable inputs, an entity shall ensure that those valuation techniques reflect observable market data (e.g., the price for a similar asset or liability) at the measurement date.

Valuation techniques used to measure fair value shall be applied consistently. However, a change in a valuation technique or its application (e.g., a change in its weightage when multiple valuation techniques are used or a change in an adjustment applied to a valuation technique) is appropriate if the change results in a measurement that is equally or more representative of fair value

in the circumstances. That might be the case if, for example, any of the following events take place:

- (a) new markets develop;
- (b) new information becomes available;
- (c) information previously used is no longer available;
- (d) valuation techniques improve; or
- (e) market conditions change.

(65) Revisions resulting from a change in the valuation technique or its application shall be accounted for as a change in accounting estimate in accordance with Ind AS 8. However, the disclosures in Ind AS 8 for a change in accounting estimate are not required for revisions resulting from a change in a valuation technique or its application.

14. Inputs to valuation techniques

General principles

Valuation techniques used to measure fair value shall maximise the use of relevant observable inputs and minimise the use of unobservable inputs.

Examples of markets in which inputs might be observable for some assets and liabilities (*e.g.*, financial instruments) include exchange markets, dealer markets, brokered markets and principal-to-principal markets.

An entity shall select inputs that are consistent with the characteristics of the asset or liability that market participants would take into account in a transaction for the asset or liability. In some cases those characteristics result in the application of an adjustment, such as a premium or discount (*e.g.*, a control premium or non-controlling interest discount). However, a fair value measurement shall not incorporate a premium or discount that is inconsistent with the unit of account in the Ind AS that requires or permits the fair value measurement.

Inputs based on bid and ask prices

If an asset or a liability measured at fair value has a bid price and an ask price (*e.g.*, an input from a dealer market), the price within the bid-ask spread that is most representative of fair value in the circumstances shall be used to measure fair value regardless of where the input is categorised within the fair value hierarchy (*i.e.*, Level 1, 2 or 3). The use of bid prices for asset positions and ask prices for liability positions is permitted, but is not required.

15. Fair value hierarchy

To increase consistency and comparability in fair value measurements and related disclosures, this Ind AS establishes a fair value hierarchy that categorises into three levels, the inputs to valuation techniques used to measure fair value. The fair value hierarchy gives the highest priority to quoted prices (unadjusted) in active markets for identical assets or liabilities (*Level 1 inputs*) and the lowest priority to unobservable inputs (*Level 3 inputs*).

In some cases, the inputs used to measure the fair value of an asset or a liability might be categorised within different levels of the fair value hierarchy. In those cases, the fair value

measurement is categorised in its entirety in the same level of the fair value hierarchy as the lowest level input that is significant to the entire measurement. Assessing the significance of a particular input to the entire measurement requires judgement, taking into account factors specific to the asset or liability. Adjustments to arrive at measurements based on fair value, such as costs to sell when measuring fair value less costs to sell, shall not be taken into account when determining the level of the fair value hierarchy within which a fair value measurement is categorised.

The availability of relevant inputs and their relative subjectivity might affect the selection of appropriate valuation techniques. However, the fair value hierarchy prioritises the inputs to valuation techniques, not the valuation techniques used to measure fair value. For example, a fair value measurement developed using a present value technique might be categorised within Level 2 or Level 3, depending on the inputs that are significant to the entire measurement and the level of the fair value hierarchy within which those inputs are categorised.

If an observable input requires an adjustment using an unobservable input and that adjustment results in a significantly higher or lower fair value measurement, the resulting measurement would be categorised within Level 3 of the fair value hierarchy. For example, if a market participant would take into account the effect of a restriction on the sale of an asset when estimating the price for the asset, an entity would adjust the quoted price to reflect the effect of that restriction. If that quoted price is a *Level 2 input* and the adjustment is an unobservable input that is significant to the entire measurement, the measurement would be categorised within Level 3 of the fair value hierarchy.

Level 1 inputs

Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities that the entity can access at the measurement date. A quoted price in an active market provides the most reliable evidence of fair value and shall be used without adjustment to measure fair value whenever available.

A Level 1 input will be available for many financial assets and financial liabilities, some of which might be exchanged in multiple active markets (*e.g.*, on different exchanges). Therefore, the emphasis within Level 1 is on determining both of the following:

- (a) the principal market for the asset or liability or, in the absence of a principal market, the most advantageous market for the asset or liability; and
- (b) whether the entity can enter into a transaction for the asset or liability at the price in that market at the measurement date.

An entity shall not make an adjustment to a Level 1 input except in the following circumstances:

- (a) when an entity holds a large number of similar (but not identical) assets or liabilities (*e.g.*, debt securities) that are measured at fair value and a quoted price in an active market is available but not readily accessible for each of those assets or liabilities individually (*i.e.*, given the

large number of similar assets or liabilities held by the entity, it would be difficult to obtain pricing information for each individual asset or liability at the measurement date). In that case, as a practical expedient, an entity may measure fair value using an alternative pricing method that does not rely exclusively on quoted prices (e.g., matrix pricing). However, the use of an alternative pricing method results in a fair value measurement categorised within a lower level of the fair value hierarchy.

- (b) when a quoted price in an active market does not represent fair value at the measurement date. That might be the case if, for example, significant events (such as transactions in a principal-to-principal market, trades in a brokered market or announcements) take place after the close of a market but before the measurement date. An entity shall establish and consistently apply a policy for identifying those events that might affect fair value measurements. However, if the quoted price is adjusted for new information, the adjustment results in a fair value measurement categorised within a lower level of the fair value hierarchy.
- (c) when measuring the fair value of a liability or an entity's own equity instrument using the quoted price for the identical item traded as an asset in an active market and that price needs to be adjusted for factors specific to the item or the asset. If no adjustment to the quoted price of the asset is required, the result is a fair value measurement categorised within Level I of the fair value hierarchy. However, any adjustment to the quoted price of the asset results in a fair value measurement categorised within a lower level of the fair value hierarchy.

If an entity holds a position in a single asset or liability (including a position comprising a large number of identical assets or liabilities, such as a holding of financial instruments) and the asset or liability is traded in an active market, the fair value of the asset or liability shall be measured within Level 1 as the product of the quoted price for the individual asset or liability and the quantity held by the entity. That is the case even if a market's normal daily trading volume is not sufficient to absorb the quantity held and placing orders to sell the position in a single transaction might affect the quoted price.

Level 2 inputs

Level 2 inputs are inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly.

If the asset or liability has a specified (contractual) term, a Level 2 input must be observable for substantially the full term of the asset or liability. Level 2 inputs include the following:

- (a) quoted prices for similar assets or liabilities in active markets.
- (b) quoted prices for identical or similar assets or liabilities in markets that are not active.

- (c) inputs other than quoted prices that are observable for the asset or liability, for example:
 - (i) interest rates and yield curves observable at commonly quoted intervals;
 - (ii) implied volatilities; and
 - (iii) credit spreads.
- (d) *market-corroborated inputs*.

Adjustments to Level 2 inputs will vary depending on factors specific to the asset or liability. Those factors include the following:

- (a) the condition or location of the asset;
- (b) the extent to which inputs relate to items that are comparable to the asset or liability; and
- (c) the volume or level of activity in the markets within which the inputs are observed.

An adjustment to a Level 2 input that is significant to the entire measurement might result in a fair value measurement categorised within Level 3 of the fair value hierarchy if the adjustment uses significant unobservable inputs.

Level 3 inputs

Level 3 inputs are unobservable inputs for the asset or liability.

Unobservable inputs shall be used to measure fair value to the extent that relevant observable inputs are not available, thereby allowing for situations in which there is little, if any, market activity for the asset or liability at the measurement date. However, the fair value measurement objective remains the same, i.e., an exit price at the measurement date from the perspective of a market participant that holds the asset or owes the liability. Therefore, unobservable inputs shall reflect the assumptions that market participants would use when pricing the asset or liability, including assumptions about risk.

Assumptions about risk include the risk inherent in a particular valuation technique used to measure fair value (such as a pricing model) and the risk inherent in the inputs to the valuation technique. A measurement that does not include an adjustment for risk would not represent a fair value measurement if market participants would include one when pricing the asset or liability. For example, it might be necessary to include a risk adjustment when there is significant measurement uncertainty (e.g., when there has been a significant decrease in the volume or level of activity when compared with normal market activity for the asset or liability, or similar assets or liabilities, and the entity has determined that the transaction price or quoted price does not represent fair value).

An entity shall develop unobservable inputs using the best information available in the circumstances, which might include the entity's own data. In developing unobservable inputs, an entity may begin with its own data, but it shall adjust those data if reasonably available information indicates that other market participants would use different data or there is something particular to the entity that is not available to other market

participants (e.g. an entity-specific synergy). An entity need not undertake exhaustive efforts to obtain information about market participant assumptions. However, an entity shall take into account all information about market participant assumptions that is reasonably available. Unobservable inputs developed in the manner described above are considered market participant assumptions and meet the objective of a fair value measurement.

16. Disclosure

An entity shall disclose information that helps users of its financial statements assess both of the following:

- (a) for assets and liabilities that are measured at fair value on a recurring or non-recurring basis in the balance sheet after initial recognition, the valuation techniques and inputs used to develop those measurements.**
- (b) for recurring fair value measurements using significant unobservable inputs (Level 3), the effect of the measurements on profit or loss or other comprehensive income for the period.**

To meet the above objectives, an entity shall disclose, at a minimum, the following information for each class of assets and liabilities measured at fair value (including measurements based on fair value within the scope of this Ind AS) in the balance sheet after initial recognition:

- (a) for recurring and non-recurring fair value measurements, the fair value measurement at the end of the reporting period, and for non-recurring fair value measurements, the reasons for the measurement. Recurring fair value measurements of assets or liabilities are those that other Ind ASs require or permit in the balance sheet at the end of each reporting period. Non-recurring fair value measurements of assets or liabilities are those that other Ind ASs require or permit in the balance sheet in particular circumstances (e.g., when an entity measures an asset held for sale at fair value less costs to sell in accordance with Ind AS 105, *Non-current Assets Held for Sale and Discontinued Operations*, because the asset's fair value less costs to sell is lower than its carrying amount).
- (b) for recurring and non-recurring fair value measurements, the level of the fair value hierarchy within which the fair value measurements are categorised in their entirety (Level 1, 2 or 3).
- (c) for assets and liabilities held at the end of the reporting period that are measured at fair value on a recurring basis, the amounts of any transfers between Level 1 and Level 2 of the fair value hierarchy, the reasons for those transfers and the entity's policy for determining when transfers between levels are deemed to have occurred. Transfers into each level shall be disclosed and discussed separately from transfers out of each level.

- (d) for recurring and non-recurring fair value measurements categorised within Level 2 and Level 3 of the fair value hierarchy, a description of the valuation technique(s) and the inputs used in the fair value measurement. If there has been a change in valuation technique (e.g., changing from a market approach to an income approach or the use of an additional valuation technique), the entity shall disclose that change and the reason(s) for making it. For fair value measurements categorised within Level 3 of the fair value hierarchy, an entity shall provide quantitative information about the significant unobservable inputs (e.g., a market multiple or future cash flows) used in the fair value measurement. An entity is not required to create quantitative information to comply with this disclosure requirement if quantitative unobservable inputs are not developed by the entity when measuring fair value (e.g., when an entity uses prices from prior transactions or third-party pricing information without adjustment). However, when providing this disclosure an entity cannot ignore quantitative unobservable inputs that are significant to the fair value measurement and are reasonably available to the entity.
- (e) for recurring fair value measurements categorised within Level 3 of the fair value hierarchy, a reconciliation from the opening balances to the closing balances, disclosing separately changes during the period attributable to the following:
 - (i) total gains or losses for the period recognised in profit or loss, and the line item(s) in profit or loss in which those gains or losses are recognised.
 - (ii) total gains or losses for the period recognised in other comprehensive income, and the line item(s) in other comprehensive income in which those gains or losses are recognised.
 - (iii) purchases, sales, issues and settlements (each of those types of changes disclosed separately).
 - (iv) the amounts of any transfers into or out of Level 3 of the fair value hierarchy, the reasons for those transfers and the entity's policy for determining when transfers between levels are deemed to have occurred. Transfers into Level 3 shall be disclosed and discussed separately from transfers out of Level 3.
- (f) for recurring fair value measurements categorised within Level 3 of the fair value hierarchy, the amount of the total gains or losses for the period in (e)(i) included in profit or loss that is attributable to the change in unrealised gains or losses relating to those assets and liabilities held at the end of the reporting period, and the line item(s) in profit or loss in which those unrealised gains or losses are recognised.

- (g) for recurring and non-recurring fair value measurements categorised within Level 3 of the fair value hierarchy, a description of the valuation processes used by the entity (including, for example, how an entity decides its valuation policies and procedures and analyses changes in fair value measurements from period to period).
- (h) for recurring fair value measurements categorised within Level 3 of the fair value hierarchy:
 - (i) for all such measurements, a narrative description of the sensitivity of the fair value measurement to changes in unobservable inputs if a change in those inputs to a different amount might result in a significantly higher or lower fair value measurement. If there are interrelationships between those inputs and other unobservable inputs used in the fair value measurement, an entity shall also provide a description of those interrelationships and of how they might magnify or mitigate the effect of changes in the unobservable inputs on the fair value measurement.
 - (ii) for financial assets and financial liabilities, if changing one or more of the unobservable inputs to reflect reasonably possible alternative assumptions would change fair value significantly, an entity shall state that fact and disclose the effect of those changes. The entity shall disclose how the effect of a change to reflect a reasonably possible alternative assumption was calculated. For that purpose, significance shall be judged with respect to profit or loss, and total assets or total liabilities, or, when changes in fair value are recognised in other comprehensive income, total equity.
- (i) for recurring and non-recurring fair value measurements, if the highest and best use of a non-financial asset differs from its current use, an entity shall disclose that fact and why the non-financial asset is being used in a manner that differs from its highest and best use.

An entity shall determine appropriate classes of assets and liabilities on the basis of the following:

- (a) the nature, characteristics and risks of the asset or liability; and
- (b) the level of the fair value hierarchy within which the fair value measurement is categorised.

The number of classes may need to be greater for fair value measurements categorised within Level 3 of the fair value hierarchy because those measurements have a greater degree of uncertainty and subjectivity. Determining appropriate classes of assets and liabilities for which disclosures about fair value measurements should be provided requires judgement. A class of assets and liabilities will often require greater disaggregation than the line items presented in the balance sheet. However, an entity shall provide information sufficient to permit reconciliation to the line

items presented in the balance sheet. If another Ind AS specifies the class for an asset or a liability, an entity may use that class in providing the disclosures required in this Ind AS if that class meets the requirements in this paragraph.

For a liability measured at fair value and issued with an inseparable third-party credit enhancement, an issuer shall disclose the existence of that credit enhancement and whether it is reflected in the fair value measurement of the liability.

An entity shall present the quantitative disclosures required by this Ind AS in a tabular format unless another format is more appropriate.

USA

SFAS No. 157

Main Elements of SFAS No. 157

SFAS No. 157, *Fair Value Measurement*, affects accounts that “require or permit fair value measurement” on the balance sheet though the standard has little to say about related income statement considerations. The statement is grounded in the belief that current values (now called fair values) are more relevant for decision making purposes than historical costing for all users and user groups.

Included in the coverage of this standard is the following:

- (1) Leases under SFAS No. 13 (para. C9)
- (2) Impaired assets under SFAS No. 144, which is still a lower-of-cost-or-market type of valuation
- (3) Exchanges of nonmonetary assets under APB Opinion No. 29 and SFAS No. 153, with an exception allowed if fair value is not “reasonably determinable” (para. C21c)
- (4) Derivatives under SFAS No. 133 with unrealized gains or losses recognized in earnings, but more disclosure is to be provided (para. C13-16)
- (5) Loan impairments under SFAS No. 114, provided that observable market prices are used (para. C18)
- (6) Zero interest rate loans under APB Opinion No. 21 (para. C19)
- (7) Assets and liabilities acquired in a business combination (para. C21e)

Clear exceptions to this standard are raw material and merchandise inventories (still governed by Accounting Research Bulletin No. 43, share-based. payment transactions (SFAS No. 123R), and accounting standards allowing measures based on “vendor-specific evidence of fair value” (paras. 2 and 3), as well as fixed assets, except those specifically mentioned above.

The fair value system of SFAS No. 157 is basically an exit-value system, but one that is grounded in revenue generating potential rather than a liquidity measurement in an orderly liquidation circumstance. SFAS No. 157 defines fair value as “the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at

the measurement date” (para. 5), at the highest and best value for an asset and at the lowest price for a liability.

Market participants are assumed to be independent of the reporting enterprise, knowledgeable, and able and willing to enter into the transaction (para. 10).

Asset prices are supposed to be derived for the asset in the market where the asset has “the highest and best use” (para. 8). Similarly, liability prices are specific to where liabilities have the lowest prices. The asset price should come from the asset’s principal market, but there is some confusion if a higher price comes from an auxiliary market.

The standard itself gives an example of land “currently developed for industrial use” (para. A10). However, in the example, it has a higher value if used for a high-rise condominium. The standard takes into account the in-use value if developed for industrial use and in-exchange value if used for condominiums.

The issue is less confusing in the case of liabilities. For example, some financial instruments can be sold either in brokered markets or in dealer markets. The lowest price governs without any of the complexities that surround different asset markets.

Prices for both assets and liabilities do not include deductions (or increases in the case of liabilities) for transaction costs with the exception of transportation costs to ship the asset to market (para. 9). Transaction costs are “direct incremental costs” such as advertising costs to notify market participants of the asset’s specifications and availability.

Transaction costs are not deducted (with the exception, as noted, of transportation costs), but they can influence the highest and best selling price. For example, assume that in one market an asset can be sold for ₹ 25 with transaction costs of ₹ 5 whereas in another market the selling price would be ₹ 24 with transaction costs of ₹ 3. The reselling (highest and best) fair value price would be ₹ 24 since the net receivable ₹ 21 is higher than the net of ₹ 20.

Measurement Considerations

SFAS No. 157 attempts to establish the highest and best use for assets. In establishing highest and best use, the standard distinguishes between two categories: in-use and in-exchange. This distinction applies strictly to assets. In-use refers to the asset being used in combination with other assets by a purchaser (para. 13a). *In-exchange* pertains to an asset being used on a separate or stand alone basis by the buyer (para. 13b). Relative to liabilities, the lowest cost of eliminating the liability is the analog of highest and best use for assets.

Valuation Techniques

There are three valuation techniques or approaches within both the in exchange and in use categories for assets and also for liabilities.

The *market approach* involves determining current prices for identical—or at least comparable—assets and liabilities (para. 18a).

The *income approach* uses future earnings or cash flows that are then discounted to a simulated selling price (para. 18b). This method also appears to pertain to liabilities such as bonds payable, which require future periodic outlays of cash for interest purposes. Other valuation techniques of a more indirect nature also fall under the income approach category. These include the Black-Scholes model and binomial models. These indirect methods are frequently referred to as *mark-to-model* models.

A third technique is the *cost approach*. This approach involves determining the current cost to replace the service capacity of an asset (para. 18c). Notice that this is a replacement cost or entry value and not an exit price!

These valuation techniques should be consistently applied (para. 20). Change, however, can be made if newer markets open up or other factors arise leading to more representative measures of fair value.

The Fair Value Pricing Hierarchy

The fair value pricing hierarchy pertains to the process or mechanics of securing prices. There are three levels for securing prices, labeled Level I through Level 3.

Level 1 prices are quoted prices in active markets for *identical* assets or liabilities (para. 24). If a Level 1 price is available for an asset or liability but the firm owns a large number of units of the asset and putting them all on the market at once would lower the per unit price from the quoted Level 1 price, the Level I quoted price is used. This is because aggregated values are intended to be market specific rather than entity specific under SFAS No. 157.

Level 2 prices pertain to quoted prices for similar assets and liabilities priced in active markets (para. 28a). Because they are for similar rather than identical assets, they are below Level 1. However, they could be for identical as well as similar assets (or liabilities) in markets that are relatively inactive (para. 28b). Within Level 2, prices can also be derived from other sources than quoted prices such as interest rates and yield curves.

Level 3 inputs are derived in situations in which there is little market activity (para. 30). Hence these inputs are called unobservable inputs. Information from unobservable inputs is based on the best available information, and they involve assumptions that the reporting enterprise makes relative to how market participants establish prices. Clearly issues of comparability and verifiability become very important relative to Level 3 inputs.

Disclosures

Numerous disclosures for interim and year end disclosures must be made under SFAS No. 157. This is especially the case for measurements using unobservable inputs (Level 3). Fair value measurements at the reporting date plus a breakout of details pertaining to the usage of the three levels must be shown (para. 32). For Level 3 measurements, beginning and end-of-year balances and the composition of the changes must be shown. In addition, gains and losses on Level 3 measurements must be

shown, including where these amounts went. These are the main disclosures.

Evaluating SFAS No. 157

The following points require worthy consideration for evaluating SFAS No. 157, Fair Value Measurement.

Omissions

(1) The Income Statement. There is virtually no mention of the income statement in SFAS No. 157. We, therefore, most likely conclude that for fixed assets, depreciation is most likely to be equal to the decline in the value of the asset between two points in time. This also leaves the possibility that a fixed asset can appreciate if its overall market value increased more than the decline owing to usage.

(2) Holding Gains and Losses. SFAS No. 157 is a balance sheet oriented standard with little said about the income statement, including the determination of fair value depreciation. Nor is anything said about what to do with holding gains, whether monetary or real, or realized versus unrealized, except that disclosures should be made about where they are shown in income (paras. 32c and d). Even if monetary and real proportions are not broken out, holding gains provide an excellent case for running unrealized amounts through other comprehensive income and then bringing realized portions into income. While no mention is made of purchasing power gains and losses, this issue may have to be faced if inflation increases sharply

Theoretical Issues

(3) The Exit Value Choice. Most conceptions of net realizable value or exit value take into account transaction costs. Fair value as defined in SFAS 157 does not. It therefore becomes difficult to interpret the meaning of exit value as fair value if transaction costs (save for transportation costs) are not deducted. The measurement seems to be incomplete and overstated without taking transaction costs into account.

(4) Market-Based versus Entity-Specific Prices. The SFAS 157 declares "that fair value is a market-based measurement not an entity-specific measurement." Certainly in perfect competition, as a result of interaction between buyers (demanders) and sellers (suppliers) prices are determined by the market. As we relax the perfect competition assumption, it is not quite as easy to draw this conclusion. In the case of monopoly, for example, the seller sets the price and accepts the quantity demanded. Thus, in less than perfect competition, the price may be largely determined in the marketplace, but the seller may have more influence over it.

(5) Pricing Approaches and Techniques. SFAS No. 157 employs a complex pricing hierarchy. For assets, the "in-use" and "in-exchange" categories are viewed to see where the "highest and best" use lies. However, if the asset is valued from an in-use perspective, its value is based on its use in combination with other assets. However, this could easily lead to a joint cost situation in which individual asset values are indeterminable. Hence, the in-exchange approach would really govern.

The valuation techniques or approaches listed (market approach, income approach, and cost approach) provide a broad array of overall costing techniques for determining fair value. While the first two are based on exit markets, the cost approach is clearly an entry value.

This brings up a number of problems and issues. Firstly, there is such a wide variety of approaches and techniques for measurement that reliability (verifiability) for individual firm measurements can be improved but comparability among firms may be decreased.

Secondly, the Board (FASB) chose exit values because "it embodies current expectations about the future inflows associated with the asset . . ." (para. C26). If this is really the case, then it is puzzling why transaction costs (except for transportation costs) are not deducted. Finally, this standard is apt to create problems for users analyzing profitability, leverage, and efficiency ratios over time.

(6) Capital Maintenance. The issue of capital maintenance represents the amount that can be distributed to shareholders as dividends without breaching capital. The maximum dividend declaration is represented by the income generated during the period.

Another issue is the gauge or utility of capital maintenance that a particular income system provides. It is often said, for example, that during periods of steep inflation, historical cost income overstates the firm's dividend possibilities owing to understating expenses such as depreciation and cost of goods sold. Hence general price-level adjustment provides an income measurement for capital maintenance possibilities that takes into account the declining purchasing power of the monetary unit. From an entity theory perspective, capital maintenance can be geared to the firm itself, taking into account the cost of productive assets in the industry in which the firm competes."

The capital maintenance gauge provided by applying SFAS No. 157 is questionable. Using historical costs for inventories as opposed to fair values for other assets is one problem. Another problem arises from not deducting transaction costs from the fair value determinations of enterprise assets. Finally, questions of reliability of fair value determinations using Level 3 measurements are another consideration. Hence the use of income for capital maintenance purposes measured under SFAS No. 157 has to be somewhat questionable.

(7) Comparability and Reliability. If measurements are not reliable (verifiable), one may question whether a high degree of comparability can result. Level 3 measurements using unobservable inputs certainly raise this issue. Another potential problem arises where some firms use markets with higher fair values than those determined for principal markets. These are some potential problems. However the FASB is to be commended for finally coming to grips again with the current value problem.

Research Insight

Under FAS No. 157, firms are required to disclose fair values of asset and liability types by levels, where levels are based on inputs used to generate fair values: (1) Level 1 (observable inputs from quoted prices in active markets), (2) Level 2 (indirectly observable inputs from quoted prices of comparable items in active markets, identical items in inactive markets, or other market-related information), and (3) Level 3 (unobservable, firm-generated inputs). Thus, fair values are disclosed from most reliable (Level 1) to least reliable (Level 3), with a classification that potentially falls somewhere in the middle (Level 2). Using banking firm data from the first three quarters of 2008, we examine two important research questions related to fair value information provided by banks under IAS No. 157. First, we compare the value relevance of Level 1 and Level 2 fair values to the value relevance of Level 3 fair values. Second, we consider whether the impact of corporate governance on the value relevance of fair values is greater for Level 3 assets compared to Level 1 and Level 2 assets.

We find the following. First, all Level information is value-relevant. Level 1 and Level 2 assets (liabilities) have valuation coefficients close to their theoretically predicted value of 1 (−1). However, Level 3 assets are valued less than 1 and less than Level 1 and Level 2 assets. Level 3 liabilities have a valuation coefficient less than −1 (*i.e.*, absolute value greater than 1) and less than those of Level 1 and Level 2 liabilities. These results are robust to potential confounding firm characteristics such as firm size and Tier I capital ratios. These results suggest that investors are likely to decrease the weight they place on less reliable Level 3 fair value measurements in their equity-pricing decisions due to the information risk, inherent estimation errors, and possible reporting bias.

Second, we find evidence that the value relevance of fair value assets varies with the strength of a firm's corporate governance. For firms with low corporate governance, Level 1 and Level 2 assets are below 1 (0.81 and 0.83). These valuations are marginally different from 1 at approximately the 0.07 level (one-tailed). We find that the valuation of Level 3 assets of low governance firms is close to 0 (0.06) and not significant, suggesting no value relevance. For high governance firms, we find that the valuations of Level 1 and Level 2 assets increase to near 1 (1.01 and 0.97), and valuation of Level 3 assets increases to 0.82. The increase in asset valuations for each of the levels is consistent with strong governance reducing information asymmetry and mitigating estimation errors or reporting biases, and this is especially apparent for Level 3 assets (*i.e.*,

unobservable, firm-generated amounts) where information asymmetry is expected to be the highest.

As an additional analysis, we find that FAS No. 157 fair value hierarchy disclosure disaggregating Type information to Level information (*i.e.*, matrix format for reporting fair values based on asset/liability type and level of input) adds some incremental value relevance to existing Type information. This finding is consistent with the prediction that FAS NO. 157 provides useful incremental information for investors' equity valuations.

Although we recognize that fair values may affect financial statement users in contexts other than the pricing of equity securities (Holthausen and Watts, 2001), we believe that our findings should be important to U.S. and international standard-setters for understanding not only the effects of FAS No. 157 disclosures, but also how future standards (*e.g.*, the joint IASB/FASB project on financial statement presentation) can enhance existing fair value disclosures. For example, we find that investors discount less reliable fair values possibly due to information asymmetry and moral hazard problems. However, to the extent firms have strong governance, these problems appear less severe. The impact of corporate governance on the value relevance of fair values has received limited attention in academic research, especially in the U.S.

Our study is subject to a few *caveats*. First, our sample firms are limited to the banking industry and represent observations during the first three quarters of 2008. Until more data are analyzed, both in the cross-section and over time, the results may not be generalizable. Second, we note that the current economic crisis existed and was worsening over our sample period. It is not yet clear to what extent fair value measures *should* be value-relevant under the framework of FAS No. 157, which requires prices to be measured based on "orderly transactions," when market liquidity is low. Although standard-setters likely hope that fair values are even more informative during an economic crisis, the low liquidity in the market makes reported fair values less observable and more subjective to measure, especially for Level 2 and Level 3 items. In additional analysis, we find little evidence that the value relevance of fair value levels, worsened as the economic crisis deepened. In fact, we find some preliminary evidence that some fair values gained in value relevance.

Source: Chang Joon Song and Wayne B. Thomas Han Yi, "Value Relevance of FAS No. 157 Fair Value Hierarchy Information and the Impact of Corporate Governance Mechanisms" *The Accounting Review*, Vol. 85, No. 4, July 2010, pp. 1375-1410.

IASB'S IFRS 13 FAIR VALUE MEASUREMENT

IFRS 13, Fair Value Measurement, issued by IASB is similar to Ind AS 113, Fair Value Measurement, with regard to all provisions and rules on fair value measurement.

EVALUATING FAIR VALUE MEASUREMENT

It is easy to see the appeal to standard setters of measuring assets and liabilities at their fair values. If these values could be measured adequately and if there were no intrafirm externalities and transaction costs, they would represent the market's view of the future cash flows that individual assets and liabilities are expected to generate or require, adjusted for their believed timing

and risk. Under these conditions, the use of fair values would seem to solve many of the problems of standard setters, especially those of trading off decision-relevance against information reliability. Fair values would ensure that current values are reported in accounting reports and these are used to determine income, thereby allowing more realistic performance measurement. Fair value increases the transparency of accounting information, portrays the market's view of the firm's prospects (as embedded in the value of its net assets), and demonstrates the volatility of markets. This increased information should allow investors to make their decisions in the best-informed way.⁵

Fair value under Indian GAAP, U.S. GAAP and IFRS is often portrayed as a homogeneous measurement attribute, as if it were always measured the same way and always exhibited the same qualitative characteristics. But such portrayals are misleading. For example, the dominant fair value measurement approach under different standards involves a hierarchy of measurement methods that are applied to assets and liabilities, depending on what information is or is not available to the reporting entity. As a result, the fair value of one balance sheet item may be determined in an entirely different way than the fair value of another balance sheet item, and the fair value of a particular balance sheet item may be determined in different ways under different circumstances. Furthermore, depending on the particular measurement method applied, fair value may effectively represent different measurement attributes and may exhibit significantly different qualitative characteristics.

The heterogeneity of fair value measurement in practice is an additional source of opposition to the use of fair value as a measurement basis. Fair value measurement differs somewhat between U.S. GAAP and IFRS, but a common criticism of financial statements prepared under both sets of standards is that fair values on an entity's balance sheet may lack sufficient objectivity, representational faithfulness, and/or verifiability when objective, observable information about current exit price is scarce, as it is in inactive or illiquid markets. An associated problem is that qualitative characteristics can and do vary significantly among the items on an entity's balance sheet and across entities as a result of diverse fair value measurement methods.⁶

Preparers and auditors have raised three practical criticisms of fair value measurement:⁷

(1) *Any measurement approach that requires periodic re-measurement involves more effort and cost than measurement approaches that require only initial measurement.* In most cases, the fair value standards require periodic "mark-to-market" accounting, which increases the burden on preparers and auditors, especially in contrast to historical cost accounting.

(2) *The various measurement methods prescribed under the fair value measurement hierarchies are often complex, costly, and time consuming to implement.* This is especially likely when objective, observable information is unavailable to the reporting entity. And again this increases the burden on preparers, internal auditors, and external auditors. The risks to users of financial statements also increase as more measurements at the less objective levels of the fair value measurement hierarchies appear on the balance sheet, as such values are more susceptible to management manipulations.

(3) *Most preparers and auditors lack the full set of knowledge, skills, and abilities required to apply the fair value measurement hierarchies.* As valuation becomes increasingly critical to financial accounting and reporting, reporting entities find themselves relying more and more on external consultants and valuation experts. Many preparers have argued that something must be wrong with accounting standards when accounting can no longer be done by accountants.

Beyond the practical problems of implementing fair value measurement standards, two "big picture" criticisms have emerged as well:

(1) *The inclusion in the income statement of changes in the fair values of balance sheet items may confuse users of financial statements.* This is especially true when unrealized gains/losses relate to assets held for use rather than for sale. Additionally, the inclusion of unrealized gains and losses due to changes in the fair values of assets and liabilities increases the volatility of the numbers in financial statements, which may obscure rather than illuminate relevant underlying phenomena.

(2) *Existing fair value measurement standards may amplify cyclical swings in financial markets.* Sometimes there may be economic losses to various participants in the world's credit markets, stakeholders will look for someone—or something—to blame, and many find the scapegoat that they were looking for in fair value accounting.

George Benston *et al.*,⁸ have pointed out four conceptual problems, (measurement problems) with fair values.

First, the value of assets to a firm (or, indeed, to any purchaser) is almost always greater than their market values. If these values in use did not exceed market prices (even if transactions costs were zero), the assets should be, and, with this knowledge, would be sold. Thus, market prices will understate the value of corporate assets to investors in corporate stock (even though the understatement usually is less than with amortized historical cost).

Second, the present value of the net cash flows to a firm expected from assets that are used jointly or in common and in combination with liabilities should be greater than that of the expected net cash flow from the individual assets. This intrafirm externality (or rent) is the *raison d'être* for the existence of firms. Because markets are not complete, market prices for such bundles of assets can rarely, if ever, be found.

Third, in incomplete markets, the market prices of many assets, particularly intangible assets, do not exist. In these situations, unverifiable estimates of the present value of net cash flows would have to be used, which raises important questions about the trustworthiness of the reported amounts.

Fourth, observable prices often are imperfectly and poorly representative of the prices at which the assets held by a firm could be sold or purchased in arm's-length transactions. These prices may be "noisy," in that they reflect transient events that affect the demand for and supply of the goods in question. They may not be representative of the amounts of assets held, in that they reflect the market clearing prices of larger or smaller quantities. They may include or exclude transportation, commission, special handling, and other costs. Market prices may under or overshoot rational bounds on prices (*i.e.*, they may transiently fail to reflect the "fundamentals" of asset values, expected future cash flows) and be affected by "herd" instincts. Strictly, an accounting system based only on market prices of assets and liabilities contains no new information for investors,

assuming they knew the type and quantities of the assets and liabilities, because they usually could access such market prices elsewhere, though it would be less expensive for firms to do this.

According to Laux and Leuz⁹ “the fair value debate should not be polarised. The use of fair values is neither responsible for the financial crisis nor entirely innocent. Furthermore, arguments against fair value do not automatically translate into arguments for historical cost accounting. Information about current values, or best estimates of those current values, is likely to be useful for management and market analysts in conjunction with lots of other bits of information. Contracts and covenants may be highly sensitive to mark to market strategies in a crisis, where breathing space may be valued over short-term volatility in contractual and regulatory compliance.

The financial crisis has certainly raised the stakes in the fair value debate and standard-setters have been forced to compromise on asset classifications and other matters. Banks have undoubtedly used the crisis to strengthen their opposition to aspects of the use of fair values in accounting and their arguments mingle ‘potentially well-founded concerns with a general desire for flexibility’. Proponents of fair value have warned against its suspension, holding to the belief that it must be used regardless of the condition of markets. Even opponents of the wide use of fair value have expressed concern at the extent of political intervention in what should be an independent policy process. At the same time there has been extensive criticism of the foundations of financial economics and macroeconomics. Yet, while the intellectual premises of fair value accounting have been shaken, the absence of an obvious competitor means that these arguments cannot provide a decisive knock out at the policy level. The picture has been and remains complex.”

REFERENCES

1. George J. Benston, Michael Bromwich, Robert E-Litan and Alfred Wagenhofer, *World Wide Financial Reporting*, Oxford University Press, 2006, p. 262.
2. Financial Accounting Standards Board, SFAS 133, Paragraph 540.
3. Bruce Pounder, *Convergence Guide for Corporate Financial Reporting*, John Wiley and Sons, 2009, p. 83.
4. Harry I. Wolk, James L. Dodd and John J. Rozycki, *Accounting Theory*, VIIIth Edition, Sage Publications, 2013, pp. 581-586.
5. George J. Benston *et.al.*, *Ibid*, p. 263.
6. Bruce Pounder, *Ibid*, p. 86.
7. Bruce Pounder, *Ibid*, pp. 86-87.
8. George Benston *et.al.*, pp. 264-265.
9. C. Laux and C. Leuz, The Crisis of Fair Value Accounting: ‘Making Sense of the Recent Debate,’ *Accounting Organizations and Society*, 34(617), pp. 826-834.

QUESTIONS

1. Define fair values.
2. What is the rationale of fair value measurement?
3. Do you think fair value is an appropriate basis for measuring assets and liabilities?
4. “Fair value measurement is asset/liability approach in standard-setting”. Comment.
5. ‘Fair value is different from ‘mark-to-market accounting’. Explain.
6. “Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.” Discuss.
7. Explain the property of fair value as a measurement attribute.
8. What are the provisions of Ind AS 113 on fair value measurement?
9. For which type of asset or liability, fair value is applied?
10. What are the assumptions under fair value measurement?
11. Who are market participants as per Ind AS 113?
12. How is fair value applied to non-financial assets?
13. How is fair value used in relation to liabilities and equity?
14. What is non-performance risk?
15. Explain the importance of fair value measurement for financial assets and financial liabilities.
16. Discuss different valuation techniques to measure fair values.
17. Explain fair value hierarchy. Discuss different Level Inputs.
18. Explain the following:
 - (i) Level 1 inputs
 - (ii) Level 2 inputs
 - (iii) Level 3 inputs
19. What are the disclosure requirements as per Ind AS 113, Fair Value Measurement?
20. Evaluate SFAS No. 157 Fair Value Measurement issued by FASB (USA)
21. Give arguments in favour of fair value measurement.
22. “Fair value information allow invertors to make their decisions in the best informed way”. Comment.
23. “Fair value measurements are often portrayed as a homogeneous measurement attributes. But such portrayals are misleading.” Do you agree with this statement?
24. What are the criticisms of fair value measurement?
25. Discuss the problems in fair value measurement.
26. Explain the conceptual problems in fair value measurement.
27. “The use of fair values is neither responsible for the financial crisis nor entirely innocent”. Laux and Lenz (2009), Comment.
28. “The overall result (in fair value measurement) is likely to be the perpetuation of mixed attribute measurement models, which may become even more mixed than they are now.” Do you agree with this statement? Why or why not?



Segment Reporting

CONCEPT OF SEGMENT REPORTING

The basic goal of a country's economy is to maximise the economic and social welfare of its citizens through an efficient allocation of resources. In developing economies, chartered by inadequate resources, capital is the scarcest and most important productive factor. To obtain their capital at a lower cost, the business enterprises and companies in particular, go to the capital market. Since capital owners and investors, like the business enterprises, also attempt to maximise their own economic returns, they require information in order to make sound economic decisions. The quality of information available to them would, in turn, lead to a more efficient allocation of resources in a country's economy. In the absence of meaningful information, capital owners, investors, creditors and others are likely to make investment decisions based on tips, hunches, guess work and unreliable news leading to an inefficient allocation of resources in the economy. Sorter and Gams¹ observe:

“Society looks to corporations for assistance in the efficient allocation of resources and expects the corporations to assume the responsibility of providing information that furthers this goal.”

A remarkable feature of modern business in India as well as abroad has been the growth of diversified enterprises that carry on activities in two or more lines of business. This widespread movement towards diversification has led to a need for information about the various segments of an enterprise in addition to consolidated financial statements about its overall performance. This need arises because the broadening of an enterprise's activities into different industries or geographic areas complicates the analysis of conditions, trends and ratios and therefore of the ability to predict. The various industry segments or geographic areas of operations of an enterprise may have different rates of profitability, degrees and types of risk, and opportunities for growth. There may be differences in the rates of return on the investment commitment in the various industry segments or geographic areas and in their future capital demands.² The investors cannot successfully evaluate a diversified enterprise without information about its various segments; consolidated or total financial statements usually combine accounts of all the segments and information about each segment may be indistinct.

A diversified company (sometimes loosely used as conglomerate company³) has been defined by Mautz⁴ as:

“...a company which either is so managerially decentralised, so lacks operational integration, or has such diversified markets that it may experience rates of profitability, degrees of risk, and opportunities for growth which vary within the

company to such an extent that an investor requires information about these variations in order to make informed decisions.”

Subsequently, Mautzs⁵ found that the (above) definition of a diversified company required modification in two respects, if it is to be adopted for financial reporting problems of diversified companies. Firstly, common usage requires that the class of companies described in the definition is more appropriately referred to as diversified companies than as conglomerate companies. Secondly, for all practical purposes, the type of diversification of significance for financial reporting purposes can be viewed as industry diversification. There may be other types of diversification also such as internal diversification resulting from either management decentralisation or nonintegrated operations, external or market diversification because of differences in customers or products or because of geographical distribution of its assets. Conceptually, these are all possible but, practically, with the exception of industry diversification, they are extremely difficult to identify.

Thus, diversified enterprises are engaged in diversified operations, *i.e.*, activity or operations in different industries and with foreign operations and sales where those activities and operations are significant in terms of sales revenue, profit or losses generated or assets employed. It is also true that segmentation along industry and geographical lines is likely to indicate most of the distinguishable components of the diversified enterprise which are subject to different profitability, different risks and different growth prospects.⁶

Operating Segment

According to Ind AS 108 Operating Segments:

(1) An operating segment is a component of an entity:

- (a) that engages in business activities from which it may earn revenues and incur expenses (including revenues and expenses relating to transactions with other components of the same entity),
- (b) whose operating results are regularly reviewed by the entity's chief operating decision maker to make decisions about resources to be allocated to the segment and assess its performance, and
- (c) for which discrete financial information is available.

An operating segment may engage in business activities for which it has yet to earn revenues, for example, start-up operations may be operating segments before earning revenues.

(2) Not every part of an entity is necessarily an operating segment or part of an operating segment. For example, a corporate headquarters or some functional departments may not earn revenues or may earn revenues that are only incidental to the activities of the entity and would not be operating segments. For the purposes of this Ind AS, an entity's post-employment benefit plans are not operating segments.

(3) The term 'chief operating decision maker' identifies a function, not necessarily a manager with a specific title. That function is to allocate resources to and assess the performance of the operating segments of an entity. Often the chief operating decision maker of an entity is its chief executive officer or chief operating officer but, for example, it may be a group of executive directors or others.

(4) Generally, an operating segment has a segment manager who is directly accountable to and maintains regular contact with the chief operating decision maker to discuss operating activities, financial results, forecasts, or plans for the segment. The term 'segment manager' identifies a function, not necessarily a manager with a specific title. The chief operating decision maker also may be the segment manager for some operating segments. A single manager may be the segment manager for more than one operating segment.

(5) The characteristics in paragraph 1 may apply to two or more overlapping sets of components for which managers are held responsible. That structure is sometimes referred to as a matrix form of organisation. For example, in some entities, some managers are responsible for different product and service lines worldwide, whereas other managers are responsible for specific geographical areas. The chief operating decision maker regularly reviews the operating results of both sets of components, and financial information is available for both. In that situation, the entity shall determine which set of components constitutes the operating segments by reference to the core principle.

BENEFITS OF SEGMENT REPORTING

Information reported in a business enterprise's financial statements constitutes an important input to financial statement analysis which is generally made in investment and lending decisions. Investors and lenders analyse information relating to a business enterprise to evaluate the risk and return associated with an investment or lending alternative. Financial Accounting Standards Board⁷ of the USA states:

"The purpose of the (segment) information is to assist financial statement users in analysing and understanding the enterprise's financial statements by permitting better assessment of the enterprise's past performance and future prospects."

According to AS-17 'Segment Reporting':

Segment information helps users of financial statements:

(a) better understand the performance of the enterprise;

(b) better assess the risks and returns of the enterprise; and

(c) make more informed judgments about the enterprise as a whole.

Information about the different types of products and services an enterprise produces and the different geographical areas in which it operates would be useful in the following respects:

1. *Allocation of Resources* — Segment information, if disclosed to parties outside the enterprise, would play an important role in improving the allocation of scarce resources in an economy. Nonavailability of information creates uncertainty in the investment market and thereby makes the investment market inefficient. The disclosure of information removes the imperfections in the investment market and causes the market to function properly. Also, the disclosure of segment information may influence greatly management performance and encourages them to work in the interest of society and investors. It helps in checking corporate abuses related to such matters as fraud, unfair pricing policy and trade practices. Beaver observes.⁸

"Financial information can also affect how investment is allocated among firms. Disclosure may alter investors beliefs about the relative rewards and risks associated with particular securities. Consider the recent analyses of the effects of inflation on corporate profits. It has been stated that failure to disclose the effects of inflation, among other things, may be contributing to a misallocation of resources toward industries or groups of firms showing illusory profits. To the extent that disclosure does alter investor perceptions of relative rewards and risks, investors will shift toward more desirable investment opportunities. In general, this shift may be reflected in the manner in which new capital is allocated among firms."

Thus, financial disclosure for business segments may result into more efficient allocation of resources.

2. *Investment and Credit Decisions* — It is widely recognised by authors in accounting and finance, accountants and accounting bodies that segment information has great usefulness in investment and credit decisions. It is argued that segment information enables the financial statement users to better analyse the uncertainties surrounding the timing and amount of expected cash flows—and therefore, the risks—related to an investment or a loan to an enterprise that operates in different industries and markets. Since the progress and prospects of diversified enterprise are composites of the progress and prospects of its several parts, financial statement users regard financial information on a less than total enterprise basis as also important⁹. A large US investment research firm, Duff and Phelps Inc.,¹⁰ has also commented on the importance of segment data for investment decisions in the following manner:

"In complex diversified enterprises, consolidated financial statements have limited value for making earnings projections because they cannot be related to the several business-economic environments in which the company operates. Each line of

business is affected not only by general economic conditions but by special industry factors such as volume, price and raw material costs trends. Each segment is likely to have different markets, profit margins, rates of growth, returns on investment and business cycle sensitivity, so each must be studied separately to develop a projection of segment earnings. These, in turn, are combined into a consolidated projection. The same considerations apply to foreign operations by important geographic areas, even though the product line is not diversified. Segment financial data, thus, are essential to the analytical process.

In credit decisions, creditors like shareholders, are interested basically in profitability and cash flows of a debtor company. Profits are the source of funds for paying interest and principal of loans. In making shortterm loans decisions the banker aims to forecast shortperiod cash flow as an indicator of a customer's ability to meet maturing financial obligations. A banker is interested in segment information for shortterm loans to disclose areas of weakness such as unprofitable products or markets that absorb rather than produce funds for meeting debts. It should be noted, however, that bankers have power to demand more information from a client than the investors.

A number of studies have been conducted which concludes that financial statement users regard segment data as very useful in making proper economic decisions. For example, studies conducted by Kinney¹¹, Korchanek¹² and Collins¹³ support the hypothesis that the availability of segment data offers information which enables users to better predict the future performance of the company. Baldwin¹⁴ has found that security analysts are able to make more accurate earnings projections after access to segmented data and therefore concluded that segmented or lineofbusiness reporting would benefit users.

Thus, segment information enhances investors' ability to understand a diversified company and to make accurate and useful forecast about the profitability of segments as well as the company as a whole.

3. Equilibrium in Share Prices — The segment disclosures would tend to adjust the prices of company shares according to information released. Horwitz and Kolodny¹⁵ examined the influence of segment data on company share prices. They took into account both changes in risk and changes in expected return resulting from segment profit disclosure. Their results support the noinformation hypothesis. Simonds and Collins¹⁶ do not agree with the Horwitz and Kolodny results and claim to find a significant reduction in risk for those firms reporting segment profit data. A more recent study by Dhaliwal, Spicer and Vickrey¹⁷ supports the results of Simonds and Collins in that they find a reduction in the cost of equity capital for firms disclosing segment profit data for the first time.

4. True and Fair View — An important provision of the Companies Act in India (and abroad) is to reveal a true and fair view of the results of operation and financial position. Segment disclosures may be greatly required in terms of the true and fair criterion established in the Companies Act. This has encouraged

provision for disclosure of segmented information in the legislation of certain countries of the world such as the USA and Canada. Also, segment disclosures are advocated by international agencies like the UN and the OECD.¹⁸ In some countries, the accounting bodies have prepared guidelines for the disclosure of segment information in company annual reports. For example, the Financial Accounting Standards Board of USA has issued Statement No. 14, Financial Reporting for Segments of a Business Enterprise in December 1976. An Australian study¹⁹ argues that an auditor may be held legally responsible in certain circumstances if he gives an unqualified report on overall financial statements which do not reveal, where they exist, significant disparities in segment results.

The abovementioned benefits associated with segment disclosure point out that segment reporting is desirable in published annual reports of diversified companies to present true and fair results of their business activities, and to help investors in making proper investment decisions. The Financial Accounting Standards Board of the USA observes²⁰.

“Society needs information to help allocate resources efficiently but the benefit to any individual or company from that source is not measurable. Nor is the spur to efficiency that comes from making managers account to stockholders capable of evaluation, either at the level of the enterprise or the economy. It is impossible to imagine a highly developed economy without the financial information that it now generates and—for the most part—consumes; yet it is also impossible to place value on that information.”

ARGUMENTS AGAINST SEGMENT REPORTING

Arguments against disclosure of information about segments of a diversified company generally emphasize practical difficulties. The opponents acknowledge the importance of segment reporting for investors. However, the critics point out two basic problems (i) misunderstanding likely to be found among investors about segment information (ii) potential detriment to the reporting company of disclosing information about individual segments. Some arguments advanced against segment reporting may be listed as follows:

1. Investment by investors and creditors is made in a company and not in its individual segments. Therefore investors require information for the company as a whole for making proper decisions. In a study it was found that the majority of the companies did not believe that segment information was relevant to the investors decisions²¹. Although, the investors invest in a company but a company is made of its different segments and segment information is very useful in making better analysis of the risk-return characteristics of the investment. Therefore, better predictions of both risk and future performance may be made from disaggregated data. Information about the make-up of a business is also useful to an investor in seeking a desired balance in his portfolio. If such information is lacking, an investor may

unknowingly maintain too large a commitment in some one field of industry or he may pass up investment opportunities because he fails to understand and evaluate them correctly in the light of his own objectives.²²

2. Segment information might be misleading to the investors and other external users who read it. Operating data by segments are developed for internal management users and often arbitrary judgments are made by management for developing such segment data. Although the nature and limitations of segment data are known to internal management users, external users have difficulty in understanding them and using them in investment decisions.

The limitations of segment data are inherent in the nature of accounting as a means of communicating information about a business segment. This is true in the communication of information at the company level also. Accounting is handicapped in disclosing all the information that is necessary in investment decisions. For instance, accounting cannot directly provide information about the physical condition of a company's plants or the competence of company managements. Similarly, a segment whose products are still in the developing stage may compare unfavourably with another segment whose products are well developed. The products in developing stage may be as essential to the company as the developed products and sometimes developing products need to be pushed at the cost of more developed (profitable) products. However, accounting is unable to communicate such information clearly. Consequently, investors and creditors, being not aware of limitations of accounting, may arrive at wrong conclusions in investment decision making.

However, it is impracticable to cater for careless users of financial statements, they could misuse or ignore any information, aggregated or disaggregated, that is presented.²³ The Financial Accounting Standards Board of USA²⁴ has adopted the following test regarding users:

"The information should be comprehensible to those who have a reasonable understanding of business and economic activities and are willing to study the information with reasonable diligence."

Users with this (as mentioned in FASB publication) or a higher level competence should be able to understand the uses and limitations of segment data provided the data presented are clear and understandable. Besides, this criticism underestimates the ability of capital market participants correctly and unbiasedly to interpret the information made available to them. It is true that it is difficult (rather impossible) to know precisely the capacity of individual users to analyse information. Nonetheless, when considered as a group, there is substantial empirical evidence to support the hypothesis that they (users) are very sophisticated in their ability to analyse and interpret information.²⁵

3. Segment data are also criticised on the ground that they cannot be prepared with sufficient reliability and it is beyond the scope of external financial reporting to provide such analytical or interpretive data.

However, the term 'reliability' does not indicate any precise or clear concept in accounting, and it may have a variety of meanings. For example it may encompass 'representational faithfulness' and 'verifiability' as recognised by the Financial Accounting Standards Board, USA.²⁶

"The reliability of a measure rests on the faithfulness with which it represents what it purports to represent, coupled with an assurance for the user, which comes through verification, that it has that representational quality. Information may be unreliable because it has one or both kinds of bias. The measurement method may be biased, so that the resulting measurement fails to represent what it purports to represent. Alternatively, or additionally the measurer through lack of skill or lack of integrity, or both, may misapply the measurement method chosen. In other words, there may be bias, not necessarily intended on the part of the measurer."

There are definite reliability problems with segment data due to some difficulties such as defining the segment, allocating common costs, and pricing intersegment transfers. However, the question of reliability is not applicable to segment reporting alone; it can be applied to the overall financial reporting framework. Also, it is not reliability in the absolute sense that is important. The main criterion is whether users are, in totality, better off or worse off if segment information is developed with possible accuracy and supplied to them. The Accounting Principles Board²⁷ states:

"Measurements cannot be completely free from subjective opinions and judgements. The process of measuring and presenting information must use human agents and human reasoning and therefore is not founded solely on an 'objective reality'. Nevertheless, the usefulness of information is enhanced if it is verifiable, that is, if the attribute or attributes selected for measurement and the measurement methods used provide results that can be corroborated by independent measurers."

Furthermore, segment information can not be said to be analytical or interpretative and it can be classified purely as accounting information. It is argued that segment information is a rearrangement, *i.e.*, a disaggregation of information included in an enterprise's aggregated financial statements, as is the information required in the statement of changes in financial position, a rearrangement of information reported in or underlying the balance sheet and income statement. Therefore, the information required in a segment reporting proposal does not go beyond or enlarge the boundaries of accounting.²⁸

4. A reporting company has to incur costs in developing, preparing and providing segment information to external users which may be too high. Also, a company has to incur the competitive costs, *i.e.*, costs due to harm done to the reporting company and its shareholders through a weakening of the company's commercial position. Horwitz and Kolodny²⁹ advise:

“...it is important that estimates be gathered on the costs of that disclosure; for evidence that security prices are affected by the formal release of segment data does not necessarily imply that they have social value. To reach this conclusion, we require a method of converting affected security price change into a metric that can be used for comparison with the cost of preparing such data. To demonstrate that potential benefits result from additional disclosure is no longer adequate without consideration of related costs. This task remains unresolved at present.”

5. Presenting the results of segment operations to external users could lead to competitive damage. Confidential information would be revealed to competitors about profitable or unprofitable products, plans for new products or entries into new markets, apparent weaknesses which might induce competitors to increase their own efforts to take advantage of the weakness, and the existence of advantages not otherwise indicated. Competitors may learn valuable information about profit margins and new product lines, and thus competitors may invade the company's most lucrative market. Customers may mistakenly conclude that products are overpriced. Government authorities may erroneously decide that the company is employing unfair competitive practices. Disclosures having those results may harm the reporting company and ultimately its investors. Consequently there may be a negative impact on corporate innovation and experimentation. The prospective returns to innovative activity may be reduced with the consequence that there is less innovation—an activity which is important to economic growth and advancement of living standards.

However, there is some doubt about how individual companies would be affected by segment disclosures. In certain quarters, there is a feeling that the problem of competitive damage can be exaggerated. The International Accounting Standards Committee³⁰ observes:

“...(it) is sometimes expressed that disclosing information about segments may weaken an enterprise's competitive position because more detailed information is made available to competitors, customers, suppliers and others. For this reason some consider it appropriate to allow the withholding of certain segment information where disclosure is deemed to be detrimental to the enterprise. Others believe that this disclosure is no more onerous to the diversified enterprise than is the disclosure of the information required of an enterprise operating in only one industry or geographical area, and that relevant information is often available from other sources. Also, analysis by segments of the aggregated financial information of a diversified enterprise is widely deemed to provide useful data that enable users to make a better assessment of the past performance and future prospects of the enterprise.”

A study³¹ done by the Institute of Chartered Accountants in England and Wales (UK) concludes:

“We accept that the disclosure may add somewhat to (or, more likely, confirm) the information that competitors and customers already have, although we believe that this difficulty is overstated. The type of information which might be disclosed is not, in our opinion, likely in most cases to be sufficiently detailed to cause commercial problems.”

Similarly Duff and Phelps³² state:

“We have rarely, if ever, encountered any real loss of competitive advantage as a result of segment reporting. Companies often have more useful intelligence on competitors than segment data reveal. Also, many of today's segments were yesterday's independent companies, operating successfully in a competitive market place and issuing, more detailed financial reports than asked for here.”

Mautz and May³³ have found that disclosure requirements can create a competitive disadvantage to a company—

- (a) If the cost of disclosure falls unequally on competitors in the same market,
- (b) If the required disclosure provides competitors with information which is useful to them in formulating competitive strategy and which otherwise would not be available to them, and
- (c) If innovation and risk taking by the reporting company are discouraged.

It is also said that competitors generally already know a great deal about each other. In many cases, competitors are an excellent source for obtaining withheld and confidential operating data about business enterprises. If competitors seem to possess all the information, the owners and investors would be the only parties uninformed about data regarding the various segments in which the company is engaged. Besides, segment information is basically meant to permit external users to make a better assessment of the past performance and future prospects of an enterprise operating in more than one industry. From the viewpoint of total economy, loss (due to disclosure) incurred by a company would be a gain for the other company. If all diversified companies are required to disclose segment information, few among them may suffer a net loss. The benefits and costs of segment reporting are likely to be widely diffused throughout society.

Rappaport and Lerner³⁴ describe some possible societal benefits:

“In short, the disclosure of information—financial or non-financial—helps make the economy more competitive because it reduces the uncertainty that surrounds investments in both new and mature business activities. When businesses engage in disparate activities with varying demand and cost characteristics, the information content of financial statement is likely to be enhanced when the results of each activity are separately reported. The business community as a whole therefore benefits from more useful information on two counts. First, business can initiate activities and expand in new directions with less risk and, therefore, at a lower cost

than might otherwise be possible. Second, the rate-of-return on investments will tend to be higher because fewer false starts or errors of total ignorance are likely.”

“As the economic system operates with less waste and as the economy becomes more competitive—and it should if better information flows initiate proper action—society as a whole will benefit. Marginal revenues from producing one additional unit of output will be driven nearer the level of marginal costs of producing that unit, which process is instrumental in generating favourable economic conditions.”

The debate whether segment disclosure could lead to competitive disadvantage is not over. An important question is whether any unfair costs or losses will accrue to reporting companies and shareholders or external users. This question has not been investigated empirically so far and the future researchers should find out and report the truth.

The International Accounting Standards Committee³⁵ observes:

“Rates of profitability, opportunities for growth, future prospects and risks to investments may vary greatly among industry and geographical segments of an enterprise. Thus, users of financial statements need segment information to assess the prospects and risks of a diversified enterprise which may not be determinable from the aggregated data. The objective of presenting information by segments is to provide users of financial statement with information on the relative size, profit contribution, and growth trend of the different industries and different geographical areas in which a diversified enterprise operates to enable them to make more informed judgments about the enterprise as a whole.”

BASES OF SEGMENTATION

An important problem in segment reporting is how to subdivide a diversified company into reporting units or how to define business segment for external reporting purposes. Discussion of segment reporting for diversified companies in accounting and finance literature has been marked by great deal of confusion over identification and definition of what constitutes a segment. A diversified company, generally speaking, can be dissected according to one or more of the following bases:

1. Organisational Division

The term ‘division’ has different meanings in different companies. Most commonly, the term ‘division’ refers to the use of company operating structure or organisation charts as a basis for segmenting operations into reporting units³⁶. A division is a separate profit responsibility centre possessing authority over both revenue (sales) and cost, although some functions (*e.g.*, finance, research, development) remain centralised. The accounting systems in such companies are usually structured to collect costs and revenues by managerial responsibilities represented by divisions and their subunits.

Divisions in some manufacturing companies also delineate the various industries, product lines or geographical areas in which the enterprise operates. However, the products manufactured in divisions are not always homogeneous. Different products, *i.e.*, products with unlike characteristics, are assigned to a given division for a variety of reasons such as physical contiguity of the operations, managerial competence, benefits from integrating or combining production or marketing operations, etc. In some companies, division may be marketoriented and each division handles a variety of products in a given market. Under all circumstances, divisions are, at best, only approximations to those segments which are to be selected for reporting to the external users. Thus, the division as a basis of segmentation denotes managerial responsibilities (operating, planning and control) in a company where management has been decentralised by delegating authority for a comparatively broad range of functions to each division head.

The division as basis of segmentation is considered an appropriate base for segmentation for external financial reporting purposes because it is sometimes used for internal reporting and managerial control also. Organisational lines define areas of managerial responsibility, planning and control. Therefore, segmentation on such basis meets the information needs of investors and creditors. Secondly, the data are often readily available and therefore they could be promptly adapted for external reporting. Thirdly, auditors might not have any difficulty in verifying the data which are already in use by management.

However, organisational division is criticised on some grounds as a basis of segmentation. Firstly, information, which is appropriate for managerial planning, control and decisionmaking, may not necessarily be useful to investors and creditors. The investors generally are not aware about the operations of a company’s various divisions or units. Investors tend to understand the relevance of information if it is provided by industry, product lines or markets. Secondly, divisionalised reporting does not promote uniformity either within a particular company or between competing firms. The reasons for this is that various companies may emphasise drastically different concepts when setting up divisions such as geographical areas, legal entities, products, executive responsibility, anticipated growth, organisational units or combinations of these which destroy comparability among companies³⁷. Thirdly, company could change its organisational structure which would require a change in definition of a segment. If these changes do not reflect changes in the underlying nature of the operations of the enterprise (changes in industry, product lines or the market served), segmented data presented along organisational lines may not be comparable from period to period. A study conducted by the Accountants International Study Group³⁸ comments:

“Companies commonly create subsidiaries or divisions to administer different activities. Organisational divisions are ordinarily created, however, according to administrative requirements and are not necessarily reliable bases for identifying segments that are homogeneous as to profitability,

growth and risk. Since accounting records commonly are maintained for organisational divisions, some companies use those divisions as bases for reporting information on segments. The practical problems of adjusting accounting records to a theoretically appropriate basis of segmentation may be considerable.”

2. Basis of Business Activities

Business activities imply that segmentation can be done broadly in terms of: (i) Broad Industries Groupings, (ii) Lines-of-business or product lines and (iii) Individual Products and Services.

- (i) *Broad Industry Groupings*: According to International Accounting Standard No. 14, industry segments (industry groupings) “are the distinguishable components of an enterprise engaged in providing a different product or service, or a different group of related products or services, primarily to customers outside the enterprise”. Financial Accounting Standards Board (USA), Statement No. 14, contains a similar definition. An industry is usually regarded as a broad group of related products or services. This segmentation base uses broad groupings of similar products and services as reporting units. Examples include textile mill products, paper and allied products, oil-refining, shipbuilding, tobacco products, furniture and fixtures, agricultural product. The industries in which an enterprise operates might be described as particular areas of economic activity, distinguished from other areas of economic activity on the basis of end-products or services rendered.

ASB’s (India) AS17 Segment Reporting³⁹ defines business segment as follows:

A *business segment* is a distinguishable component of an enterprise that is engaged in providing an individual product or service or a group of related products or services and that is subject to risks and returns that are different from those of other business segments. Factors that should be considered in determining whether products or services are related include:

- (a) the nature of the products or services;
- (b) the nature of the production processes;
- (c) the type or class of customers for the products or services;
- (d) the methods used to distribute the products or provide the services; and
- (e) if applicable, the nature of the regulatory environment, for example, banking, insurance, or public utilities.

There are circumstances where it may appear that an enterprise has a number of industry segments but where industry segmentation could be meaningless or more

misleading than helpful. The following examples of such situations are given in a study⁴⁰ conducted by the UK’s Institute of Chartered Accountants in England and Wales:

- (a) In vertically integrated companies where the volume of transactions between lines of business and the degree of integration is significant, so that the results of one line of business are directly dependent on the results of the other lines of business and are not of themselves meaningful.
- (b) Where products are interdependent in the market, for example, a company which manufactures and sells equipment and spares for that equipment may, as a matter of policy, decide the relative levels of profit to be earned on the equipment and spares, respectively. The disclosure of the equipment and spares lines of business separately might not be meaningful in these circumstances.
- (c) Where lines of business rely on common manufacturing facilities and could not be economically carried on without each other.
- (d) Where one line of business is a by-product of the main line of business and would not exist but for that main line of business.
- (e) Where lines of business rely on common sales or distribution outlets and either could not be economically carried on without each other or alternative outlets could not be found.
- (f) Where a company operates one line of business primarily to support or promote its other line of business.

The Financial Accounting Standards of the USA (Statement No. 14) and Canadian Institute of Chartered Accountants⁴¹ both exempt vertically integrated operations segmentation. The Canadian Institute of Chartered Accountants considers only horizontal integration (defined as extension of activity in the same general lines of business or expansion into supplementary, complementary or compatible products) and states that: “Integration of this type does not normally result in an enterprise operating in more than one industry.”

Emmanuel and Gray⁴² argue:

“Attention should be focussed on the development of an approach which accommodates both the management’s perception of how the company is operated, on both an industrial and geographical basis, and yet also meets the needs of users for objective data which is comparable and corresponds in some degree, with external classifications of industrial and geographical data”.

- (ii) *Lines-of-Business or a Product Line*: A line-of-business or a product line is defined on the basis of the end-products produced. A product line refers to major business lines or operating activity in which a company is engaged. It is generally considered to be a relatively narrow group of related products, whereas an industry constitutes a broader grouping. For example the manufacture of furniture and fixtures might be regarded as a single industry within which there might be a number of product lines, *e.g.*, office furniture, household furniture, public buildings (schools, colleges, etc.) and related furniture and fixtures. An industry is deemed to be an aggregation of product lines.

The distinction between segmentation by industry and segmentation by product line is often difficult to draw and, at times, the two may be congruent. For example, an enterprise which manufactures desks and men's suits might be considered as being in both the furniture and apparel industries. At the same time, it could be viewed as having two product lines, each of which happens to fall into a particular industry classification⁴³. Segment reporting by industry is similar in approach to product line reporting, except that the categories are broader. Industry segmentation and product line segmentation both have problems which are similar in nature. There is no common agreement as to what constitutes an industry; industries tend not to be discrete and they are constantly changing as new products and markets are created and old ones disappear⁴⁴. A drawback to the use of industry or product line as a basis of segmentation is that innovations, obsolescence, fluctuations in demand influence greatly the basis of segmentation, *i.e.*, industry and product line. This, in turn, may create difficulty in distinguishing one industry or product line from another.

- (iii) *Individual Products and Services*: Segmentation base may imply individual products and services using narrowly defined groups or categories of products manufactured or sold and services rendered as reporting units. An example would be to disaggregate office furniture into the reporting units: chairs, sofas, desks, stools, filing cabinets and benches; or oil refining as one industry group to be disaggregated as the following reporting units: refined fuels, oils, greases, etc.

Segmentation on the basis of individual products would prove useful in making predictions and analysis of a company's profit prospects and risk element. Productwise data produce a comparable data which could be compared with data of other firms, competitors, customers, suppliers. However, this segmentation basis has a drawback, in that no suitable classification of products and services is available. Also, providing productwise data requires unrealistic cost allocations which make the segments profit figures unreliable. A comprehensive working of figures is needed to produce the data. Since detailed disclosure is provided, certain companies could suffer a high level of

competitive damage. Defining specific product lines also involves complexities and difficulties. Hawkins⁴⁵ observes:

"There is little agreement on what constitutes a product line. Also, there are many practical problems to establishing an allinclusive, well defined list of product categories which could be uniformly used by all corporations. Some companies, particularly diversified companies, view their product lines very broadly. Others see their product lines in narrow terms. One company selling canned foods may simply view itself as being in the food business. Another company in the same business may regard its product lines as being canned fish, canned meals and canned soups. It may go even further and break these categories down by different trade marks or container sizes. The product lines of some companies tend to trend together. For example, it may be difficult for a company that makes soaps, detergents, window cleaners, waxes and polish to draw a clear distinction between the cleaning compounds and polishing products, particularly as some products both clean and wax."

3. Market Structure

Market structure is considered by some as a possible solution to the problem of defining segments of diversified companies on the premise that different markets have different degrees of risk attributed to them, *e.g.*, both risk and profitability can be affected by whether the firm supplies manufacturers, middlemen or consumers and whether there is a high proportion of sales to government bodies, to particular industries, or to particular company groups. Information for different markets is valuable to users in determining the future growth and stability of the company. Such information indicates the degree of dependence (i) on a single major customer (ii) on a group of customers (iii) on a particular industry as the major purchaser of its products (iv) on business with government. It has also been suggested that data relating to sales, in each major customer category be disclosed even if another method is chosen for the disclosure of segmental information.

Market basis of segmentation, however, does not possess readily available data in the form needed to make the necessary segmental disclosure. Some more points are mentioned here against market segmentation:

- (i) Segmentation by market has problems in determining profits by customers. Cost allocation among the different markets may be highly complex, confusing and unreliable.
- (ii) The marketwise data may prove harmful to the reporting company.
- (iii) Wrong impressions are likely to be created about potentialities of different markets. Alternative markets may be available and therefore no useful purpose will be served by providing market information.

The Financial Accounting Standards Board (USA) has proposed that if 10 per cent or more of the revenue of an enterprise

is derived from sales to any single customer, that fact and the amount of revenue from each such customer should be disclosed. Similarly, if 10 per cent or more of the revenue of an enterprise is derived from sales to domestic government agencies in the aggregate or to foreign governments in the aggregate, that fact and the amount of revenue should be disclosed.

4. Geographical Segments

AS17 Segment Reporting⁴⁶ defines geographical segment as follows:

A *geographical segment* is a distinguishable component of an enterprise that is engaged in providing products or services within a particular economic environment and that is subject to risks and returns that are different from those of components operating in other economic environments. Factors that should be considered in identifying geographical segments include:

- (a) similarity of economic and political conditions;
- (b) relationships between operations in different geographical areas;
- (c) proximity of operations;
- (d) special risks associated with operations in a particular area;
- (e) exchange control regulations; and
- (f) the underlying currency risks.

The Canadian Institute of Chartered Accountants⁴⁷ defines a geographical segment as:

“...a single operation or group of operations located in a particular geographical area. Such operations are those that generate revenue, incur costs and have assets employed in or associated with generating such revenue. An enterprise’s domestic operations are considered to be a separate geographical segment”

Geographical segment is generally proposed in terms of (i) foreign and (ii) domestic segmentation. It is assumed that segmentation on the basis of geographical area reflects differing prospects for growth, rates of profitability and degrees of risk in various parts of the world and perhaps even in various parts of the home country.

Foreign geographical areas are individual countries or groups of countries as may be found suitable in an enterprise’s particular circumstances. Foreign geographical segments generate revenue either from sales to unaffiliated customers or from inter segment sales or transfers between geographical areas. No single method of grouping the countries can be suggested; each enterprise should group its foreign operations on the basis of differences that are most important in its particular circumstances. Some factors to be considered in determining foreign geographical areas include:

- (a) proximity of operations in different countries,

- (b) similarities in business and political conditions prevailing in various countries, and
- (c) nature, scale, and degree of interrelationship of operations in various countries.

An enterprise’s domestic operations are regarded a separate geographical segment. Domestic area includes those revenue producing operations of the enterprise located in the home country that generate revenue either from sales to unaffiliated customers or from inter segment sales or transfers between geographical areas. Operations, either domestic or foreign, should have identified with them the revenues generated by those operations, the assets employed in or associated with generating those revenues, and the costs and expenses incurred in generating those revenues or employing those assets.⁴⁸

As compared to domestic operations, operations in foreign geographical areas and sales to foreign markets may involve greater risk due to foreign government instability, exchange rate fluctuations, changes in industrial policy of the government, competition in international business, political decisions, protectionism, etc. Due to uncertainty involved in foreign operations, profits arising on foreign operations are likely to be extreme or marginal.

It should be understood that “foreign operations” are different from “export sales”. The Financial Accounting Standards Board of the USA and the Canadian Institute of Chartered Accountants provide for geographical segmentation of operations as well as the disclosure or export sales where such operations and sales are significant. Ernst and Whimney⁴⁹ observe:

“The distinction between foreign operations and export sales may be unclear. Foreign operations may, for example, include sales of domestic products through marketing efforts, additional manufacturing processes, or other activities conducted outside the home country. Frequently, the transfer of marketing and manufacturing activities from domestic to new foreign markets is a gradual process.”

Emmanuel and Gray⁵⁰ are of opinion that a dual analysis of foreign operations by location of operations and location of markets can be significant and hence desirable at least in respect of turnover; with perhaps some reference to exports from all locations to all markets.

SELECTING A BASIS OF SEGMENTATION

The appropriateness of a basis of segmentation should be decided in terms of its relevance to external users for decision making purposes. Generally speaking, that segment is material for users which show significantly different rates of profitability, diverse degrees of risk or varying opportunities for growth. The segment selected should provide the best measures of differing prospects for profits, growth and risk.

Among the many bases of segmentation, industry segmentation is widely recognised as the most appropriate basis

of segmentation. According to the International Accounting Standards Committee,⁵¹ “industry segments and geographical segments are usual bases for presenting information on operations by segments. An enterprise would provide information on both bases if both are applicable to its operations”. Mautz⁵² suggests that industry segmentation is fundamental:

“The kind of information useful to an investor appears to be, first and most basic, some indication of the industries in which the diversified company is active and the relative importance of each. Second, he needs to know the relative successfulness of the company’s operations in each of these industries. An investor commits his resources to a company primarily on the basis of his expectations of what the future holds for that company in the way of profits, risk and growth potential. Without knowledge of the industries in which a company participates, the extent of the activities in each one relative to others, and the success or lack of success of the company’s management in meeting competition, he can do little more than make a blind guess at the company’s future.”

The Canadian Institute of Chartered Accountants also states that the “basis of segmentation should generally be the industries in which the enterprise operates”. However, another basis may be chosen “if management decides that segmentation on a basis other than industries is more appropriate for the enterprise”. Segmentation according to “any particular industry classification guide is discouraged in favour of broad industry groupings which management of the enterprise recognises as being clearly distinguishable one from the other”.

Backer and Mcferland⁵³ have found that no single basis of segment can be suggested for all companies:

“Review of evidence from this study leads to the conclusion that no single segment classification pattern can be applied to all companies. Wide differences in company operations made it necessary to select, in each case, the segments, which will be useful to investors in understanding a company’s business and in forecasting the outlook for earning in future periods... the useful segments are product groups in some cases, markets in other cases. There are also companies where at least some breakdowns into both product and market segments are needed.”

Organisational division as a basis of segmentation is not usually favoured. However, it may be useful to external users if ‘divisions’ clearly reflect diversity in profitability, growth, and risk.

Segmentation according to ‘basic activities’ has been proposed by Rappaport and Lerner⁵⁴ who summarise their guidelines for ‘basic activities’ thus:

“Basic activities are activities that generate both revenue and expense streams; they can be structured by product, market or both. The choice of classifying activities by product or market should take into account the classification systems (product and/or market) used by other information sources available to the investor. If two or more products or markets

have a common demand elasticity, they may be treated as a single activity. If two or more activities make use of an identical production function, and as such have similar cost trends, they may be considered as a single basic activity. Basic activities should be of sufficient materiality to warrant separate disclosure.”

Those who favour that a single basis should be suggested for reporting segment information generally cite uniformity of reporting among enterprises as the reason for their position. Also, a specified basis of segmentation would eliminate the possibility that segments would be selected so as to present the enterprise in the most favourable manner

Other persons contend that uniformity among enterprises is not an important factor in the selection of a basis of segmentation, because they believe that investors and creditors should use segment data to evaluate the enterprise as a whole and not to compare a segment of one enterprise with a similar segment of another enterprise. Those who oppose specifying a basis (or bases) of segmentation point to the inflexibility of such an approach that it may force some enterprises to report segment information which may be uninformative to investors and creditors. Companies differ so much in structure, operating procedure, and industry that it seems unlikely that any given system can be devised which will apply with equal force to all companies. This is true whether the particular company became diversified through internal growth or as a result of business acquisition.⁵⁵

It is the responsibility of management to exercise its judgment in determining how the enterprise activities are to be grouped for reporting as segments. In making such decisions, management normally takes account of many factors. Such factors may include similarities and differences in the enterprise’s products and activities; in the profitability, risk and growth of those products and activities; and in the operating and marketing areas and the relative importance of those areas within the enterprise as a whole. The existence of special regulatory requirements and specific industry characteristics such as in the banking and insurance industries may constitute additional factors to be considered in determining segments to be reported.⁵⁶

IDENTIFYING REPORTABLE SEGMENTS

Another question which is important in segment reporting is: when is a segment significant or material enough to warrant separate disclosure?

After a company has grouped its related products and services into segments, it must select which of these segments are important enough to be included separately in the information reported. Some guidelines have been suggested for determining the significance of segments for the purpose of external reporting. For example, the International Accounting Standards Committee suggests 10 per cent of consolidated revenue, or operating profit or total assets as the criterion for determining the significance of a segment.

It can be observed that the significance tests for determining reportable foreign geographical areas are different in certain respects from those used in determining industry segments. In contrast to the 10 per cent tests, Mautz recommended a 15 per cent of gross revenue tests for industry segments although he recognised that it might be necessary to have additional tests:⁵⁷

“If the amounts of gross revenue are significantly disproportionate to the amounts of income from or the assets employed in diversified components, as compared to other components to the company, a more representative test of the materiality of the diversification should be used.”

AS-17 Segment Reporting issued by ASB of ICAI has the following guidelines on identifying reportable segments.⁵⁸

I. Primary and Secondary Segment Reporting Formats

I. The dominant source and nature of risks and returns of an enterprise should govern whether its primary segment reporting format will be business segments or geographical segments. If the risks and returns of an enterprise are affected predominantly by differences in the products and services it produces, its primary format for reporting segment information should be business segments, with secondary information reported geographically. Similarly, if the risks and returns of the enterprise are affected predominantly by the fact that it operates in different countries or other geographical areas, its primary format for reporting segment information should be geographical segments, with secondary information reported for groups of related products and services (para 19).

2. Internal organisation and management structure of an enterprise and its system of internal financial reporting to the board of directors and the chief executive officer should normally be the basis for identifying the predominant source and nature of risks and differing rates of return facing the enterprise and, therefore, for determining which reporting format is primary and which is secondary, except as provided in subparagraphs (a) and (b) below:

- (a) if risks and returns of an enterprise are strongly affected both by differences in the products and services it produces and by differences in the geographical areas in which it operates, as evidenced by a ‘matrix approach’ to managing the company and to reporting internally to the board of directors and the chief executive officer, then the enterprise should use business segments as its primary segment reporting format and geographical segments as its secondary reporting format; and
- (b) if internal organisational and management structure of an enterprise and its system of internal financial reporting to the board of directors and the chief executive officer are based neither on individual products or services or groups of related products/services nor on geographical areas the directors and management of the enterprise should determine whether the risk and returns of the

enterprise are related more to the products and services it produces or to the geographical areas in which it operates and should, accordingly, choose business segments or geographical segments as the primary segment reporting format of the enterprise, with the other as its secondary reporting format (para 20).

3. For most enterprises, the predominant source of risks and returns determines how the enterprise is organised and managed. Organisational and management structure of an enterprise and its internal financial reporting system normally provide the best evidence of the predominant source of risk and returns of the enterprise for the purpose of its segment reporting. Therefore, except in rare circumstances, an enterprise will report segment information in its financial statements on the same basis as it reports internally to top management. Its predominant source of risks and returns becomes its primary segment reporting format. Its secondary source of risks and returns becomes its secondary segment reporting format (para 21).

4. A ‘matrix presentation’—both business segments and geographical segments as primary segments reporting formats with full segment disclosure on each basis—will often provide useful information if risks and returns of an enterprise are strongly affected both by differences in the products and services it produces and by differences in the geographical area in which it operates. This Statement does not require, but does not prohibit, a ‘matrix presentation’ (para 22).

5. In some cases, organisation and internal reporting of an enterprise may have developed along lines unrelated to both the types of products and services it produces, and the geographical areas in which it operates. In such cases, the internally reported segment data will not meet the objective of this Statement. Accordingly, para 20(b) requires the directors and management of the enterprise to determine whether the risks and returns of the enterprise are more product/service driven or geographically driven and to accordingly choose business segments or geographical segments as the primary basis of segment reporting. The objective is to achieve a reasonable degree of comparability with other enterprises, enhance understandability of the resulting information, and meet the needs of investors, creditors, and others for information about product/service-related and geographically related risks and returns (para 23).

II. Business and Geographical Segments

1. Business and geographical segments of an enterprise for external reporting purposes should be those organisational units for which information is reported to the board of directors and to the chief executive officer for the purpose of evaluating the unit’s performance and for making decisions about future allocations of resources, except as provided in paragraph 25 (para 24).

2. If internal organisational and management structure of an enterprise and its system of internal financial reporting to the board of directors and the chief executive officer are based neither on individual products or services or groups of related products/services nor on geographical areas, paragraph 20(b) requires that

the directors and management of the enterprise should choose either business segments or geographical segments as the primary segment reporting format of the enterprise based on their assessment of which reflects the primary source of the risks and returns of the enterprise, with the other as its secondary reporting format. In that case, the directors and management of the enterprise should determine its business segments and geographical segments for external reporting purposes, rather than on the basis of its system of internal financial reporting to the board of directors and chief executive officer, consistent with the following:

- (a) if one or more of the segments reported internally to the directors and management is a business segment or a geographical segments based on the factors in the definitions in paragraph 5 but others are not, subparagraph (b) below should be applied only to those internal segments that do not meet the definitions in paragraph 5 (that is, an internally reported segment that meets the definition should not be further segmented);
- (b) for those segments reported internally to the directors and management that do not satisfy the definitions in paragraph 5, management of the enterprise should look to the next lower level of internal segmentation that reports information along product and service lines or geographical lines, as appropriate under the definitions in paragraph 5; and
- (c) if such an internally reported lower level segment meets the definition of business segment or geographical segment based on the factors in paragraph 5, the criteria in paragraph 27 for identifying reportable segments should be applied to that segment (para 25).

3. Under this statement, most enterprises will identify their business and geographical segments as the organisational units for which information is reported to the board of the directors (particularly the nonexecutive directors, if any) and to the chief executive officer (the senior operating decision maker, which in some cases may be group of several people) for the purpose of evaluating each unit's performance and for making decisions about future allocations of resources. Even if an enterprise must apply paragraph 25 because its internal segments are not along product/service or geographical lines, it will consider the next lower level of internal segmentation that reports information along product and service lines or geographical lines rather than construct segments solely for external reporting purposes. This approach of looking to organisational and management structure of an enterprise and its internal financial reporting system to identify the business and geographical segments of the enterprise for external reporting purposes is sometimes called the 'management approach', and the organisation components for which information is reported internally are sometimes called 'operating segments'. (para 26)

III. Reportable Segments

The following are the provisions about reportable segments as given in Ind AS 108 Operating Segments.

(1) An entity shall report separately information about each operating segment that:

- (a) has been identified in accordance this Ind AS or results from aggregating two or more of those segments in accordance with paragraph 2 and
- (b) exceeds the quantitative thresholds in paragraph 3.

Aggregation criteria

(2) Operating segments often exhibit similar long-term financial performance if they have similar economic characteristics. For example, similar long-term average gross margins for two operating segments would be expected if their economic characteristics were similar. Two or more operating segments may be aggregated into a single operating segment if aggregation is consistent with the core principle of this Ind AS, the segments have similar economic characteristics, and the segments are similar in each of the following respects:

- (a) the nature of the products and services;
- (b) the nature of the production processes;
- (c) the type or class of customer for their products and services;
- (d) the methods used to distribute their products or provide their services; and
- (e) if applicable, the nature of the regulatory environment, for example, banking, insurance or public utilities.

Quantitative thresholds

(3) An entity shall report separately information about an operating segment that meets any of the following quantitative thresholds:

- (a) Its reported revenue, including both sales to external customers and intersegment sales or transfers, is 10 per cent or more of the combined revenue, internal and external, of all operating segments.
- (b) The absolute amount of its reported profit or loss is 10 per cent or more of the greater, in absolute amount, of (i) the combined reported profit of all operating segments that did not report a loss and (ii) the combined reported loss of all operating segments that reported a loss.
- (c) Its assets are 10 per cent or more of the combined assets of all operating segments.

Operating segments that do not meet any of the quantitative thresholds may be considered reportable, and separately disclosed, if management believes that information about the segment would be useful to users of the financial statements.

(4) An entity may combine information about operating segments that do not meet the quantitative thresholds with information about other operating segments that do not meet the quantitative thresholds to produce a reportable segment only if the operating segments have similar economic characteristics and share a majority of the aggregation criteria listed in paragraph 2.

(5) If the total external revenue reported by operating segments constitutes less than 75 per cent of the entity's revenue, additional operating segments shall be identified as reportable segments (even if they do not meet the criteria in paragraph 3) until at least 75 per cent of the entity's revenue is included in reportable segments.

(6) Information about other business activities and operating segments that are not reportable shall be combined and disclosed in an 'all other segments' category separately from other reconciling items in the reconciliations required by this Ind AS. The sources of the revenue included in the 'all other segments' category shall be described.

(7) If management judges that an operating segment identified as a reportable segment in the immediately preceding period is of continuing significance, information about that segment shall continue to be reported separately in the current period even if it no longer meets the criteria for reportability in paragraph 3.

(8) If an operating segment is identified as a reportable segment in the current period in accordance with the quantitative thresholds, segment data for a prior period presented for comparative purposes shall be restated to reflect the newly reportable segment as a separate segment, even if that segment did not satisfy the criteria for reportability in paragraph 3 in the prior period, unless the necessary information is not available and the cost to develop it would be excessive.

(9) There may be a practical limit to the number of reportable segments that an entity separately discloses beyond which segment information may become too detailed. Although no precise limit has been determined, as the number of segments that are reportable in accordance with paragraphs 3-8 increases above ten, the entity should consider whether a practical limit has been reached.

IV. Primary Segment Reporting

An enterprise should disclose the following for each reportable segment:

- (a) segment revenue, classified into segment revenue from sales to external customers and segment revenue from transactions with other segments;
- (b) segment result;
- (c) total carrying amount of segment assets;
- (d) total amount of segment liabilities;
- (e) total cost incurred during the period to acquire segment assets that are expected to be used during more than one period (tangible and intangible fixed assets);
- (f) total amount of expense included in the segment result for depreciation and amortisation in respect of segment assets for the period; and
- (g) total amount of significant non-cash expenses, other than depreciation and amortisation in respect of segment assets, that were included in segment expense and, therefore, deducted in measuring segment result (para 40).

AS 17 requires an enterprise to report segment result. If an enterprise can compute segment net profit or loss or some other measure of segment profitability other than segment result, without arbitrary allocations, reporting of such amount(s) in addition to segment result is encouraged. If that measure is prepared on a basis other than the accounting policies adopted for the financial statements of the enterprise, the enterprise will include in its financial statements a clear description of the basis of measurement (para 41).

An example of a measure of segment performance above segment result in the statement of profit and loss is gross margin on sales. Examples of measures of segment performance below segment result in the statement of profit and loss are profit or loss from ordinary activities (either before or after income taxes) and net profit or loss (para 42).

Accounting Standard 5, 'Net Profit or Loss for the Period, Prior Period Items and Changes in Accounting Policies' requires that "when items of income and expense within profit or loss from ordinary activities are of such size, nature or incidence that their disclosure is relevant to explain the performance of the enterprise for the period, the nature and amount of such items should be disclosed separately". Examples of such item include writedowns of inventories, provisions for restructuring, disposals of fixed assets and longterm investments, legislative changes having retrospective application, litigation settlements, and reversal of provisions. An enterprise is encouraged, but not required to disclose the nature and amount of any items of segment revenue and segment expense that are of such size, nature, or incident that their disclosure is relevant to explain the performance of the segment for the period. Such disclosure is not intended to change the classification of any such items of revenue or expenses from ordinary to extraordinary or to change the measurement of such items. The disclosure, however, does change the level at which the significance of such items is evaluated for disclosure proposes from the enterprise level to the segment level (para 43).

An enterprise that reports the amount of cash flows arising from operating, investing and financing activities of a segment need not disclose depreciation and amortisation expense and noncash expenses of such segment pursuant to subparagraphs (f) and (g) of paragraph 40 (para 44).

AS-3, Cash Flow Statement, recommends that an enterprise present cash flow statement that separately reports cash flows from operating, investing and financing activities. Disclosure of information regarding operating, investing and financing cash flows of each reportable segment is relevant to understanding the enterprise's overall financial position, liquidity, and cash flows. Disclosure of segment cash flow is, therefore, encouraged, though not required. An enterprise that provides segment cash flow disclosures need not disclose depreciation and amortisation expense and noncash expenses pursuant to subparagraphs (f) and (g) of paragraph 40 (para 45).

An enterprise should present a reconciliation between the information disclosed for reportable segments and the aggregated information in the enterprise financial statements. In presenting

the reconciliation, segment revenue should be reconciled to enterprise revenue; segment result should be reconciled to enterprise net profit or loss; segment assets should be reconciled to enterprise assets; and segment liabilities should be reconciled to enterprise liabilities (para 46).

V. Secondary Segment Information

AS 17 identifies the disclosure requirements to be applied to each reportable segment based on secondary reporting format of an enterprise, as follows:

If primary format of an enterprise for reporting segment information is business segments, it should also report the following information:

- (a) segment revenue from external customers by geographical area based on the geographical location of its customers, for each geographical segment whose revenue from sales to external customers is 10 per cent or more of enterprise revenue;
- (b) the total carrying amount of segment assets by geographical location of assets, for each geographical segment whose segment assets are 10 per cent or more of the total assets of all geographical segments; and
- (c) the total cost incurred during the period to acquire segment assets that are expected to be used during more than one period (tangible and intangible fixed assets) by geographical location of assets for each geographical segment whose segment assets are 10 per cent or more of the total assets of all geographical segments (para 48).

If primary format of an enterprise for reporting segment information is geographical segments (whether based on location of assets or location of customers), it should also report the following segment information for each business segment whose revenue from sales to external customers is 10 per cent or more of enterprise revenue or whose segment assets are 10 per cent or more of the total assets of all business segments:

- (a) segment revenue from external customers;
- (b) the total carrying amount of segment assets; and
- (c) the total cost incurred during the period to acquire segment assets that are expected to be used during more than one period (tangible and intangible fixed assets) (para 49).

If primary format of an enterprise for reporting segment information is geographical segments that are based on location of assets, and if the location of its customers is different from the location of its assets, then the enterprise should also report revenue from sales to external customers for each customer based geographical segment whose revenue from sales to external customers is 10 per cent or more of enterprise revenue (para 50).

If primary format of an enterprise for reporting segment information is geographical segments that are based on location of customers, and if the assets of the enterprise are located in

different geographical areas from its customers, then the enterprise should also report the following segment information for each asset based geographical segment whose revenue from sales to external customers or segment assets are 10 per cent or more of total enterprise amounts:

- (a) the total carrying amount of segment assets by geographical location of the assets; and
- (b) the total cost incurred during the period to acquire segment assets that are expected to be used during more than one period (tangible and intangible fixed assets) by location of the assets (para 51).

VI. Other Disclosures

1. In measuring and reporting segment revenue from transactions with other segments, inter segment transfers should be measured on the basis that the enterprise actually used to price those transfers. The basis of pricing inter segment transfers and any change therein should be disclosed in the financial statements (para 53).

2. Changes in accounting policies adopted for segment reporting that have a material effect on segment information should be disclosed. Such disclosure should include a description of the nature of the change, and the financial effect of the change if it is reasonably determinable (para 54).

3. AS-5 requires that changes in accounting policies adopted by the enterprise should be made only if required by statute, or for compliance with an accounting standard, or if it is considered that the change would result in a more appropriate presentation of events or transactions in the financial statements of the enterprise (para 55).

4. Changes in accounting policies adopted at the enterprise level that affect segment information are dealt with the accordance with AS-5. AS-5 requires that any change in an accounting policy which has a material effect should be disclosed. The impact of, and the adjustments resulting from, such change, if material, should be shown in the financial statements of the period in which such change is made, to reflect the effect of such change. Where the effect of such change is not ascertainable, wholly or in part, the fact should be indicated. If a change is made in the accounting policies which has no material effect on the financial statements for the current period but which is reasonably expected to have a material effect in later periods, the fact of such change should be appropriately disclosed in the period in which the change is adopted (para 56).

5. Some changes in accounting policies relate specifically to segment reporting. Examples include changes in identification of segments and changes in the basis for allocating revenues and expenses to segments. Such changes can have a significant impact on the segment information reported but will not change aggregate financial information reported for the enterprise. To enable users to understand the impact of such changes, this Statement requires the disclosure of the nature of the change and the financial effect of the change, if reasonably determinable (para 57).

6. An enterprise should indicate the types of products and services included in each reported business segment and indicate the composition of each reported geographical segment, both primary and secondary, if not otherwise disclosed in the financial statements (para 58).

7. To assess the impact of such matters as shifts in demand, changes in the prices of inputs or other factors of production, and the development of alternative products and processes on a business segment, it is necessary to know the activities encompassed by that segment. Similarly, to assess the impact of changes in the economic and political environment on the risks and returns of a geographical segment, it is important to know the composition of that geographical segment (para 59).

Example 1

XYZ Company has three segments namely A, B, C. The total assets of the company are ₹ 10.00 crs. Segment A has ₹ 2.00 crs. Segment B has ₹ 3.00 crs and Segment C has ₹ 5.00 crs. Deferred tax assets included in the assets of each segments are A ₹ 0.50 crs. B ₹ 0.40 crs. C ₹ 0.30 crs. The accountant contends that all the three segments are reportable segments. Comment.

Solution:

According to AS 17 "Segment Reporting, segment assets do not include income tax assets. So, assets of

Segment A = 2.00 – 0.50 =	₹ 1.50 crs.
Segment B = 3.00 – 0.40 =	₹ 2.60 crs.
Segment C = 5.00 – 0.30 =	₹ 4.70 crs.
Total Segment Assets	₹ 8.80 crs.

Since each segment's assets is more than 10% of total segment assets (i.e. ₹ 8.80 crs.) all segments are reportable segments.

Solution:

Segmental Report

(₹ in '000)

Segment Revenue	Division			Inter segment Eliminations	Consolidated Total
	A	B	C		
Sales:					
Domestic	1,800				1,800
Export	1,22,700	6,000	5,400		1,34,100
External Sales	1,24,500	6,000	5,400		1,35,900
Inter segment Sales	91,500	900		92,400	
Total Revenue	2,16,000	6,900	5,400	92,400	1,35,900
Segment result (given)	4,800	600	(240)		5,160
Head office expenses					(2,880)
Operating profit					2,280
Interest expenses					(300)
Profit before tax					1,980
Other information:					
Fixed assets	6,000	1,200	3,600		10,800
Net current assets	36,00	1,200	2,700		7,500
Segment assets	9,600	2,400	6,300		18,300
Unallocated corporate assets					2,940
Segment liabilities	600	300	3,600		4,500
Unallocated corporate liabilities					1,140

Example 2

Johnson has three divisions A, B and C. Details of their turnover, results and net assets are given below:

₹ ('000)

Division A	
Sales to B	91,500
Other Sales (Home)	1,800
Export Sales	1,22,700
	<u>2,16,000</u>

Division B	
Sales to C	900
Exports Sales to Europe	6,000
	<u>6,900</u>

Division C	
Export Sales to America	5,400

	Head Office ₹ ('000)	A ₹ ('000)	B ₹ ('000)	C ₹ ('000)
Operating Profit or Loss before tax		4,800	600	(240)
Re-allocated cost from Head Office		1,440	720	720
Interest cost		120	150	30
Fixed assets	1,500	6,000	1,200	3,600
Net current assets	1,440	3,600	1,200	2,700
Long-term liabilities	1,140	600	300	3,600

Prepare a Segmental Report for publication in Johnson.

Sales Revenue by Geographical Market

(₹ in '000)

	Home Sales	Export Sales (by division A)	Export to Europe	Export to America	Consolidated Total
External Sales	1,800	1,22,700	6,000	5,400	1,35,900

Example 3

Identify the reportable segment by profitability test as follows for ABC Ltd.

Segment	Profit (Loss) (₹ '000)
A	4,500
B	500
C	(3,500)
D	(400)
E	(2,100)

Solution :

First, the operating segments are grouped according to whether they incurred a profit or loss, as follows:

Segments Incurring Profits		Segments Incurring Losses	
Segment	Profit (₹)	Segment	Loss (₹)
A	4,500	C	(3,500)
B	500	D	(400)
	—	E	(2,100)
	5,000		6,000

For the profitability test, only absolute amounts are used. The combined total of those segments incurring a loss is larger than the combined total of those segments incurring a profit. Therefore, any segment for which the absolute amount of its operating profit or loss equals or exceeds ₹ 600 (*i.e.*, 10% of ₹ 6,000) meets the profitability test and is therefore a reportable segment. Segments A, C and E meet the profitability test, summarized as follows:

Operating Segment	Absolute amount of Profit or loss		
A	4,500	Yes	(reportable segment)
B	500	No	
C	3,500	Yes	(reportable segment)
D	400	No	
E	2,100	Yes	(reportable segment)

If the total external revenue (*i.e.*, sales to unaffiliated customers) of the reportable segments is less than 75% of total consolidated revenue, additional operating segments must be identified as reportable segments (even if they do not otherwise qualify as a reportable segment) until at least 75% of total consolidated revenue is included in reportable segments.

Information about all operating segments that did not qualify as reportable segments must be combined and disclosed in an “all other” category.

Example 4

The Chief Accountant of Bharati Company gives the following data regarding its six segments:

(₹ '000)

Particulars	M	N	O	P	Q	R	Total
Segment Assets	400	800	300	200	200	100	2,000
Segment Result	500	-1,900	100	100	-100	300	-1,000
Segment Revenue	3,000	6,200	800	600	800	600	12,000

The Chief Accountant is of the opinion that segments “M” and “N” alone should be reported. Is he justified in his view? Discuss.

Solution:

No, he is not justified in his view, because as per Para 27 of AS 17 “Segment Reporting”, Business Segment or geographical segment which has been identified as reportable segment shall be further divided to include subsegments based on the following conditions:

Segment revenue from sales to external customers and internal transfer is 10% or more than total external and internal revenue of all segments.

Or

10% or more of segment result

(Segment result means: if some segments are in loss, then total loss of all loss making segments or if some segments are in profit, total profit of all profit making segments. Whichever is higher *i.e.*, total profit or total loss figure in absolute term.)

Or

Segment asset is 10% or more than total assets of all segments.

Ensure whether at least 75% of total external revenue should be in the reportable segments.

In the question, the segments “M” and “N” are reportable segments on the basis of 10% of segment revenue criteria. The other two criteria should also be applied to make reportable segment as per AS-17. 10% of segment result is 200 or more (loss) $(1,900 + 100) \times 10\%$. By these criteria “R” is also reportable segment. As per the 10% or more asset criteria “O”, “P” and “Q” also becomes the reportable segments; therefore all the 6 segments should be reportable segments.

DISCLOSURES IN SEGMENT REPORTS

Setting standards of segmental disclosure for diversified companies requires determining the relevant data to be disclosed and the methodology to be used in these disclosures. What segment information should be disclosed in published annual reports of diversified companies is probably the most important issue in segment reporting. This issue has greatly been debated and accounting bodies, accounting researchers and others have expressed opinions about the information to be disclosed for business segments. Ind AS 108 'Operating Segments' provides disclosure of the following items of information in published annual reports of diversified companies:

(1) An entity shall disclose information to enable users of its financial statements to evaluate the nature and financial effects of the business activities in which it engages and the economic environments in which it operates.

(2) To give effect to the principle in paragraph 1, an entity shall disclose the following for each period for which a statement of profit and loss is presented:

- (a) general information as described in paragraph 3;
- (b) information about reported segment profit or loss, including specified revenues and expenses included in reported segment profit or loss, segment assets, segment liabilities and the basis of measurement, as described in paragraphs 4-8; and
- (c) reconciliations of the totals of segment revenues, reported segment profit or loss, segment assets, segment liabilities and other material segment items to corresponding entity amounts as described in paragraph 9.

Reconciliations of the amounts in the balance sheet for reportable segments to the amounts in the entity's balance sheet are required for each date at which a balance sheet is presented. Information for prior periods shall be restated as described in paragraphs 10 and 11.

General information

(3) An entity shall disclose the following general information:

- (a) factors used to identify the entity's reportable segments, including the basis of organisation (for example, whether management has chosen to organise the entity around differences in products and services, geographical areas, regulatory environments, or a combination of factors and whether operating segments have been aggregated)
- (aa) the judgements made by management in applying the aggregation criteria as per this Ind AS. This includes a brief description of the operating segments that have been aggregated in this way and the economic indicators that have been assessed in determining that the aggregated operating segments share similar economic characteristics; and

- (b) types of products and services from which each reportable segment derives its revenues.

Information about profit or loss, assets and liabilities

(4) An entity shall report a measure of profit or loss for each reportable segment. An entity shall report a measure of total assets and liabilities for each reportable segment if such amounts are regularly provided to the chief operating decision maker. An entity shall also disclose the following about each reportable segment if the specified amounts are included in the measure of segment profit or loss reviewed by the chief operating decision maker, or are otherwise regularly provided to the chief operating decision maker even if not included in that measure of segment profit or loss:

- (a) revenues from external Customers;
- (b) revenues from transactions with other operating segments of the same entity;
- (c) interest revenue;
- (d) interest expense;
- (e) depreciation and amortisation;
- (f) material items of income and expense disclosed in accordance with paragraph 97 of Ind AS 1, Presentation of Financial Statements;
- (g) the entity's interest in the profit or loss of associates and joint ventures accounted for by the equity method;
- (h) income tax expense or income; and
- (i) material non-cash items other than depreciation and amortisation.

An entity shall report interest revenue separately from interest expense for each reportable segment unless a majority of the segment's revenues are from interest and the chief operating decision maker relies primarily on net interest revenue to assess the performance of the segment and make decisions about resources to be allocated to the segment. In that situation, an entity may report that segment's interest revenue net of its interest expense and disclose that it has done so.

(5) An entity shall disclose the following about each reportable segment if the specified amounts are included in the measure of segment assets reviewed by the chief operating decision maker or are otherwise regularly provided to the chief operating decision maker, even if not included in the measure of segment assets:

- (a) the amount of investment in associates and joint ventures accounted for by the equity method, and
- (b) the amounts of additions to non-current assets other than financial instruments, deferred tax assets, net defined benefit assets (see Ind AS 19, *Employee Benefits*) and rights arising under insurance contracts.

An entity shall provide an explanation of the measurements of segment profit or loss, segment assets and segment liabilities for each reportable segment. At a minimum, an entity shall disclose the following:

- (a) the basis of accounting for any transactions between reportable segments.
- (b) the nature of any differences between the measurements of the reportable segments' profits or losses and the entity's profit or loss before income tax expense or income and discontinued operations. Those differences could include accounting policies and policies for allocation of centrally incurred costs that are necessary for an understanding of the reported segment information.
- (c) the nature of any differences between the measurements of the reportable segments' assets and the entity's assets (if not apparent from the reconciliations). Those differences could include accounting policies and policies for allocation of jointly used assets that are necessary for an understanding of the reported segment information.
- (d) the nature of any differences between the measurements of the reportable segments' liabilities and the entity's liabilities (if not apparent from the reconciliations). Those differences could include accounting policies and policies for allocation of jointly utilised liabilities that are necessary for an understanding of the reported segment information.
- (e) the nature of any changes from prior periods in the measurement methods used to determine reported segment profit or loss and the effect, if any, of those changes on the measure of segment profit or loss.
- (f) the nature and effect of any asymmetrical allocations to reportable segments. For example, an entity might allocate depreciation expense to a segment without allocating the related depreciable assets to that segment

Reconciliations

An entity shall provide reconciliations of all of the following:

- (a) the total of the reportable segments' revenues to the entity's revenue.
- (b) the total of the reportable segments' measures of profit or loss to the entity's profit or loss before tax expense (tax income) and discontinued operations. However, if an entity allocates to reportable segments items such as tax expense (tax income), the entity may reconcile the total of the segments' measures of profit or loss to the entity's profit or loss after those items.
- (c) the total of the reportable segments' assets to the entity's assets.
- (d) the total of the reportable segments' liabilities to the entity's liabilities.
- (e) the total of the reportable segments' amounts for every other material item of information disclosed to the corresponding amount for the entity.

All material reconciling items shall be separately identified and described. For example, the amount of each material adjustment needed to reconcile reportable segment profit or loss to the entity's profit or loss arising from different accounting policies shall be separately identified and described.

Restatement of previously reported information

If an entity changes the structure of its internal organisation in a manner that causes the composition of its reportable segments to change, the corresponding information for earlier periods, including interim periods, shall be restated unless the information is not available and the cost to develop it would be excessive. The determination of whether the information is not available and the cost to develop it would be excessive shall be made for each individual item of disclosure. Following a change in the composition of its reportable segments, an entity shall disclose whether it has restated the corresponding items of segment information for earlier periods.

If an entity has changed the structure of its internal organisation in a manner that causes the composition of its reportable segments to change and if segment information for earlier periods, including interim periods, is not restated to reflect the change, the entity shall disclose in the year in which the change occurs segment information for the current period on both the old basis and the new basis of segmentation, unless the necessary information is not available and the cost to develop it would be excessive.

Information about products and services

An entity shall report the revenues from external customers for each product and service, or each group of similar products and services, unless the necessary information is not available and the cost to develop it would be excessive, in which case that fact shall be disclosed. The amounts of revenues reported shall be based on the financial information used to produce the entity's financial statements.

Information about geographical areas

An entity shall report the following geographical information, unless the necessary information is not available and the cost to develop it would be excessive:

- (a) revenues from external customers (i) attributed to the entity's country of domicile and (ii) attributed to all foreign countries in total from which the entity derives revenues. If revenues from external customers attributed to an individual foreign country are material, those revenues shall be disclosed separately. An entity shall disclose the basis for attributing revenues from external customers to individual countries.
- (b) non-current assets other than financial instruments, deferred tax assets, post-employment benefit assets, and rights arising under insurance contracts (i) located in

the entity's country of domicile and (ii) located in all foreign countries in total in which the entity holds assets. If assets in an individual foreign country are material, those assets shall be disclosed separately.

The amounts reported shall be based on the financial information that is used to produce the entity's financial statements. If the necessary information is not available and the cost to develop it would be excessive, that fact shall be disclosed. An entity may provide, in addition to the information required by this paragraph, subtotals of geographical information about groups of countries.

Information about major customers

An entity shall provide information about the extent of its reliance on its major customers. If revenues from transactions with a single external customer amount to 10 per cent or more of an entity's revenues, the entity shall disclose that fact, the total amount of revenues from each such customer, and the identity of the segment or segments reporting the revenues. The entity need not disclose the identity of a major customer or the amount of revenues that each segment reports from that customer. For the purposes of this Ind AS, a group of entities known to a reporting entity to be under common control shall be considered a single customer. However, judgement is required to assess whether a government (including government agencies and similar bodies whether local, national or international) and entities known to the reporting entity to be under the control of that government are considered a single customer. In assessing this, the reporting entity shall consider the extent of economic integration between those entities.

It should be noted that Ind AS 108 'Operating Segments' is identical to IFRS 8 'Operating Segments'.

Furthermore, Ind AS 108 'Operating Segments' is similar, on many counts, to SFAS No. 131 'Disclosure about segments of an Enterprise and Related Information' issued by Financial Accounting Standards Board (USA) in June 1997.

AS-17 ON SEGMENTS DISCLOSURES

AS-17, 'Segments Reporting', issued by the Institute of Chartered Accountants of India in year 2000 contains the provisions on segmental disclosures in company annual reports. Some of these provisions have been discussed below.

1. *Segment Revenue*: According to AS-17 Segment Reporting: *Segment revenues* is the aggregate of:

- (i) the portion of enterprise revenue that is directly attributable to a segment,
- (ii) the relevant portion of enterprise revenue that can be allocated on a reasonable basis to a segment, and
- (iii) revenue from transactions with other segments of the enterprise.

Segment revenue does not include:

- (a) extraordinary items as defined in AS-5, Net Profit or Loss for the Period, Prior Period Items and Changes in Accounting Policies;
- (b) interest or dividend income, including interest earned on advances or loans to other segments unless the operations of the segment are primarily of a financial nature; and
- (c) gains on sales of investments or on extinguishment of debt unless the operations of the segment are primarily of a financial nature.

The International Accounting Standards Committee in its Standard No. 14 defines segment revenue as follows⁵⁹:

"Segment revenue is revenue that is directly attributable to a segment, or the relevant portion of revenue that can be allocated on a reasonable basis to a segment, and that is derived from transactions with parties outside the enterprise and from other segments of the same enterprise."

The Canadian Institute of Chartered Accountants defines 'segment revenue' as "revenue, directly attributable to a segment, from sales to customers outside the enterprise and from intersegment sales or transfers of products and services". The following are excluded from segment revenue as these do not relate to segments:

- (a) Revenue earned at head office level or corporate level,
- (b) Income from investments accounted for by the equity method,
- (c) Interest and dividend income other than that earned on an asset included in the segment's identifiable assets,
- (d) Extraordinary gains, and
- (e) Inter segment charges for the cost of shared facilities or other jointly incurred expenses.

The most controversial issue regarding segment revenue is about the treatment of inter segment sales or transfers. Those who argue that intersegment sales or transfers should be included in segment revenue give the following arguments:

- (a) Inclusion of intersegment transfers makes segment operating profit figure accurate and reliable.
- (b) Pricing of inter segment transfers does not involve much difficulty and they can be priced appropriately.
- (c) In case inter segment transfers are not included, its exclusion would require exclusion of costs incurred in intersegment transfers.

It has been argued by critics that intersegment transfers should be excluded from segment revenue. The Financial Accounting Standards Board comments⁶⁰:

"(i) financial accounting should recognise only those revenues which have been realised through bargained market transactions; (ii) the transfer price is not objectively verifiable because there have been no arms length transactions; (iii) the level of segment activity, including intersegment transfers, may be affected by internal production decisions, and (iv) the total reported segment sales, including inter segment

transfers, will differ from consolidated figures unless appropriate eliminations are presented.”

However, the Financial Accounting Standards Board in its Standard No. 14 suggested that intersegment transfers (including inter area or intra enterprise transfers) be reported on the same basis as the enterprises uses to account for them internally. The amount of the inter segment transfers have to be separately disclosed in respect of both industries and geographical areas. The basis of accounting as well as the nature and effect of any change in basis must be disclosed.

2. *Segment Expense*: According to AS-17 Segment Reporting:

Segment expense is the aggregate of:

- (i) the expense resulting from the operating activities of a segment that is directly attributable to the segment, and
- (ii) the relevant portion of enterprise expense that can be allocated on a reasonable basis to the segment,

including expense relating to transactions with other segments of the enterprise.

Segment expense does not include:

- (a) extraordinary items as defined in AS-5, Net Profit or Loss for the Period, Prior Period Items and Changes in Accounting Policies;
- (b) interest expense, including interest incurred on advances or loans from other segments, unless the operations of the segment are primarily of a financial nature;
- (c) losses on sales of investments or losses on extinguishment of debt unless the operations of segment are primarily of a financial nature;
- (d) income tax expense; and
- (e) general administrative expenses, head office expenses, and other expenses that arise at the enterprise level and relate to the enterprise as a whole. However, costs are sometimes incurred at the enterprise level on behalf of a segment. Such costs are part of segment expense if they relate to the operating activities of the segment and if they can be directly attributed or allocated to the segment on a reasonable basis.

3. *Segment Profitability*: The question of segment reporting involves the reporting of segment operating profit or loss which is the difference between segment revenue and segment expense. Generally, there are two concepts of segment profitability:

- (a) Segment contribution
- (b) Segment net profit.

Segment contribution is calculated by deducting the expenses traceable to the segment from segment revenues. Segment contribution is also known as ‘defined profit’ since traceable expenses would include directly fixed costs as well as direct variable costs. The segment contribution approach calls for separating all costs and revenues into two groups, those directly attributable to the reporting segments and those not directly related. The resulting marginal income under this method can be

interpreted, in general, as the addition to total enterprise profit attributable to the presence of a particular segment. In other words, contribution margin measures the amount that each segment has contributed toward joint segment costs and profits taken as a whole.

Segment contribution approach can easily be followed with ease because there is no need to make joint cost allocations to segments which are often considered timeconsuming and costly. The contribution approach is commonly used by management for internal management uses such as planning, control, decisionmaking, and cost-volume-profit analysis. Therefore, this approach can be applied without much difficulty for external reporting purposes to the benefit of existing and potential investors in planning their investments. Another advantage of the contribution margin approach is its objectivity since it avoids the arbitrariness involved in allocation of indirect costs.

The segment net profit approach considers all costs in the determination of operating profit and loss. The profit so determined is known as net income or operating profit. Arguments have also been advanced to include in segment operating profit certain items which could sometimes be usefully traced to a segment. The Research Committee of the Canadian Institute of Chartered Accountants has accepted this position when it says:

“A number of respondents thought that additional items should be taken into account in determining a segment’s operating profit or loss; for example: income from investments accounted for on an equity basis, extraordinary items, minority interest and income taxes. These respondents argued that the allocation of such items would make the segmented data more meaningful, provide a better insight into a segment’s relationship to the enterprise as a whole and facilitate inter-enterprise comparison of segments.”

The segment net profit approach considers all costs and revenue whether they are direct or joint. Determining net income in this manner involves allocating joint revenues and joint costs. However, the amounts of joint revenues are much smaller than those of joint costs and therefore allocation of joint revenues involves less difficulty. It is also said that net income under this approach is likely to be accurate and reliable although joint costs allocations are involved in it. Financial accounting still uses estimates, judgements, and assumptions in the preparation of financial reports with regard to many items such as depreciation, allowance for bad debts, etc. Since most financial statement users understand the nature of complexities involved in the preparation of financial statements, they will not be misled by the inclusion of joint costs in segment net income. Furthermore, exclusion of joint costs is not in conformity with the standard of adequate disclosure in company annual reports because the contribution margin does not disclose a segment’s ability to earn income and does not place the financial statements of a segment in a diversified company on an equal basis with a nondiversified (unitary) company engaged in the same line of business.

4. *Assets*. The disclosure of segment assets gives an indication of the resources employed in generating segment operating

results. Segment assets include (a) assets used by or directly associable with a segment, and (b) assets used jointly by two or more segments to be allocated on a reasonable basis. The following assets are not included in segment assets:

- (a) Assets maintained for general corporate purposes (*i.e.*, those not used in the operations of any industry segment)
- (b) Inter segment loans and advances (except for financial segment); and
- (c) Investments accounted for by the equity method.

It has been suggested that information should be given about the total net book amount of assets identifiable with both industry and geographical segments. 'Net' means after deducting provision for bad and doubtful debts and for accumulated depreciation. According to the Financial Accounting Standards Board⁶¹, the purpose of the requirement is "to allow financial statement users to assess the relative investment commitment in an enterprise's various segments and to assess the results obtained by the various segments in relation to the investment commitment".

Liquid assets in the form of cash, shortterm deposits and marketable securities are the most common type of general corporate assets although there is some disagreement about how liquid assets should be treated. On this controversy, Arthur Anderson and Co.⁶² has expressed the following view:

"Some have questioned whether cash maintained on the books of subsidiaries and divisions should be included in a segment's identifiable assets. While some companies may conclude that this should be done, particularly if the cash is under the control of segment management, we, believe that all cash and cash items, no matter what their location, can be considered to be corporate assets since they are not directly used in operations and can normally be shifted among segments on a basis similar to debt (which, for this reason, among others, is not segmented). If cash and marketable securities maintained on the books of subsidiaries and divisions are significant and it is not otherwise apparent, companies should consider disclosing how those items were treated in determining segment 'identifiable assets'."

It is also suggested that segment assets should be classified into different categories such as plant, inventories, debtors, etc.

5. Liabilities: A suggestion has emerged in corporate financial reporting that liabilities should be reported on a segment basis. It does not involve much difficulty about liabilities which are directly traceable to segments. However, most business enterprises have common liabilities for the business as a whole. For example, debt is issued by the enterprise as a whole. Besides, the corporate office of a company may control the financing decisions, with the result that a segment's debt may be attributable to management policy rather than to the particular requirements of the segment. The International Accounting Standards Committee observes:⁶³

"Liabilities are generally not allocated, either because they are considered to relate to the enterprise as a whole or because

they are viewed as giving rise to a financing result rather than an operating result."

According to AS-17 Segment Reporting:

"Examples of segment liabilities include trade and other payables, accrued liabilities, customer advances, product warranty provisions, and other claims relating to the provision of goods and services. Segment liabilities do not include borrowings and other liabilities that are incurred for financing rather than operating purposes. The liabilities of segments whose operations are not primarily of a financial nature do not include borrowings and similar liabilities because segment result represents an operating, rather than a netoffinancing, profit or loss. Further, because debt is often issued at the headoffice level on an enterprisewide basis, it is often not possible to directly attribute, or reasonably allocate, the interestbearing liabilities to segments."

6. Funds Flow: Rappaport and Lerner⁶⁴ have advocated the production of a segmented funds statement for a number of reasons including the following:

- (a) Users are concerned with liquidity and would be interested in knowing which segments are net sources of funds and which segments are net users.
- (b) The disclosure of application of funds indicates to the shareholders management's commitment to future prospects of various segments. An investor may or may not agree with management's resource allocation plan, but the information allows the investor yet another basis for valuing the company's shares.

Despite the utility of a segmented funds statement, its production is not feasible because of allocation problems especially in relation to liquid assets and liabilities. However, it is practicable to disclose the capital expenditure (*i.e.*, additions to property, plant and equipment) of each reportable industry segment. Also, the required reporting of depreciation, depletion and amortisation expenses for each segment coupled with segment operating profit or loss allows the user roughly to approximate the contribution of each segment to the funds generated from operations during the period.

7. Accounting Policies: Investors improve their predictions when business enterprise disclose sufficient information regarding the impact of accounting changes on their earnings.⁶⁵ Accounting policy disclosures are mainly required relating to:

- (a) the basis of segmentation (type of products and services included in industry segments and a description of the geographical areas into which the enterprise's foreign operations have been segmented); and
- (b) the basis of accounting for intersegment sales or transfers.

There is a more general requirement for accounting policies relevant to industry segment to be described to the extent that they are not adequately explained by disclosures of the enterprises's accounting policies. The Financial Accounting

Standards Board of the USA and the Canadian Institute of Chartered Accountants both do not require specifically accounting policy disclosures in respect of:

- (a) the methods of allocating common expenses.
- (b) the company's policy in defining general corporate expenses and general corporate assets.

8. *Inter Segment Transfers*: Total revenues, including intersegment transfers, should be disclosed in the segment income statements. The amount of such transfers should be shown either on a separate line or by footnote. Management should be free to determine the most appropriate method of pricing inter segment transfers; the method used for pricing inter segment transfers for internal reporting purposes will also usually be satisfactory in presenting the segment income statements. The methods of pricing inter segment transfers should be disclosed in the segment reports. Where a major portion of a segment's sales (say, 50% or more) represent transfers to other segments of the firm, there is a substantial doubt that such an activity should be viewed as a separate segment.

9. *Extraordinary Items*: Unusual, infrequent, or extraordinary items should be attributed to segments, whenever a directly identifiable relationship exists. More importantly, some such items may be peculiar to a segment's particular industry and thus relate to its degree of risk, growth and profitability in a meaningful fashion.

10. *Minority Interests*: If all of the minority interest relates to a segment, minority interest should be deducted. If the minority interest relates to more than one segment, it should be treated as a common cost.

11. *Segment Depreciation and Capital Expenditures*: These should be reported since they are likely to be useful and are easy to verify.

12. *Reconciliation to the Consolidated Amounts*: It has been emphasised that segment data should be reconciled to the consolidated financial statements. There seems little doubt that reconciliation is desirable, it helps, among other things, to stress that the segment data are a disaggregation of the consolidated financial data and that the same accounting principles are used for both, except that most inter segment transactions eliminated from consolidated financial statements are reinstated and included in segment data.

13. *Additional Information*: Disclosure of additional information about segments should be governed by the same precepts as disclosure of additional information about companywide activities. If disclosure is necessary to understanding, then it should be required. Among the items to be disclosed may be (a) the basis or bases of segmentation and the nature of operations of the various segments. This should include a listing of the classes of products included in each segment with the most significant of those products listed first, (b) if common costs are allocated, the method of allocating them; (c) an explanation of the treatment of investments accounted for by the equity, method.

14. *Disclosure of Budget Data*: Budgetary data are useful in making investment decisions. Backer⁶⁶ in his study has found that inclusion of forecast earnings in reports to shareholders would provide an additional basis for investor decisions and evaluating management's performance. Backer is of opinion that it may be advisable for management to give favourable budget information in external reports and thereby avoid taking direct responsibility for the realisation of plans but to have benefits for increased investment attractiveness. Segmental disclosure of budgetary data would help investors and creditors make better decisions by improving their ability to evaluate the future potential of both the company and its management. It would also help Government to make better estimates of investment levels, tax revenues, and guide them in policymaking decisions in the areas of taxes and investments.

AS-17 ON SEGMENT ACCOUNTING POLICIES

AS-17 contains the following suggestions on segment accounting policies

1. Segment information should be prepared in conformity with the accounting policies adopted for preparing and presenting the financial statements of the enterprise as a whole.

2. There is a presumption that the accounting policies that the directors and management of an enterprise have chosen to use in preparing the financial statements of the enterprise as a whole are those that the directors and management believe are the most appropriate for external reporting purposes. Since the purpose of segment information is to help users of financial statements better understand and make more informed judgements about the enterprise as a whole, this Statement requires the use, in preparing segment information, of the accounting policies adopted for preparing and presenting the financial statements of the enterprise as a whole. That does not mean however, that the enterprise accounting policies are to be applied to reportable segments as if the segments were separate stand-alone reporting entities. A detailed calculation done in applying a particular accounting policy at the enterprise-wide level may be allocated to segments if there is a reasonable basis for doing so. Pension calculations, for example, often are done for an enterprise as a whole, but the enterprise-wide figures may be allocated to segments based on salary and demographic data for the segments.

3. This Statement does not prohibit the disclosure of additional segment information that is prepared on a basis other than the accounting policies adopted for the enterprise financial statements provided that (a) the information is reported internally to the board of directors and the chief executive officer for purposes of making decisions about allocating resources to the segment and assessing its performance and (b) the basis of measurement for this additional information is clearly described.

4. Assets and liabilities that relate jointly to two or more segments should be allocated to segments if, and only if, their related revenues and expenses also are allocated to those segments.

5. The way in which asset, liability, revenue, and expense items are allocated to segments depends on such factors as the nature of those items, the activities conducted by the segment, and the relative autonomy of that segment. It is not possible or appropriate to specify a single basis of allocation that should be adopted by all enterprises; nor is it appropriate to force allocation of enterprise asset, liability, revenue, and expense items that relate jointly to two or more segments, if the only basis for making those allocations is arbitrary. At the same time, the definitions of segment revenue, segment expense, segment assets, and segment liabilities are interrelated, and the resulting allocations should be consistent. Therefore, jointly used assets and liabilities are allocated to segments if, and only if, their related revenues and expenses also are allocated to those segments. For example, an asset is included in segment assets if, and only if, the related depreciation or amortisation is included in segment expense.

DIFFICULTIES IN SEGMENT REPORTING

The difficulties involved in segment reporting are, truly speaking, the problems of implementation. However, there are some difficulties of which company managements and investment community are aware and which must be resolved if segment information is to be disclosed in company annual reports. Some problems in implementing segment reporting proposal are listed below:

(1) *Basis of Segmentation*: How a diversified company should be fractionalised for reporting purposes is a problem in segment reporting. Basically there are three questions involved in this vital problem. Firstly, the improbability of developing a single uniform system which would permit segmentation of all companies on a reasonable basis. Secondly, development of a system which will realistically reflect the operations of the companies concerned. Thirdly, misunderstandings that are likely to result from attempting to view parts of a total company as if they were independent units subject to independent valuation.

The greatest problem in segmenting a diversified enterprise lies in the fact that diversification may exist in different forms such as, industry, product lines, individual products, markets and geographical areas. Each type of diversification may create segments that vary significantly in terms of profitability, growth and risk. Besides, more than one type of diversification may be found in an enterprise simultaneously. Also, terms like industry, product, location and market are not very precise. Some argue that it is difficult to evaluate a segment separate from the rest of the company.

It should be understood that the purpose of segmentation is to provide information which will help financial statement users to judge the future success of the company. Therefore segments selected should be realistic and viable from the operating point of view. Put another way, segment(s) selected in a diversified company for financial reporting purposes should represent the company and company operations, reflect the difference within the company regarding rate of profit, degrees of risk and potential for growth.

(2) *Allocation of Common Costs*: Common costs for the purpose of preparing segment reports need to be apportioned between different products (segments). In some cases, common costs are apportioned on a basis which may be classified as reasonable and reliable. For example, factory rent is a common cost which can be divided among different segments on the basis of the area occupied by them. Similarly, the expenses pertaining to a central accounting department may be apportioned among different segments without much difficulty if details about the time devoted to the accounting matters of each segment by the company accounting department is available. But the expenses of planning department (established at the company level) may be very difficult to apportion as no direct relation between the services provided by the planning department and the benefits accruing to different segments may be visible. If a common cost is apportioned on a basis which does not reflect a rational relationship, the basis, being totally unjustified, would produce inaccurate and unreliable segment figures. It may be concluded that common costs have to be grouped in terms of how easily they can be apportioned among different segments.

The problem of allocating common items (common assets and liabilities) is greater for some items than for others. It is particularly great for assets, liabilities, and equity so that reporting for business segments is suggested less often for information from the balance sheet, statement of shareholders' equity and funds statements than for information from the income statement. Thus, some common costs can be allocated on a rational basis; some may be distributed on a basis which may even reflect whim or bias. Because of the diversity of methods employed, cross company comparisons of similar segments are likely to be misleading, and the reliability of segment operating results varies depending on how closely the basis of allocation approximates results that would have been produced by market transactions.⁶⁷

A study⁶⁸ done by the Accountants International Study Group observes:

"The problem of allocating common items has no theoretically correct solution, and its practical solutions pose a dilemma for an accountant attempting to report information for a segment of a diversified company. On one hand he can restrict segmentation only to those portions of revenue, expenses, and other items that can be directly identified with specific segments and report all other items as an undivided aggregate. Alternatively, he can segment all items using indirect bases of allocation that are frequently arbitrary. Neither approach is entirely satisfactory. The first produces segmented information that is incomplete, the second produces segmented information that is a mixture of information that varies widely in objectivity and relevance."

(3) *Pricing of Inter Segment Transactions*: The segments in a diversified company may or may not have substantial amounts of inter segment transactions. A diversified company having disparate segments may have very few inter segment transactions. On the contrary, a diversified enterprise may have closely

integrated segments which would surely have very substantial transactions among themselves. Indeed, there may be segments which have no outside transactions under any circumstances. As compared with the apportionment of common costs, it is relatively easy to price intersegment transactions. Internally, a company will price its transactions between its segments in order to hold the various segments responsible for their activities and operations. An important secondary purpose of the pricing, however, may be to motivate employees, or actually to measure the success of the several segments as accurately as possible. Solomons⁶⁹ has suggested that all interdivisional transfers be made at cost, including a proportionate share of overhead:

“The best procedure seems to be to eliminate interdivisional sales from reports to stockholders. This is really equivalent to saying that all materials or products transferred between divisions shall be transferred at cost, including a proportionate share of overhead. The result will be to leave each division to bear the cost of goods sold to outside customers and it would report sales to outsiders and the cost thereof.”

The market price for pricing inter segment transactions may be more useful for external users as it provides accurate revenue data based on the transactions approach and the realisation concept. Although market values result in a more accurate determination of segment profitability, they are often difficult to determine as no readily available open market transactions exist as a standard against which to measure the price used.

The use of marginal cost (variable costs) tends to understate the revenue of supplying segment. In full cost plus profit margin or negotiated price based on full cost techniques, revenue is recognised by the transferring segment before an outside sale takes place. Sometimes it leads to an inaccurate and premature measure of segment performance. In case the full cost method is used, the profit of the transferring segment happens to be understated because the profit margin likely to be earned on the transfers is not considered. The inclusion of profit margin is possible only when market price technique is used.

No single accounting method is available which may be classified as the most appropriate. If market values are difficult to determine, full cost of the product or a negotiated price is considered an acceptable alternative. Additional research is needed with regard to determination of a suitable method of intersegment transfers. However, segment reporting should not be withheld simply because an appropriate method is not available.

(4) *Comparability of Segment Data:* There is the question of comparability of the data disclosed when (1) apparently similar segments, in different firms may be identified differently; (2) the treatment of inter segment transfers may differ, and common costs may be allocated on different bases. Problems concerning the technical feasibility of segmental reporting may limit its current usefulness in practice, but do not necessarily undermine its potential relevance. Secondly, comparability between segments is not, in any case, an essential goal of segmental reporting. The

main aim is to promote a more informed evaluation of the performance and prospects of each firm, including the prediction of profits and cash flows, so that comparisons can be made at the firm rather than at the segmental level.

(5) *Degree of Integration in Segment Activities:* A more significant argument against segmental reporting can be made where a firm is highly integrated. In the case of a vertically integrated firm, the recognition of external markets for intermediate goods may not always be warranted. Similarly, in the case of a horizontally integrated firm, there may be circumstances where there is a substantial amount of interdependence between activities which are coordinated by management to an extent that the recognition of separate activities cannot be supported. Where a firm's operations are highly integrated and closely coordinated, then it seems unlikely that meaningful segmental reports will result. The problem is how to determine the critical point at which disaggregation no longer becomes justifiable, or segmental reports valuable.

(6) *Costs of Segment Disclosure:* Further arguments against segmental reporting are concerned with the costs of disclosure. The provision of additional information will, undoubtedly, increase a firm's operating costs in terms of the costs of collection, processing, audit and dissemination. A further potential cost is where the company's management control system needs to be adapted to allow the relevant data to be collected. Much will depend on the quantity and quality of data required and the nature of the company's existing control system. It seems likely that, in many instances, management will already be gathering relevant segmental data for its own internal purposes, and it may well be that this can be readily adapted for its external users. The level of disaggregation required seems likely to be an important cost consideration. It can be argued that there must be some limit to the number of segments disclosed and to their related information content. There is also the question of information overload to be taken into account which even in the case of sophisticated investors may eventually have dysfunctional consequences.

Another important cost argument relates to the increased competition that may result from segmental disclosures. It is argued that the disclosure of profitable segments will attract competitors, whilst loss making segments may become the subject of takeover bids or put pressure on management to sell them off, with the purpose of improving profits in the short-term and to take on less risky projects. A competitive disadvantage may also occur where foreign companies are not required to provide segmental reports. In addition, government scrutiny may also be encouraged, especially in the case of multinational companies with possible regulatory or tax consequences. Against these arguments is the public interest in the form of competition as a means to a more efficient allocation of resources in the economy taken as a whole. A key question is, of course, the extent to which competition is seen to be a desirable goal, and the extent to which regulation of disclosure is seen to be necessary to achieve it. This is likely to vary across countries according to the balance of

value judgments at any point in time concerning the costs and benefits involved.

7. *Management Conservatism*: Another argument is that, where there is no regulatory provision to disclose segmental reports, voluntary disclosures are likely to be perceived by managements to be beneficial only in certain instances; for example, where management believes that the company's attractiveness to investors will be enhanced and the costs of finance reduced. Few companies are likely to take voluntary action that may benefit their competitors or reveal weaknesses. Further, where regulations exist but gives too much discretion to management, it tends to be largely ineffective as either there is no disclosure, or where there is, it is of questionable value owing to "conscious manipulation or inadvertent discrimination" in the identification of the segments to be reported.⁷⁰

In summary, there are a number of valid arguments in favour of segment reporting which, in the case of investors, are supported to some degree by empirical research findings. On the other hand, there are situations where segmental reporting may not be meaningful, where there is little stimulus for disclosures to be made, and where the costs may outweigh the benefits. A fundamental problem concerns the evaluation of costs and benefits especially where social objectives inevitably intrude. Any decision to provide or require segmental disclosures must also involve consideration of a further set of problems, including the identification of reportable segments as well as issues of materiality, content, measurement, presentation and audit.

SEGMENT DISCLOSURES BY INDIAN COMPANIES

The Indian Companies Act, 1956 has provision for disclosures of some segmental (product) information in published annual reports such as sales (quantity and values), production (quantity and values), stocks (quantity and values), purchases (quantity and values). Besides, information about licensed capacity and installed capacity for every product is also to be given in the annual reports. It has been found that many diversified Indian companies develop segment information for their managerial planning, control and decisionmaking such as income statement, sales or other gross revenue, cost of goods sold, gross margin on sales, segmented contribution margin, selling expenses, administrative expenses, segmented net profit before tax, segmented balance sheet.

Accounting Standard 17 Segment Reporting (2000) is mandatory in respect of companies who are listed on the stock exchange or who are in the process of issuing equity or debt securities and will be accordingly listed on the stock exchanges in India. Therefore, Indian companies are giving segmental information in compliance with AS-17 Segment Reporting issued by ICAI.

Further, Companies (Amendment) Act 2013 and Ind AS 108 'Operating Segments' (February 2015) are regulating and influencing segmental disclosures in Indian Corporate sector.

To illustrate segmental disclosure practices in India, an example is given here of Bharti Airtel Ltd., and Hindustan Unilever Ltd., for segmental disclosures made by them (Fig. 17.1, Fig. 17.2 respectively).

Segment Reporting for the Fourth Quarter and Year Ended March 31, 2015.

Segment Reporting - Prepared as per International Financial Reporting Standards (IFRS) (as Consolidated Entity)

(In ₹ Million)

Particulars	Quarter Ended March 31, 2015 Audited	Quarter Ended December 31, 2014 Audited	Quarter Ended March 31, 2014 Audited	Year Ended March 31, 2015 Audited	Year Ended March 31, 2014 Audited
1. Segment Revenue					
Net sales / income from each segment					
(a) Mobile Services India	134,135	131,634	120,835	519,636	466,835
(b) Mobile Services South Asia	3,707	3,788	4,488	15,759	17,403
(c) Mobile Services Africa	62,152	68,277	70,623	269,070	272,488
(d) Telemedia Services	11,289	11,171	10,242	44,325	39,352
(e) Airtel Business	17,805	16,177	16,305	67,130	63,361
(f) Digital TV Services	6,347	6,234	5,415	24,759	20,771
(g) Tower Infrastructure Services	13,518	13,692	13,061	54,282	51,087
(h) Others	716	690	717	2,914	3,197
(i) Unallocated	—	—	—	—	—
Total	249,669	251,663	241,686	997,875	934,494
Less: Inter Segment Eliminations	19,514	19,492	19,493	77,481	77,033
Net sales / Income	230,155	232,171	222,193	920,394	857,461
2. Segment Results*					
Profit / (Loss) before tax, net Finance Charges (including exchange fluctuation and related expenses) and exceptional items from each segment					
(a) Mobile Services India	33,955	31,616	25,429	124,703	91,298
(b) Mobile Services South Asia	(1,939)	(1,783)	(1,083)	(6,138)	(4,271)
(c) Mobile Services Africa	1,947	3,188	3,881	11,727	16,983
(d) Telemedia Services	2,849	2,013	1,420	8,689	5,541
(e) Airtel Business	1,542	1,929	2,136	7,713	8,078
(f) Digital TV Services	81	(360)	(1,107)	(1,581)	(4,812)
(g) Tower Infrastructure Services	5,950	5,511	5,465	21,731	16,185
(h) Others	(25)	10	(15)	16	62
(i) Unallocated	330	(437)	(422)	(1,064)	(1,644)
Total	44,690	41,687	35,704	165,796	127,420
Less: Inter Segment Eliminations	(168)	45	290	1	275
Total profit / (loss) before tax, Net Finance Charges (including exchange fluctuation and related expenses) and exceptional items	44,858	41,642	35,414	165,795	127,145
Less: Net Finance Charges (including exchange fluctuation and related expenses)	19,703	10,523	10,030	50,133	49,040
Exceptional Items – Loss / (Gain)	1,469	2,921	1,569	8,532	(538)
Total profit before tax	23,686	28,198	23,815	107.13	78.643
3. Capital Employed					
(Segment assets – Segment liabilities)					
(a) Mobile Services India	842,718	798,584	718,552	842,718	718,552
(b) Mobile Services South Asia	18,340	21,851	11,087	18,340	11,087
(c) Mobile Services Africa	475,393	527,153	629,398	475,393	629,398
(d) Telemedia Services	54,754	52,116	46,700	54,754	46,700
(e) Airtel Business	81,321	81,273	75,301	81,321	75,301
(f) Digital TV Services	(35,425)	(35,368)	(33,317)	(35,425)	(33,317)
(g) Tower Infrastructure Services	186,788	181,032	183,527	186,798	183,527
(h) Others	335	(333)	(314)	(335)	(314)
(i) Unallocated (net of eliminations)*	(955,465)	(973,457)	(991,272)	(955,465)	(991,272)
Total	668,089	652,851	639,662	668,089	639,662

Figure 17.1 : Bharti Airtel Ltd.

*Comprises borrowings, including borrowings for acquisition of Africa operations and other borrowings of Africa operations of Rs. 554,776 Mn (USD 8.86 Bn), Rs. 572,524 Mn (USD 9.04 Bn) and Rs. 640,237 Mn (USD 10.65 Bn), for 3G and BWA licenses (including spectrum) of Rs. 45,153 Mn, Rs. 30,153 Mn and Rs. 70,900 Mn as of March 31, 2015, December 31, 2014 and March 31, 2014, respectively, provision for taxes, deferred tax asset / liabilities and fair value of derivative financial instruments.

\$ Segment results include share of (loss) / gain in joint ventures associates.

Source: Mint, New Delhi, April 29, 2015.

Segment Reporting for the Year Ended March 31, 2015.
SEGMENT WISE REVENUE, RESULTS AND CAPITAL EMPLOYED

(₹ in Lakhs)

STAND-ALONE				STAND-ALONE		CONSOLIDATED	
Unaudited Results for the Quarter ended 31st March		Unaudited Results for the Quarter ended 31st December	Particulars	Audited Results for the Year ended 31st March		Audited Results for the Year ended 31st March	
2015	2014	2014		2015	2014	2015	2014
			Segment Revenue (Sales and other operating income)				
367,371	349,712	360,022	– Soaps and Detergents	1,487,661	1,368,341	1,487,650	1,368,341
224,968	198,329	245,455	– Personal Products	900,653	812,091	910,003	819,436
97,615	86,904	91,965	– Beverages	363,149	331,186	363,126	331,186
47,683	41,968	41,988	– Packaged Foods	189,180	164,830	189,180	164,830
29,470	29,579	35,350	– Others (includes Exports, Water, Infant Care Products, etc)	131,291	115,630	239,201	230,631
767,107	706,492	774,780	Total Segment Revenue	3,071,934	2,792,078	3,189,160	2,914,424
—	—	—	Less: Inter Segment Revenue	—	—	—	—
767,107	706,492	774,780	Net Segment Revenue	3,071,934	2,792,078	3,189,160	2,914,424
			Segment Results (Profit before tax and interest from ordinary activities)				
48,825	42,171	50,241	– Soaps and Detergents	203,365	178,581	206,550	180,234
62,452	49,581	68,091	– Personal Products	242,435	206,806	242,353	205,677
18,161	16,304	14,100	– Beverages	61,456	58,069	61,456	58,069
2,540	2,296	(2,126)	– Packaged Foods	8,317	6,126	8,317	6,126
(783)	(2,505)	(376)	– Others (includes Exports, Water, Infant Care Products, etc)	(1,548)	(3,700)	19,610	20,533
131,195	107,847	129,930	Total Segment Results	514,025	445,882	538,286	470,639
—	(533)	(424)	Less: Finance Costs	(1,682)	(3,603)	(1,770)	(4,068)
21,352	14,997	47,577	Add/(Less): Other unallocable income net of unallocable expenditure	106,399	60,560	95,435	54,947
152,547	122,311	177,083	Total Profit Before Tax from ordinary activities	618,742	502,839	631,951	521,518
			Capital Employed (Segment assets less Segment liabilities)				
(12,333)	(23,091)	(49,817)	– Soaps and Detergents	(12,333)	(23,091)	5,237	(9,866)
(42,760)	(47,509)	(77,545)	– Personal Products	(42,760)	(47,509)	(38,535)	(46,313)
37,720	34,735	5,234	– Beverages	37,720	34,735	37,720	34,735
21,592	17,428	14,054	– Packaged Foods	21,592	17,428	21,592	17,428
(2,457)	(2,160)	(375)	– Others (includes Exports, Water, Infant Care Products, etc)	(2,457)	(2,160)	30,787	26,788
1,762	(20,597)	(108,449)	Total Capital Employed in segments	1,762	(20,597)	56,801	22,772
370,716	348,302	611,479	Add: Unallocable corporate assets less corporate liabilities	370,716	348,302	347,842	333,185
372,478	327,705	503,030	Total Capital Employed	372,478	327,705	404,643	355,957

Figure 17.2: Hindustan Unilever Ltd.

Notes on Segment Information:

1. Segment Revenue, Results and Capital Employed figures represent amounts identifiable to each of the segments. Other “unallocable income net of unallocable expenditure” mainly includes interest, dividend, gain on sale of investments (net), expenses on common services not directly identifiable to individual segments, corporate expenses and exceptional items.

Capital Employed figures are as at 31st March, 2015, 31st March, 2014 and 31st December, 2014. Unallocable corporate assets less corporate liabilities mainly represent investment of surplus funds and cash and bank.

2. Previous period figures have been re-grouped/reclassified wherever necessary, to conform to this period’s classification.

Source: The Time of India, May, 10, 2015, p. 19.

REFERENCES

1. George H. Sorter and Martin S. Gams, Objectives of Financial Statements, Supplement to *Journal of Accounting Research*, 1974, p. 8.
2. Financial Accounting Standards Board, Financial Reporting for Segments of a Business Enterprise, FAS No. 14, FASB, 1976, para 59.
3. The conglomerate company, in general usage, is used more and more in the restricted sense to describe diversified companies containing disparate components typically obtained through business acquisitions.
4. R.K. Mautz, Financial Reporting by Diversified Companies, New York, Financial Executives Research Foundation, 1968, p. 67.
5. R.K. Mautz, *ibid.*, p. 154.
6. Malcolm, C. Miller and Mark R. Scott, *Financial Reporting by Segments*, Melbourne, Australian Accounting Research Foundation, Discussion Paper No. 4, 1980, p. 3.
7. Financial Accounting Standards Board, Statement of Financial Accounting Standards No. 14, *Financial Reporting for Segments of a Business Enterprise*, Stamford, FASB, December 1976, para 5.
8. William H. Beaver, *Financial Reporting: An Accounting Revolution*, New Jersey, Prentice Hall Inc., Englewood Cliffs, 1981, p. 51.
9. Financial Accounting Standards Board, Statement of Financial Accounting Standards No. 14, *ibid.*, para 60.
10. Duff and Phelps Inc., *A Management Guide to Better Financial Reporting: Ideas for Strengthening Reports to Shareholders and the Financial Analyst's Perspective of Financial Reporting Practices*, Arthur Anderson & Co., 1976, pp. 64-65.
11. W.R. Jr. Kinney, "Predicting Earnings: Entity Versus Subentity Data," *Journal of Accounting Research* (Spring 1971).
12. R. Korchanek, "Segmental Financial Disclosure and Security Prices," *The Accounting Review* (April 1974).
13. D. Collins, "SEC Product Line Reporting and Market Efficiency," *Journal of Financial Economics* (June 1975).
14. Bruce A. Baldwin, "Segmented Earnings and the Ability of Security Analysts to Forecast Earning Per Share," *Accounting Review* (July 1984), pp. 376389.
15. B. Horwitz and R. Kolodny, "Line of Business Reporting and Security Prices: An Analysis of an SEC Disclosure Rule," *The Bell Journal of Economics* (Spring 1977).
16. R.R. Simonds and D.W. Collins, "Line of Business Reporting and Security Prices: An Analysis of an SEC Disclosure Rule: Comment" *The Bell Journal of Economics* (Autumn 1978).
17. D.S. Dhaliwal, B.H. Spicer and D. Vickrey, "The Quality of Disclosure and the Cost of Equity Capital," *Journal of Business Finance and Accounting* (Summer 1979).
18. (a) Organisation for Economic Cooperation and Development, *International Investment and Multinational Enterprises*, Paris, 1976 (b) United Nations, *International Standards of Accounting and Reporting for Transitional Corporations*, New York, 1972.
19. R.W. Gibson, "Reporting on Diversified Companies," *Accounting Education* (May 1974).
20. Financial Accounting Standards Board, *Qualitative Characteristics: Criteria for Selecting and Evaluating Financial Accounting and Reporting Policies*, Proposed Statement of Financial Accounting Concepts, Stamford, FASB, 1979.
21. A.M. Mirza, "A Survey of Company Managements Views on Segment Reporting," *The Chartered Accountant in Australia* (April 1978).
22. Morton Backer and Walter B. McFarland *External Reporting for Segments of a Business*, New York, National Association of Accountants, 1968, p. 8.
23. Malcolm C. Miller and Mark R. Scott, *Financial Reporting by Segments*, Melbourne, Australian Accounting Research Foundation, 1980, p. 8.
24. Financial Accounting Standards Board, *Objectives of Financial Reporting by Business Enterprises*, Statement of Financial Accounting Concept No. 1, 1978, para 34.
25. (a) R. Thomas Dyckman, *et al*, *Efficient Capital Markets and Accounting*, New Jersey, Prentice Hall Inc., 1975.
(b) Baruch Lev, *Financial Statement Analysis—A New Approach* New Jersey, Prentice Hall Inc., 1974.
(c) R.K. Mautz and William G. May, *Financial Disclosure in Competitive Economy*, New York, Financial Executive Research Foundation, 1978.
(d) Surendra S. Singhvi and Harsh B. Desai, "An Empirical Study of the Quality of Corporate Financial Disclosure," *The Accounting Review* (January 1971), pp. 129138.
26. Financial Accounting Standards Board, *Qualitative Characteristics: Criteria for Selecting and Evaluating Financial Accounting and Reporting Policies*, Stamford, FASB, 1979, para 54.
27. Accounting Principles Board, Statement No. 4, *Basic Concepts and Accounting Principles underlying Financial Statements of Business Enterprises*, New York, AICPA, para 90.
28. Financial Accounting Standards Board, Statement No. 14, *ibid.*, December 1976, para 64.
29. Bertrand Horwitz and Richard Kolodny, *Financial Reporting Rules and Corporate Decisions: A Study of Public Policy*, Jai Press Inc. 1982, p. 88.
30. International Accounting Standards Committee, *Reporting Financial Information by Segments*, 1981, para 8.
31. The Institute of Chartered Accountants in England and Wales, *Analysed Reporting*, London, I.C.W.A., 1977, p. 64.
32. Duff and Phelps Inc., *A Management Guide to Better Financial Reporting*, Arthur Anderson & Co., 1976, p. 66.
33. R.K. Mautz and William G. May, *Financial Disclosure in Competitive Economy*, New York, Financial Executives Research Foundation, 1978, p. 76.
34. A. Rappaport and E.M. Lerner, *Segment Reporting for Managers and Investors*, New York, National Association of Accountants, 1972, p. 7.
35. International Accounting Standards Committee Statement No. 14 Reporting Financial Information by Segments, IAS, August 1981, para 5.
36. Arthur A. Thompson, Jr. *et al.*, *Strategic Management, Concepts and Cases*, Texas, Business Publications, 1984, p. 201.
37. R.K. Mautz, "Bases for More Detailed Reporting by Diversified Companies," *Financial Executive* (Nov. 1967), p. 58.
38. Accountants International Study Group, *Reporting by Diversified Companies*, 1972, para 35.

39. Accounting Standards Board, AS-17, Segment Reporting, ICAI, October 2000, p. 3.
40. The Institute of Chartered Accountants in England and Wales, *Analysed Reporting*, London, ICAEW, 1977, p. 39.
41. Canadian Institute of Chartered Accountants, Section 1700, Segmented Information, CICA, April 1979.
42. C.R. Emmanuel and S.J. Gray, "Corporate Diversification and Segmental Disclosure Requirements in the USA." *Journal of Business Finance and Accounting* (Winter 1977), p. 416.
43. Financial Accounting Standards Board, *An Analysis of Issues Related to Financial Reporting for Segment of a Business Enterprise*, FASBDM, 1974, p. 16.
44. D.F. Hawkins, *Corporate Financial Reporting* Homewood, Richard D. Irwin, 1977, p. 700.
45. D.F. Hawkins, *ibid.*, p. 699.
46. Accounting Standards Board, AS-17, Segment Reporting, ICAI, Oct., 2000. p. 3.
47. Canadian Institute of Chartered Accountants, *Segmented Information*, Section 1700, CICA, April, 1979.
48. Financial Accounting Standards Board, Statement No. 14, *ibid.*, December 1976, para 31.
49. Ernst and Whimney, *Financial Reporting Developments*, FASB Statements, 1978, p. 214.
50. C.R. Emmanuel and S.J. Gray, "Segmental Disclosure and the Segment Identification Problem," *Accounting and Business Research* (Winter 1977), p. 46.
51. International Accounting Standards Committee, Statement No. 14, *Reporting Financial Information by Segments*, IAS, August 1982, para 9.
52. R.K. Mautz, *Financial Reporting by Diversified Companies*, New York, Financial Executives Research Foundation 1968, p. 127.
53. Morton Backer and W.B. Meferland, *External Reporting for Segments of a Business*, New York, National Association of Accountants, 1968, p. 21.
54. A Rappaport, and E.M. Lerner, *Segment Reporting for Managers and Investors*, New York, National Association of Accountants, 1972, p. 12.
55. R.K. Mautz, *Financial Reporting by Diversified Companies*, New York, Financial Executives Research Foundation, 1968, p. 41.
56. International Accounting Standards Committee, Standard No. 14, *Reporting Financial Information by Segments*, IAS, August, 1981 para 11.
57. R.K. Mautz, *ibid.*, 1968, p. 158.
58. Accounting Standards Board, AS-17, Segment Reporting, *ibid.*, pp. 917.
59. International Accounting Standards Committee, Standard No. 14, *ibid.*, para 4.
60. Financial Accounting Standards Board, *An Analysts of Issues Related to Financial Reporting for Segments of a Business*, DM, FASB, 1974, p. 27.
61. Financial Accounting Standards Board, Statement No. 14, *ibid.*, Dec. 1976, p. 37.
62. Arthur Anderson and Co., *Disclosure of Segment Information in 1977 Annual Reports: Analysis and Comments*, 1978, p. 28.
63. International Accounting Standards Committee, *Reporting Financial Information by Segments*, Standard No. 14, August 1981, para 18.
64. A Rappaport and E.M. Lerner, *Segment Reporting for Managers and Investors* New York, National Association of Accountants, 1972, pp. 1618.
65. L.D. Brown "Accounting Changes and the Accuracy of Analysts' Earnings Forecasts," *Journal of Accounting Research* (Autumn 1983) pp. 432-443.
66. Morton Backer, "Financial Reporting and Security Investment Decision", *Financial Analysis Journal* (March 1971), p. 70.
67. James A. Johnson, "Business Segments", *ibid.*
68. Accountants International Study Group, *Reporting by Diversified Companies*, 1972, para 38.
69. David Solomons, *Divisional Performance. Measurement and Control*, New York, Financial Executive, Research Foundation, 1965.
70. C.R. Emmanuel and S.J. Gray, *ibid.*

QUESTIONS

1. What do you mean by a 'diversified company'. Do you think investment decisions with regard to diversified companies present some specific problems? Give arguments.
2. How does segmental data contribute to better investment decisionmaking?
3. List the users who can derive benefits from segmental information if provided in company annual reports.
4. What are the difficulties in providing segmental disclosures in published annual reports?
5. What is segment reporting? What are the benefits of segmental disclosures?
6. How are corporate enterprises benefited from segment reporting?
7. Discuss the arguments against segment reporting.
8. Discuss the different bases used for segmenting a diversified company.
9. Explain as to which base of segmentation is appropriate for segment reporting?
10. Discuss the suitability of following bases of segmentation:
 - (i) Industry segments
 - (ii) Geographical segments
 - (iii) Market structure.
11. How is a segment identified for the purpose of segment reporting?
12. Discuss fully segmental disclosures to be made by Indian companies for the benefit of Indian investors.
13. What segment policies need to be reported by companies?
14. Explain the difficulties involved in segment reporting
15. What do US and UK accounting standards provide on segment reporting?
16. Discuss the salient features of AS-17 Segment Reporting.
17. Explain the similarities and dissimilarities between Indian and US accounting standard on segment reporting.
18. How does AS-17 Segment Reporting differ from UK accounting standard on segment reporting?
19. Discuss the provisions of AS-17 with regard to
 - (i) Primary and Secondary Segments
 - (ii) Business and Geographical segments.

20. Explain the concept of reportable segment.
21. What segment accounting policies have been suggested for disclosure in segment reports?
22. Discuss fully the contents of primary reporting format as per AS-17.
23. Explain Secondary segment information as per AS-17.
24. Discuss segmental disclosure practices adopted by Indian companies. Give suggestions, if any to improve them.
25. What are the difficulties in providing segmental information in company annual reports?
(M.Com., Delhi 1994, 1995, 1997)
26. Discuss the developments taken place in the area of segment reporting.
(M.Com., Delhi, 1996)
27. What is a reportable segment? What is the test to determine if enough industry segments have been separately reported upon and what is the guideline on the maximum number of industry segments to be shown? Answer the above question in the light of the provisions contained in the standard issued by the ICAI?
(M.Com., Delhi, 2001)
28. Discuss the utility of segment reporting in company financial reporting. Explain fully the salient features of AS-17 Segment Reporting.
(M.Com., Delhi, 2007, 2008)
29. Explain clearly the need for segment reporting.
(M.Com., Delhi, 2000)
30. Discuss the recommendations of AS-17 Segment Reporting on 'Identifying Reportable Segments'.
31. Explain the concept of primary and secondary segment reporting formats as per AS-17 segment reporting.
32. What are the provisions of AS-17 Segment Reporting with regard to Business and Geographical Segments?
33. Write an explanatory note on segment accounting policies in segment reports.
34. Discuss segmental disclosures that should be reported in company annual reports.

MULTIPLE CHOICE QUESTIONS

Select the correct answer for the following multiple choice questions:

1. Taylor company assesses performance and makes operating decisions using the following information for its reportable segments:

Total revenues	₹ 7,68,000
Total profit and loss	40,600

 Included in the total profit and loss are intersegment profits of ₹ 6,100. In addition, Taylor has ₹ 500 of common costs for its

reportable segments that are not allocated in reports used internally. For purposes of segment reporting, Taylor should report segment profit of

- (a) ₹ 35,000
- (b) ₹ 34,500
- (c) ₹ 41,100
- (d) ₹ 40,600

Ans. (d)

2. An enterprise must disclose all of the following about each reportable segment if the amounts are used by the chief operating decision maker, except
 - (a) Depreciation expense
 - (b) Allocated expenses.
 - (c) Interest expense.
 - (d) Incometax expense.
3. In financial reporting for segments of a business, an enterprise shall disclose all of the following except
 - (a) Types of products and services from which each reportable segment derives its revenues.
 - (b) The title of the chief operating decision maker of each reportable segment.
 - (c) Factors used to identify the enterprises reportable segments.
 - (d) The basis of measurement of segment profit or loss and segment assets.

Ans. (b)

4. In financial reporting for segments of a business enterprise, segment data may be aggregated
 - (a) Before performing the 10% tests if a majority of the aggregation criteria are met.
 - (b) If the segments do not meet the 10% tests but meet all of the aggregation criteria.
 - (c) Before performing the 10% tests if all of the aggregation criteria are met.
 - (d) If any one of the aggregation criteria are met.
5. The method used to determine what information to report for business segments is referred to as the
 - (a) Segment approach.
 - (b) Operating approach.
 - (c) Enterprise approach.
 - (d) Management approach.

Ans. (c)

5. The method used to determine what information to report for business segments is referred to as the

- (a) Segment approach.
- (b) Operating approach.
- (c) Enterprise approach.
- (d) Management approach.

Ans. (d)



Interim Reporting

NEED FOR INTERIM REPORTING

In a dynamic business environment, with the increased scope and complexity of business enterprises, annual data are insufficient to evaluate developments in general economic, industry, and company activities and making or revising projections of earnings and financial position as a basis for investment decisions. Investment decisions are made on the basis of information disclosed in company annual reports. These economic decisions are made throughout the year rather than at yearend reporting dates. Although annual reporting has been accepted by accountants and/or law, investment decisions based on financial data are made daily and require current financial information. No doubt the annual report will continue as a report on management's stewardship for the full year and a benchmark for measurement of financial progress over several years. But neither the dynamics of the internal organisation, nor outside economic forces stop and start over at each new accounting year. Therefore, it is suggested that company financial reporting should continuously measure and report on the firm's progress and provide information on a less than annual basis for the benefit of shareholders and other external users. An important research study by Schiff¹ concludes:

"Interim income numbers are the important ones and the annual income number provides merely a confirmation of the previously reported numbers. The central thrust for the development of accounting and reporting standards should be directed to interim reporting and modification in annual reporting standards should be made to accommodate the interim period. The interim period is a fraction of the annual period, much as the annual period is a fraction of the entity's life. The problem of integral vs. discrete is, therefore, viewed as a nonproblem..."

The FASB's (USA) Discussion Memorandum² has found the following five possible objectives and uses for interim reporting:

1. To estimate annual earnings.
2. To make projections.
3. To identify turning points.
4. To evaluate management performance.
5. To supplement the annual report.

Accounting Standards (AS-25), 'Interim Financial Reporting' issued by ICAI in February 2002 observes:

"Timely and reliable interim financial reporting improves the ability of investors, creditors and others to understand an enterprise's capacity, to generate earnings and cash flows, its financial condition and liquidity."

AS-25 comes into effect in respect of accounting periods commencing on or after April 1, 2002. The objectives of AS-25 is to prescribe the minimum content of an interim financial report and to prescribe the principles for recognition and measurement in a complete or condensed financial statements for an interim period.

SEBI'S GUIDELINES ON INTERIM REPORTING

Based on the Bhav Committee's recommendations, the SEBI issued the guidelines on February 4, 2000 requiring the stock exchanges to amend the listing agreements to incorporate quarterly financial reporting. The main features of SEBI's guidelines are as follows:

- (1) A company should furnish unaudited financial result on a quarterly basis in the prescribed proforma within one month of the expiry of the period to the Stock Exchange and will make an announcement forthwith to the Stock Exchanges where the company is listed and also within 48 hours of the conclusion of the Board Meeting at least in one English daily newspaper circulating in the whole or substantially the whole of India and in a newspaper published in the language of the region, where the registered office of the company is situated.
- (2) The Board of Directors should take on record the unaudited quarterly results which shall be signed by the Managing Director/Director. The Company shall inform the Stock Exchange where its securities are listed about the date of the aforesaid Board Meeting at least 7 days in advance and shall also issue immediately a press release in at least one national newspaper and one regional language newspaper about the date of the aforesaid Board Meeting.
- (3) The unaudited result should not differ substantially from the audited result of the company. If the sum of four quarters as regards any items differs more than 20 per cent when compared to its full year figure, the company shall explain the reason of such variance.
- (4) In addition, a company has to prepare half yearly results in the same *pro forma*. The half yearly results are subject to limited audit review by the auditors of the company. The meaning and scope of the limited audited review is not explained. The limited audit review report should be submitted to the stock exchange within two months after the close of the half year.

(5) If the sum of the first and second quarterly unaudited results in respect of any item given in the same proforma format varies 20 per cent or more from the respective half yearly results as determined after limited audit review, the company has to prepare statement explaining reasons thereof. Such an explanatory statement should be approved by the Board of Directors and should be submitted to the Stock Exchange along with the Limited Audit Review Report.

(6) If a company intimates the stock exchange in advance that it will publish its audited result within a period of three months from the end of the financial year, then there is no need to publish the results of the last quarter.

Notes attached to the Specimen Quarterly Financial Reporting format further requires that—

- (a) Any material event or transaction like strike, completion of diversification or expansion programme, which have material impact in understanding quarterly result should be separately disclosed. Any such material event or transaction which occurred subsequent to the end of the quarter and the effect of which is not reflected in the quarterly results should also be disclosed.
- (b) Items of nonrecurring or abnormal items of gain/loss should be disclosed separately.
- (c) Effect of changes in accounting policies should be disclosed separately.
- (d) In case of companies whose revenues are subject to seasonal variations, it is necessary to provide financial results for a period of twelve months ending on the last day of the quarter for the current and preceding years on a rolling basis.
- (e) Dividend information.
- (f) Effect of change in the composition of the company during the quarter. Such changes may occur because of acquisition, or disposal of subsidiaries, business combination or restructuring.
- (g) It is necessary to disclose the audit qualification, if any, on the previous year's accounts alongwith the quarterly results. It should also give explanation as to how such qualifications has been addressed in the unaudited financial results.
- (h) The company, which is yet to commence commercial production, should give particulars about the status of the project, its implementation and expected date of commissioning. This should be given in lieu of the quarterly results.
- (i) The unaudited results should be prepared on the basis of same set of accounting policies which have been followed in the preparation of the financial statements of the previous year. In case there is a change in the accounting policy, the result of the

previous year should be recast to make it comparable with the current year's result.

The SEBI's other provisions on interim financial reporting are as follows:

(i) *Statement of variations between projected fund utilisation and profitability*—The SEBI has further improved the quarterly report including a statement of variations between projected and actual utilization of funds and profitability of a company. Companies project its fund utilization and profitability in the prospectus or offer letter while raising funds and subsequently validity of such projections are not assessed.

It is required that listed companies should furnish on quarterly basis a statement to the exchange indicating the variations between projected and actual utilization of funds and profitability. The statement should include information as regards projections given in each year. It should be published alongwith audited and unaudited results. It is necessary to provide an explanation in case the variation is material. This explanation should also be included in the Director's Report.

(ii) *Enforcement of corporate governance*—The SEBI also required to submit quarterly compliance report on the corporate governance.

(iii) *Option to publish audited half yearly results*—A listed company has the option to publish audited half yearly results within two months from the end of the half year along with the limited audit review instead of publishing unaudited quarterly results.

(iv) *Disclosure of non-promoter shareholding in the half yearly financial results*—A listed company is required to furnish aggregate non-promoter shareholding in half yearly results commencing from the half year ended on or after March 31, 2001.

(v) *Quarterly disclosure of companies which are yet to commence commercial production*—These companies are required to make additional disclosure about the unutilized amount of monies raised and form of investment of such amount.

(vi) *Quarterly segment report*—Companies are required to furnish quarterly segment report in the prescribed format in respect of all the companies including companies whose accounting year has commenced before April 01, 2001, segment information prescribed under clause 41 shall be given for the quarters ending on or after September 30, 2001.

(vii) *Compliance with accounting for taxes on income*—Companies are required to follow accounting standard on "Accounting for Taxes on Income" in respect of the quarterly unaudited financial results with effect from the quarters ending on and from September 30, 2001.

- (viii) *Optional quarterly consolidated financial results*—A parent company may publish consolidated quarterly financial results in addition to its own quarterly financial results.

INDIAN ACCOUNTING STANDARD (IND AS) 34 ON INTERIM FINANCIAL REPORTING

1. Objective

The objective of this Standard is to prescribe the minimum content of an interim financial report and to prescribe the principles for recognition and measurement in complete or condensed financial statements for an interim period. Timely and reliable interim financial reporting improves the ability of investors, creditors, and others to understand an entity's capacity to generate earnings and cash flows and its financial condition and liquidity.

2. Scope

(1) This Standard does not mandate which entities should be required to publish interim financial reports, how frequently, or how soon after the end of an interim period. However, governments, securities regulators, stock exchanges, and accountancy bodies often require entities whose debt or equity securities are publicly traded to publish interim financial reports*. This Standard applies if an entity is required or elects to publish an interim financial report in accordance with Indian Accounting Standards (Ind ASs).

(2) Each financial report, annual or interim, is evaluated on its own for conformity to Ind ASs. The fact that an entity may not have provided interim financial reports during a particular financial year or may have provided interim financial reports that do not comply with this Standard does not prevent the entity's annual financial statements from conforming to Ind ASs if they otherwise do so.

3. Definitions

Interim period is a financial reporting period shorter than a full financial year.

Interim financial report means a financial report containing either a complete set of financial statements (as described in Ind AS 1, *Presentation of Financial Statements*, or a set of condensed financial statements (as described in this Standard) for an interim period.

4. Content of an interim financial report

Ind AS 1 defines a complete set of financial statements as including the following components:

- (a) a balance sheet as at the end of the period;

- (b) a statement of profit and loss for the period;
(c) a statement of changes in equity for the period;
(d) a statement of cash flows for the period;
(e) notes, comprising a summary of significant accounting policies and other explanatory information;
(ea) comparative information in respect of the preceding period.
(f) a balance sheet as at the beginning of the preceding period when an entity applies an accounting policy retrospectively or makes a retrospective restatement of items in its financial statements, or when it reclassifies items in its financial statements.

In the interest of timeliness and cost considerations and to avoid repetition of information previously reported, an entity may be required to or may elect to provide less information at interim dates as compared with its annual financial statements. The interim financial report is intended to provide an update on the latest complete set of annual financial statements. Accordingly, it focuses on new activities, events, and circumstances and does not duplicate information previously reported.

Nothing in this Standard is intended to prohibit or discourage an entity from publishing a complete set of financial statements (as described in Ind AS 1) in its interim financial report, rather than condensed financial statements and selected explanatory notes. Nor does this Standard prohibit or discourage an entity from including in condensed interim financial statements more than the minimum line items or selected explanatory notes as set out in this Standard.

Minimum components of an interim financial report

An interim financial report shall include, at a minimum, the following components:

- (a) a condensed balance sheet
(b) a condensed statement of profit and loss;
(c) a condensed statement of changes in equity;
(d) a condensed statement of cash flows; and
(e) selected explanatory notes.

Form and content of interim financial statements

If an entity publishes a complete set of financial statements in its interim financial report, the form and content of those statements shall conform to the requirements of Ind AS 1 for a complete set of financial statements.

If an entity publishes a set of condensed financial statements in its interim financial report, those condensed statements shall include, at a minimum, each of the headings and subtotals that were included in its most recent annual financial statements and the selected explanatory notes as required by this Standard. Additional line items or notes shall be included if their omission would make the condensed interim financial statements misleading.

*Unaudited Financial Results required to be prepared and presented under Clause 41 of Listing Agreement with stock exchanges is not an 'Interim Financial Report' as defined in paragraph 4 of this Standard

In the statement that presents the components of profit or loss for an interim period, an entity shall present basic and diluted earnings per share for that period when the entity is within the scope of Ind AS 33, *Earnings per Share*.

An interim financial report is prepared on a consolidated basis if the entity's most recent annual financial statements were consolidated statements. The parent's separate financial statements are not consistent or comparable with the consolidated statements in the most recent annual financial report. If an entity's annual financial report included the parent's separate financial statements in addition to consolidated financial statements, this Standard neither requires nor prohibits the inclusion of the parent's separate statements in the entity's interim financial report.

Significant events and transactions

An entity shall include in its interim financial report an explanation of events and transactions that are significant to an understanding of the changes in financial position and performance of the entity since the end of the last annual reporting period. Information disclosed in relation to those events and transactions shall update the relevant information presented in the most recent annual financial report.

The following is a list of events and transactions for which disclosures would be required if they are significant: the list is not exhaustive.

- (a) the write-down of inventories to net realisable value and the reversal of such a write-down;
- (b) recognition of a loss from the impairment of financial assets, property, plant and equipment, intangible assets, assets arising from contracts with customers, or other assets, and the reversal of such an impairment loss;
- (c) the reversal of any provisions for the costs of restructuring;
- (d) acquisitions and disposals of items of property, plant and equipment;
- (e) commitments for the purchase of property, plant and equipment;
- (f) litigation settlements
- (g) corrections of prior period errors;
- (h) changes in the business or economic circumstances that affect the fair value of the entity's financial assets and financial liabilities, whether those assets or liabilities are recognised at fair value or amortised cost;
- (i) any loan default or breach of a loan agreement that has not been remedied on or before the end of the reporting period;
- (j) related party transactions;
- (k) transfers between levels of the fair value hierarchy used in measuring the fair value of financial instruments;

- (l) changes in the classification of financial assets as a result of a change in the purpose or use of those assets; and

- (m) changes in contingent liabilities or contingent assets.

Other Disclosures

In addition to disclosing significant events and transactions, an entity shall include the following information, in the notes to its interim financial statements, if not disclosed elsewhere in the interim financial report. The information shall normally be reported on a financial year-to-date basis.

- (a) a statement that the same accounting policies and methods of computation are followed in the interim financial statements as compared with the most recent annual financial statements or, if those policies or methods have been changed, a description of the nature and effect of the change.
- (b) explanatory comments about the seasonality or cyclicity of interim operations.
- (c) the nature and amount of items affecting assets, liabilities, equity, net income or cash flows that are unusual because of their nature, size or incidence.
- (d) the nature and amount of changes in estimates of amounts reported in prior interim periods of the current financial year or changes in estimates of amounts reported in prior financial years.
- (e) issues, repurchases and repayments of debt and equity securities.
- (f) dividends paid (aggregate or per share) separately for ordinary shares and other shares.
- (g) the following segment information (disclosure of segment information is required in an entity's interim financial report only if Ind AS 108, *Operating Segments*, requires that entity to disclose segment information in its annual financial statements):
 - (i) revenues from external customers, if included in the measure of segment profit or loss reviewed by the chief operating decision maker or otherwise regularly provided to the chief operating decision maker.
 - (ii) intersegment revenues, if included in the measure of segment profit or loss reviewed by the chief operating decision maker or otherwise regularly provided to the chief operating decision maker.
 - (iii) a measure of segment profit or loss.
 - (iv) a measure of total assets and liabilities for a particular reportable segment if such amounts are regularly provided to the chief operating decision maker and if there has been a material change from the amount disclosed in the last annual financial statements for that reportable segment.

- (v) a description of differences from the last annual financial statements in the basis of segmentation or in the basis of measurement of segment profit or loss.
- (vi) a reconciliation of the total of the reportable segments' measures of profit or loss to the entity's profit or loss before tax expense (tax income) and discontinued operations. However, if an entity allocates to reportable segments items such as tax expense (tax income), the entity may reconcile the total of the segments' measures of profit or loss to profit or loss after those items. Material reconciling items shall be separately identified and described in that reconciliation.
- (h) events after the interim period that have not been reflected in the financial statements for the interim period.
- (i) the effect of changes in the composition of the entity during the interim period, including business combinations, obtaining or losing control of subsidiaries and long-term investments, restructurings, and discontinued operations. In the case of business combinations, the entity shall disclose the information required by Ind AS 103, *Business Combinations*.
- (j) for financial instruments, the disclosures about fair value required.
- (k) for entities becoming, or ceasing to be, investment entities, as defined in Ind AS 110, *Consolidated Financial Statements*, the disclosures in Ind AS 112, *Disclosure of Interests in Other Entities*.
- (l) the disaggregation of revenue from contracts with customers required.
- (c) statement of changes in equity cumulatively for the current financial year to date, with a comparative statement for the comparable year-to-date period of the immediately preceding financial year.
- (d) statement of cash flows cumulatively for the current financial year to date, with a comparative statement for the comparable year-to-date period of the immediately preceding financial year.

For an entity whose business is highly seasonal, financial information for the twelve months up to the end of the interim period and comparative information for the prior twelve-month period may be useful. Accordingly, entities whose business is highly seasonal are encouraged to consider reporting such information in addition to the information called for as per this standard.

5. Materiality

In deciding how to recognise, measure, classify, or disclose an item for interim financial reporting purposes, materiality shall be assessed in relation to the interim period financial data. In making assessments of materiality, it shall be recognized that interim measurements may rely on estimates to a greater extent than measurements of annual financial data.

Ind AS 1 and Ind AS 8, *Accounting Policies, Changes in Accounting Estimates and Errors*, define an item as material if its omission or misstatement could influence the economic decisions of users of the financial statements. Ind AS 1 requires separate disclosure of material items, including (for example) discontinued operations, and Ind AS 8 requires disclosure of changes in accounting estimates, errors, and changes in accounting policies. The two Standards do not contain quantified guidance as to materiality.

While judgement is always required in assessing materiality, this Standard bases the recognition and disclosure decision on data for the interim period by itself for reasons of understandability of the interim figures. Thus, for example, unusual items, changes in accounting policies or estimates, and errors are recognised and disclosed on the basis of materiality in relation to interim period data to avoid misleading inferences that might result from non-disclosure. The overriding goal is to ensure that an interim financial report includes all information that is relevant to understanding an entity's financial position and performance during the interim period.

6. Disclosure in annual financial statements

If an estimate of an amount reported in an interim period is changed significantly during the final interim period of the financial year but a separate financial report is not published for that final interim period, the nature and amount of that change in estimate shall be disclosed in a note to the annual financial statements for that financial year.

Disclosure of compliance with Ind ASs

If an entity's interim financial report is in compliance with this Standard, that fact shall be disclosed. An interim financial report shall not be described as complying with Ind ASs unless it complies with all of the requirements of Ind ASs.

Periods for which interim financial statements are required to be presented

Interim reports shall include interim financial statements (condensed or complete) for periods as follows:

- (a) balance sheet as of the end of the current interim period and a comparative balance sheet as of the end of the immediately preceding financial year.
- (b) statements of profit and loss for the current interim period and cumulatively for the current financial year to date, with comparative statements of profit and loss for the comparable interim periods (current and year-to-date) of the immediately preceding financial year.

7. Recognition and measurement

Same accounting policies as annual

An entity shall apply the same accounting policies in its interim financial statements as are applied in its annual financial statements, except for accounting policy changes made after the date of the most recent annual financial statements that are to be reflected in the next annual financial statements. However, the frequency of an entity's reporting (annual, half-yearly, or quarterly) shall not affect the measurement of its annual results. To achieve that objective, measurements for interim reporting purposes shall be made on a year-to-date basis.

Requiring that an entity apply the same accounting policies in its interim financial statements as in its annual statements may seem to suggest that interim period measurements are made as if each interim period stands alone as an independent reporting period. However, by providing that the frequency of an entity's reporting shall not affect the measurement of its annual results, then it is acknowledged that an interim period is a part of a larger financial year. Year-to-date measurements may involve changes in estimates of amounts reported in prior interim periods of the current financial year. But the principles for recognising assets, liabilities, income, and expenses for interim periods are the same as in annual financial statements.

8. Revenues received seasonally, cyclically, or occasionally

Revenues that are received seasonally, cyclically, or occasionally within a financial year shall not be anticipated or deferred as of an interim date if anticipation or deferral would not be appropriate at the end of the entity's financial year.

Examples include dividend revenue, royalties, and government grants. Additionally, some entities consistently earn more revenues in certain interim periods of a financial year than in other interim periods, for example, seasonal revenues of retailers. Such revenues are recognised when they occur.

9. Costs incurred unevenly during the financial year

Costs that are incurred unevenly during an entity's financial year shall be anticipated or deferred for interim reporting purposes if, and only if, it is also appropriate to anticipate or defer that type of cost at the end of the financial year.

10. Use of estimates

The measurement procedures to be followed in an interim financial report shall be designed to ensure that the resulting information is reliable and that all material financial information that is relevant to an understanding of the financial position or performance of the entity is appropriately disclosed. While measurements in both annual and interim financial reports are often based on reasonable estimates, the preparation of interim financial reports generally will require a greater use of estimation methods than annual financial reports.

11. Restatement of previously reported interim periods

A change in accounting policy, other than one for which the transition is specified by a new Ind AS, shall be reflected by:

- (a) restating the financial statements of prior interim periods of the current financial year and the comparable interim periods of any prior financial years that will be restated in the annual financial statements in accordance with Ind AS 8; or
- (b) when it is impracticable to determine the cumulative effect at the beginning of the financial year of applying a new accounting policy to all prior periods, adjusting the financial statements of prior interim periods of the current financial year, and comparable interim periods of prior financial years to apply the new accounting policy prospectively, from the earliest date practicable.

COMPARISON WITH IAS 34, INTERIM FINANCIAL REPORTING, AND IFRIC 10

(1) With regard to preparation of statement of profit and loss, International Accounting Standard (IAS) 34, *Interim Financial Reporting*, provides option either to follow single statement approach or to follow two statement approaches. But, Ind AS 34 allows only single statement approach on the lines of Ind AS 1, *Presentation of Financial Statements*, which also allows only single statement approach.

(2) Different terminology is used in Ind AS 34, e.g., the term 'balance sheet' is used instead of 'Statement of financial position' and 'Statement of Profit and Loss' is used instead of 'Statement of comprehensive income' or 'Statement of profit or loss and other comprehensive income'.

PROBLEMS IN INTERIM REPORTING

Estimates and judgements are required for determining results of operations for any period, even a whole year. Normally, though, the shorter the period, the less precise the results, because the relative importance of estimates and judgments increases as the materiality base — e.g., the reported amounts — decreases. Further, to develop interim results, companies must rely more heavily on estimates. Of course, the more sophisticated a company's accounting system and the stronger its internal control, the less it needs to rely on estimates. Basically two problems — Accounting Problems and Conceptual Problems are involved in interim financial reporting.

Accounting Problems

Accounting Problems are of the following types:

1. *Inventory Problems*: In a business enterprise, inventory is a major element in the generation of income. Inventory problem in interim reporting has three types of problems: determination of inventory quantity, valuation of inventories, and adjustments of valuation. The development of inventory data for interim reporting

depends largely on the making of accurate physical counts and its costing procedure. However, the valuation problem is more important than the quantity problem. It is almost invariably considered impractical to count and price the inventory every quarter or every month, so estimates of gross profit must be used to determine cost of goods sold. Alternatively, the company may have perpetual inventory records integrated with the accounting records, allowing direct determination of cost of goods sold, but the perpetual records may not be verified by cycle counts, and some interim allowance will be needed for annual physical inventory adjustments.

The inventory problem is further complicated for companies on LIFO, since these companies must estimate not only the gross profit on their sales but also the effect of inflation and the year-end inventory quantity level. It is said that for business firms adopting LIFO, interim reports may be a problem if the inventory level at the end of the reporting period is below than at the beginning of the year. In such situations, interim periods are not independent of other reporting periods. Inventory valuations are further adjusted to lower-of-cost or market value.

2. Matching Problem: Business operations are not similar and uniform throughout the year. Resources are acquired and output is done in advance of sales. Some costs related to current sales do not mature into liabilities or readily measurable expenses until a subsequent time. Because of various lead and lag relationships between cost and sales, difficulties are created in matching costs and revenues. The relationship between costs and revenues becomes unclear.

Interim accruals for various selling expenses, general and administrative expenses, allowances for doubtful accounts, and deferrals and contingencies are illustrations of items that normally require companies to rely heavily on estimates.

Many techniques and procedures are available in accounting for allocating cost between different periods. But the allocation procedures appear to be highly arbitrary which raise serious questions as to the reliability and usefulness of the results. For example, depreciation and property taxes may be allocated to months on a time basis, but deducting a constant amount each period when sales fluctuate, tend to increase the amplitude of fluctuations in reported profits. Some expenses to be incurred during a period may be uncertain at the time when revenues are reported, *e.g.*, maintenance and repairs, employee vacations, various taxes, etc. Income tax is also a complex area in interim reporting requiring considerable attention. In order to calculate interim income taxes, a company must estimate such items as the annual pretax income, and other permanent differences for the full year.

Because investors have a tendency to project a full year's results on the basis of data given for the short period, random fluctuations or seasonal business that occurs in short periods, if not recognized, would lead to erroneous projections. Seasonal

business also raises a question about matching revenues and expenses during the year. When revenue are combined to a short season and direct costs are incurred throughout the year, is it appropriate to spread these costs proportionate to revenues.

3. Extent of Disclosure Problem: There is a problem of deciding the quantity of disclosure in interim financial reports. Generally speaking, disclosure requirements applicable for annual reporting are not applicable to interim reporting. In the absence of mandatory interim disclosure, the interim disclosure practices are likely to vary. There is a problem of determining materiality criteria for deciding the information to be disclosed in interim reports. The treatment to be given in respect of prior period adjustments, extraordinary items and earning per share can create difficulties in interim reporting.

Conceptual Issues

Interim reporting restricts the quality of accounting measurements. Also, disclosures in addition to the basic financial statements often cannot be fully developed and thus interim disclosures become limited in comparison with annual disclosures. But users are likely to consider the opportunity loss caused by delay in receipt of current financial information than the benefit of more detailed, accurate information received later.³

The primary conceptual issue is whether the interim period is part of a longer period or is a period in itself. The former position is known as the integral view, the latter as the discrete view. Under the integral view, revenue and expenses for interim periods are based on estimates of total annual revenues and expenses. The discrete view holds that earnings for each period are not affected by projections of the annual results; the methods used to measure earnings are the same for any period, whether a quarter or a year. As a practical matter, some elements of both positions are recognised in current reporting.

In both accounting theory and practice, there are currently two opposing viewpoints of the problem of interim financial reporting. Those who favour the first, the discrete approach, view "each interim period as a basic accounting period and conclude that the results of operations for each interim period should be determined in essentially the same manner as if the interim period were an annual accounting period".⁴

Those who favour the second, the integral approach, view each interim period primarily as being an integral part of the annual period. Under this view deferrals, accruals, and estimates at the end of each interim period are affected by judgments made at the interim date as to the results of operations for the balance of the annual period.⁵

Proponents of the discrete approach, on the other hand, argue that users are interested in a report of the actual realisations of the interim period itself in order to monitor management's (and

the firm's) performance during this period. Consequently, they argue against any allocation of costs based upon annual results that would lead to a 'smoothing' effect in which turning points and shortterm fluctuations are obscured from investors. In addition, while the usefulness of interim reports in making future projections is acknowledged, it is argued "the estimating period may, but need not, coincide with an annual fiscal period....users should be free to make their own choices of forecasting period"⁶. Thus, proponents of the discrete approach argue for similar treatment of interim and annual reports.

Proponents of the integral approach argue that the primary purpose of interim reports is to aid users in forecasting the future, with emphasis on the estimation of annual results. Interim reports, therefore, should be affected by one's expectations of annual operations.

In a study conducted by Schiff⁷, it was found that financial executives prefer discrete approach for some issues, whereas the integral view was favoured for others (issues). This combination view was explicitly recognised as a third alternative to the first two basic approaches by the Financial Accounting Standards Board (USA) in its Discussion Memorandum entitled 'Interim Financial Accounting and Reporting'.

The FASB justifies the combination approach by stating:

"Users may be interested both in making predictions for various future periods and in detecting changes in profit trend and liquidity. It may not be necessary....to place emphasis on one of these or on other possible uses. The integral and discrete views may be seen to have both advantages and disadvantages. Therefore....a more reasoned approach is to attempt to obtain the advantages and minimise the disadvantages of each of these views (para 92)."

Fried and Livnot⁸, in their recent study, however, have concluded that the ranking of the accounting methods (discrete, or integral, or combination) for the various objectives of interim reporting depended to a great degree on the nature of the environment and the specific conditions of uncertainty and correlations of the periodic cash flows.

Critics of integral basis suggest that essential judgments and allocations can sometimes be used artificially to smooth over and disguise significant operating changes. So called 'discrete' interim period reporting appears to avoid many of these problems of estimation and allocation in apportioning expected annual figures. Most companies, therefore, seem to follow the discrete principal in practice. Exceptional expenditure is borne as it occurs, or noted separately as being omitted for subsequent treatment in the annual financial statements. Often no account is taken of tax adjustments expected on the year's results. In such cases, the interim figures will usually be accompanied by a narrative explanation of the policies adopted. The discrete approach, however, contains few clues to management's expectations for the rest of the year, and may reduce for users the inherent predictive implications of interim reporting, unless supplemented by more detailed narratives on expected events and the prospects for the whole year.⁹

The discrete basis tends to cause greater fluctuations from period to period, which can sometimes mislead, but some believe this highlights real business turning points. The SEC (USA) has argued that it is in isolating these turning points that interim reports can be most useful by modifying the smoothing inadequacies of annual statements. It is difficult, however, to distinguish a real turning point from a regular trading fluctuation, and this is nowhere more accurate than in seasonal businesses.

INTERIM REPORTING PRACTICES IN INDIA

In India, companies whose securities are listed on stock exchanges and who are required to comply with Ind AS February 2015) are required to report quarterly financial result pursuant to the listing requirements. Figures 18.1 and 18.2 display quarterly audited financial results of two Indian companies as published in the national newspaper.

**PART 1: Statement of Audited Financial Results for the
Quarter and Twelve Months ended 31st March, 2015 (₹ in Crores)**

		STAND-ALONE					CONSOLIDATED	
		3 Months ended	Corresponding 3 Months ended	Preceding 3 Months ended	Twelve Months ended	Twelve Months ended	Twelve Months ended	Twelve Months ended
		31.03.2015	31.03.2014	31.12.2014	31.03.2015	31.03.2014	31.03.2015	31.03.2014
		(Audited)*	(Audited)*	Unaudited	(Audited)	(Audited)	(Audited)	(Audited)
INCOME FROM OPERATIONS								
(a) NET SALES / INCOME FROM OPERATIONS (Net of Excise Duty)	(1)	9188.25	9145.14	8800.22	36083.21	32882.56	38433.31	34984.70
(b) OTHER OPERATING INCOME	(2)	104.53	93.38	142.37	424.19	356.04	401.50	332.38
TOTAL INCOME FROM OPERATIONS (Net) (1+2)	(3)	9292.78	9238.52	8942.59	36507.40	33238.60	38834.81	35317.08
EXPENSES								
(a) Cost of materials consumed		2803.44	2707.89	2731.05	10987.83	10263.28	11089.10	10376.05
(b) Purchases of stock-in-trade		759.37	1011.38	579.50	3898.66	3021.47	3918.80	2976.98
(c) Changes in inventories of finished goods, work-in-progress and stock-in-trade		98.87	150.35	167.01	(214.53)	(128.41)	(235.72)	(112.74)
(d) Employee benefits expense		454.39	410.81	419.12	1780.04	1608.37	2772.28	2504.24
(e) Depreciation and amortisation expense		249.57	237.83	237.63	961.74	899.92	1027.96	964.92
(f) Other expenses**		1933.60	1754.70	1581.71	6581.85	6019.05	7088.73	6520.66
TOTAL EXPENSES	(4)	6299.24	6272.96	5716.02	23995.59	21683.68	25661.15	23230.11
PROFIT FROM OPERATIONS BEFORE OTHER INCOME AND FINANCE COSTS (3-4)	(5)	2993.54	2965.56	3226.57	12511.81	11554.92	13173.66	12086.97
OTHER INCOME	(6)	370.37	266.71	581.99	1543.13	1107.14	1256.51	970.95
PROFIT FROM ORDINARY ACTIVITIES BEFORE FINANCE COSTS (5 + 6)	(7)	3363.91	3232.27	3808.56	14054.94	12662.06	14430.17	13057.92
FINANCE COSTS**	(8)	15.51	9.53	8.37	57.42	2.95	68.12	6.37
PROFIT FROM ORDINARY ACTIVITIES BEFORE TAX (7-8)	(9)	3348.40	3222.74	3800.19	13997.52	12659.11	14362.05	13051.55
TAX EXPENSE	(10)	987.22	944.73	1165.19	4389.79	3873.90	4596.42	4060.93
NET PROFIT FOR THE PERIOD (9-10)	(11)	2361.18	2278.01	2635.00	9607.73	8785.21	9765.63	8990.62
SHARE OF PROFIT/(LOSS) OF ASSOCIATES	(12)	N.A.	N.A.	N.A.	N.A.	N.A.	12.89	10.57
MINORITY INTEREST	(13)	N.A.	N.A.	N.A.	N.A.	N.A.	115.35	109.81
NET PROFIT/AFTER TAXES, MINORITY INTERESTS AND SHARE OF PROFIT/(LOSS) OF ASSOCIATES (11+12-13)	(14)	2361.18	2278.01	2635.00	9607.73	8785.21	9663.17	8891.38
PAID-UP EQUITY SHARE CAPITAL (Ordinary shares of Rs. 1/- each)	(15)	801.55	795.32	799.54	801.55	795.32	801.55	795.32
RESERVES EXCLUDING REVALUATION RESERVES	(16)	—	—	—	29881.73	25414.29	30877.01	26342.33
EARNINGS PER SHARE (of Rs. 1/- each) (not annualised):	(17)							
(a) Basic (Rs.)		2.95	2.87	3.30	12.05	11.09	12.11	11.22
(b) Diluted		2.93	2.83	3.27	11.93	10.96	12.00	11.09

Figure 18.1: ITC Ltd.

* The figures for the 3 months ended 31.03.2015 and corresponding 3 months ended 31.03.2014 are the balancing figures between the audited figures in respect of the full financial year and the year to date figures upto the third quarter of the respective financial years.

** For the twelve months ended 31.03.2014, Other Expenses and Finance Costs are net of liability for earlier years towards Rates and Taxes and Interest thereon of Rs. 157.91 Crores and Rs. 34.77 Crores respectively that were no longer required and therefore written back consequent to a favourable High Court Order.

PART II: Select information for the Quarter and Twelve Months ended 31st March, 2015

A. Particulars of Shareholding	3 Months ended 31. 03.2015	Corresponding 3 Months ended 31. 03.2014	Preceding 3 Months ended 31. 03.2014	Twelve Months ended 31. 03.2015	Twelve Months ended 31. 03.2014
1. PUBLIC SHAREHOLDING					
– NUMBER OF SHARES	7995556406	7932401330	7975472396	7995556406	7932401330
– PERCENTAGE OF SHAREHOLDING	99.75	99.74	99.75	99.75	99.74
2. PROMOTERS AND PROMOTER GROUP SHAREHOLDING	Nil	Nil	Nil	Nil	Nil
(a) Pledged / Encumbered	N.A.	N.A.	N.A.	N.A.	N.A.
(b) Non-encumbered	N.A.	N.A.	N.A.	N.A.	N.A.

B. Investor Complaints	3 Months ended 31.03.2015
Pending at the beginning of the quarter	Nil
Received during the quarter	1
Disposed off during the quarter	1
Remaining unresolved at the end of the quarter	Nil

Notes:

- (i) The audited Financial Results and Segment Results were reviewed by the Audit Committee and approved at the meeting of the Board of Directors of the Company held on 22nd May, 2015.
- (ii) Figures for the previous periods are re-classified/re-arranged/re-grouped, wherever necessary, to correspond with the current period's classification/disclosure.
- (iii) The Company does not have any Exceptional or Extraordinary item to report for the above periods.
- (iv) The launch and rollout costs of the Company's brands 'Fiama Di Wills', 'Vivel', 'Superia' and 'Engage' covering the range of personal products of soaps, face washes, shower gels, skin care and deodorants, and the continuing significant brand building costs of the Foods businesses are reflected under 'Other expenses' stated above and in Segment Results under 'FMCG_Others'.
- (v) During the quarter, 2,00,84,010 Ordinary Shares of Rs. 1/- each were issued and allotted under the Company's Employee Stock Option Schemes. Consequently, the issued and paid_up Share Capital of the Company as on 31 st March, 2015 stands increased to Rs. 801,55,19,541 /-.
- (vi) The Scheme of Arrangement between Wimco Limited ('Wimco') and the Company became effective on 27th June, 2014 on filing of the Order of the Hon'ble High Court with the respective Registrar of Companies. The Scheme, with effect from 1 st April 2013, provided for the demerger of the Non Engineering Business of Wimco into the Company. The results for the quarters ended 31 st December, 2014 and 31 st March, 2015 and for the twelve months ended 31st March, 2015 reflect the effect of the Scheme, and consequently, the figures for the previous periods are not strictly comparable.
- (vii) Pursuant to the enactment of the Companies Act 2013, (the 'Act'), the Company has, effective 1st April 2014, reviewed and revised the estimated useful lives of its fixed assets, in accordance with the provisions of Schedule II of the Act. The consequential impact (after charging Rs. 48.32 Crores (net of tax of Rs. 24.88 Crores) to Retained Earnings in line with the transition provision specified in Schedule III on the depreciation charged and on the results for the quarter and twelve months is not material.
- (viii) The Board of Directors of the Company has recommended a dividend of Rs. 6.25 per Ordinary Share of Rs. 1/- each for the financial year ended 31st March, 2015 and the dividend, if declared, will be paid on Monday, 3rd August, 2015 to those members entitled thereto.

Note

- (1) The Company's corporate strategy aims at creating multiple drivers of growth anchored on its core competencies, The Company is currently focused on four business groups: FMCG, Hotels, Paperboards, Paper & Packaging and Agri Business. The Company's organisational structure and governance processes are designed to support effective management of multiple businesses while retaining focus on each one of them.

- (2) The business groups comprise the following:
- | | | | | |
|----------------------------------|---|------------|---|--|
| FMCG | : | Cigarettes | — | Cigarettes, Cigars, etc. |
| | | Others | — | Branded Packaged Foods Businesses (Bakery and Confectionery Foods; Snack Foods; Staples, Spices and Ready to Eat Foods etc.); Apparel; Education and Stationery Products; Personal Care Products; Safety Matches and Agarbattis. |
| Hotels | | | — | Hoteliering. |
| Paperboards, Paper & Packaging | | | — | Paperboards, Paper including Specialty Paper & Packaging including Flexibles. |
| Agri Business | | | — | Agri commodities such as soya, spices, coffee and leaf tobacco. |
| Others (in Consolidated Segment) | | | — | Information Technology services, Filter Rods etc. |
- (3) Segment results of 'FMCG: Others' are after considering significant business development, brand building and gestation costs of the Branded Packaged Foods businesses and Personal Care Products business.
- (4) The Company's Agri Business markets agri commodities in the export and domestic markets; supplies agri raw materials to the Branded Packaged Foods businesses and sources leaf tobacco for the Cigarettes business,
- (5) Figures for the corresponding previous periods are re-arranged, wherever necessary, to conform to the figures of the current period.
- Source:** *Mint*, New Delhi, Saturday, May 23, 2015, p. 5.

Audited Financial Results for the Quarter/Year ended 31st March 2015
(₹ in crores)

	STAND-ALONE					CONSOLIDATED	
	Quarter ended			Year ended		Year	
Particulars	31.03.2015 Audited	31.12.2014 Unaudited	31.03.2014 Audited	31.03.2015 Audited	31.03.2014 Audited	31.03.2015 Audited	31.03.2014 Audited
1 Interest Earned (a) + (b) + (c) + (d)	40101.16	38546.18	35857.62	152397.07	136350.80	207974.34	189062.43
(a) Interest/discount on advances/bills	28268.54	28646.37	26949.22	112343.91	102484.10	153144.59	141382.60
(b) Income on Investments	9982.75	9484.73	8228.20	37087.77	31941.87	51002.02	44855.68
(c) Interest on balances with Reserve Bank of India and other inter bank funds	158.90	151.51	98.37	505.12	409.31	1159.94	1144.71
(d) Others	1690.97	263.57	581.83	246027	1515.52	2667.79	1679.44
2 Other Income	8515.25	5237.80	6585.65	22575.89	18552.92	49315.17	37882.13
3 TOTAL INCOME (1 + 2)	48616.41	43783.98	42443.27	174972.96	154903.72	257289.51	226944.56
4 Interest Expended	25389.40	24769.54	22954.81	97381.82	87068.63	133178.64	121479.04
5 Operating Expenses (i) + (ii)	10817.65	9719.97	8860.64	38677.64	35725.85	73848.01	63368.74
(i) Employee cost	6566.54	5842.03	5279.16	23537.07	22504.28	31117.61	29868.36
(ii) Other Operating Expenses	4251.11	3877.94	3581.48	15140.57	13221.57	42730.40	33500.38
6 TOTAL EXPENDITURE (4) + (5) (excluding Provisions and Contingencies)	36207.05	34489.51	31815.45	136059.46	122794.48	207026.65	184847.78
7 OPERATING PROFIT (3 – 6) (before Previsions and Contingencies)	12409.36	9294.47	10627.82	38913.50	32109.24	50262.86	42096.78
8 Provisions (other than tax) and Contingencies	6592.91	5234.91	5891.12	19599.54	15935.35	24408.29	20771.24
– of which provisions for Non-peforming assets	4635.43	4717.44	5883.75	17284.28	14223.57	21574.54	18337.30
9 Exceptional Items	—	—	—	—	—	—	—
10 Profit from Ordinary Activities before tax (7-8-9)	5816.45	4059.56	4736.70	19313.96	16173.89	25854.57	21325.54
11 Tax Expenses	2074.43	1149.50	1695.96	6212.39	5282.72	8337.20	6836.07
12 Net Profit from Ordinary Activities after tax (10-11)	3742.02	2910.06	3040.74	13101.57	10891.17	17517.37	14489.47
13 Extraordinary items (net of tax expenses)	—	—	—	—	—	—	—
14 Net Profit for the period (12-13)	3742.02	2910.06	3040.74	13101.57	10891.17	17517.37	14489.47
15 Share in profit of Associates						314.44	317.73
16 Share of Minority						837.51	633.43
17 Net Profit from Minority Interest (14 + 15 – 16)	3742.02	2910.06	3040.74	13101.57	10891.17	16994.30	14173.77
18 Paid-up Equity Share Capital (Face Value of Rs. 1 per share)	746.57	746.57	746.57	746.57	746.57	746.57	746.57
19 Reserves excluding Revaluation Reserves				127691.65	117535.68	160640.97	146623.96
20 Analytical Ratios							
(i) Percentage of shares held by Government of India	58.60%	58.60%	58.60%	58.60%	58.60%	58.60%	58.60%
(ii) Capital Adequacy Ratio							
Basel II	12.79%	12.54%	12.96%	12.79%	12.96%		
Basel III	12.00%	12.03%	12.44%	12.00%	12.44%		
(iii) Exarings Per Share (EPS) (in Rs.)*							
(a) Basic and diluted EPS before Extraordinary items (net of tax expenses) (Quarter numbers not annualised)	5.01	3.90	4.18	17.55	15.68	22.76	20.40

(b) Basic and diluted EPS after Extraordinary items (Quarter numbers not annualised)	5.01	3.90	4.18	17.55	15.68	22.76	20.40
(iv) NPA Ratios							
(a) Amount of gross non-performing assets	56725.34	61991.45	61605.35	56725.34	61605.345		
(b) Amount of net non-performing assets	27590.58	34468.74	31096.07	27590.58	31096.07		
(c) % of gross NPAs	4.25%	4.90%	4.95%	4.25%	4.95%		
(d) % of net NPAs	2.12%	2.80%	2.57%	2.12%	2.57%		
(v) Return on Assets (Annualised)	0.76%	0.62%	0.69%	0.68%	0.65%		
21 Public Shareholding							
— Number of shares*	3091132670	3091132670	3091132670	3091132670	3091132670		
— Percentage of Shareholding	41.40%	41.40%	41.40	41.40%	41.40%		
22 Promoters and Promoter Group Shareholding							
(a) Pledged/Encumbered Number of Shares							
Percentage of Shares (as a percentages of the total shareholding of promoter and promoter group)			NIL				
Percentage of Shares (as a percentages of the total share capital of the company)							
(b) Non-encumbered							
Number of Shares*	4374598250	4374598250	4374598250	4374598250	4374598250		
Percentage of Shares (as a percentages of the total shareholding of promoter and promoter group)	100.00%	100.00%	100.00%	100.00%	100.00%		
Percentage of Shares (as a percentages of the total share capital of the company)	58.60%	58.60%	58.60%	58.60%	58.60%		

Figure 18.2: State Bank of India

*The face value of shares of the Bank was split from ₹ 10 per share to ₹ 1 per share w.e.f. 22.11.2014.
All the shares and per share information reflect the effect of the split for each period presented.

Audited Segment-wise Revenue, Results and Capital Employed

Part A : Primary Segments

(₹ in crores)

	STAND-ALONE					CONSOLIDATED	
	Quarter ended			Year ended		Year	
Particulars	31.03.2015 Audited	31.12.2014 Unaudited	31.03.2014 Audited	31.03.2015 Audited	31.03.2014 Audited	31.03.2015 Audited	31.03.2014 Audited
1 Segment Revenue (income)							
(a) Treasury Operations	11804.91	10439.83	9099.89	41095.95	34763.95	51867.83	42418.29
(b) Corporate/Wholesales Banking Operations	16072.75	15591.92	14988.36	61445.90	54180.43	85230.94	73300.30
(c) Retail Banking Operations	19668.71	17749.81	18085.88	71248.38	65543.48	90340.03	89329.62
(d) Insurance Business	—	—	—	—	—	24476.88	18066.15
(e) Other Banking Operations	—	—	—	—	—	4144.11	3388.22
(f) Add/(Less) : Unallocated	1070.04	2.42	269.14	1182.73	415.86	1229.72	441.98
Total	48616.41	43783.98	42443.27	174972.96	154903.72	257289.51	226944.56
2 Segment Results (Profit before tax)							
(a) Treasury Operations	2738.73	1861.16	1256.33	7554.38	2800.61	7331.87	2139.86
(b) Corporate/Wholesale Banking Operations	-1209.54	436.08	-2072.88	-308.47	884.27	1945.87	3653.51
(c) Retail Banking Operations	4207.95	2726.03	6234.45	14758.80	15762.74	17914.50	18007.47
(d) Insurance Business	—	—	—	—	—	843.39	718.43
(e) Other Banking Operations	—	—	—	—	—	1361.91	948.79
Total	5737.14	5023.27	5417.90	22004.71	19447.62	29397.54	25468.06
(f) Add/(Less) : Unallocated	79.31	-963.71	-681.20	-2690.75	-3273.73	-3542.97	-4142.52
Operating Profit	5816.45	4059.56	4736.70	19313.96	16173.89	25854.57	21325.54
Less : Income Tax	2074.43	1149.50	1695.96	6212.39	5282.72	8337.20	6836.07
Less : Extraordinary Profit/Loss	—	—	—	—	—	—	—
Net Profit before share of profit in Associates/Minority Interest	3742.02	2910.06	3040.74	13101.57	10891.17	17517.37	14489.47
Add : Share in Profit of Associates						314.44	317.73
Less : Minority Interest						837.51	633.43
Net Profit*	3742.02	2910.06	3040.74	13101.57	10891.17	16994.30	14173.77
3 Capital Employed (Segment Assets – Segment Liabilities)							
(a) Treasury Operations	204598.36	212482.07	208469.35	204598.36	208469.35	277106.91	280549.50
(b) Corporate/Wholesale Banking Operations	95049.62	97831.98	87054.37	95049.62	87054.37	76998.14	128678.74
(c) Retail Banking Operations	-133522.45	-134190.05	-141191.90	-133522.45	-141191.90	-152229.55	-220907.68
(d) Insurance Business	—	—	—	—	—	4875.56	3859.39
(e) Other Banking Operations	—	—	—	—	—	4368.30	3735.90
(f) Unallocated	-37687.30	-47572.82	-36049.57	-37687.30	-36049.57	-49721.82	-48545.32
Total	128438.23	128551.18	118282.25	128438.23	118282.25	161387.54	147370.53

*Segments Net Results are arrived after taking the effects of Transfer Pricing

Part A : Secondary Segments (Stand-alone)**(₹ in crores)**

	Domestic Operation		Foreign Operation		Total	
Geographic Segments	Year ended (Audited)		Year ended (Audited)		Year ended (Audited)	
Particulars	31.03.2015	31.03.2014	31.03.2015	31.03.2014	31.03.2015	31.03.2014
1 Revenue	164304.43	145647.12	9485.80	8840.74	173790.23	154487.86
2 Net Profit	17746.10	16377.14	4258.61	3070.48	22004.71	19447.62
3 Assets	1747311.56	1525258.51	300768.24	267489.78	2048079.80	1792748.29
4 Liabilities	1618873.33	1406976.28	300768.24	267489.78	1919641.57	1674466.06

Summarised Balance Sheet**(₹ in crores)**

	Stand-alone			Cobnsolldated		
Particulars	As at 31.03.2015 (Audited)	As at 31.12.2014 (Unaudited)	As at 31.03.2014 (Audited)	As at 31.03.2015 (Audited)	As at 31.03.2014 (Unaudited)	As at 31.03.2014 (Audited)
Capital and Liabilities						
Capital	746.57	746.57	746.57	746.57	746.57	746.57
Reserves & Surplus	127691.65	127804.61	117535.68	160640.97	159975.76	146623.96
Minority Interest	—	—	—	5497.12	5362.74	4909.15
Deposits	1576793.25	1510076.93	1394408.51	2052960.79	1969677.94	1838852.36
Borrowings	205150.29	181674.78	183130.88	244663.46	220061.88	223759.71
Other libilities and provisions	137698.04	83759.59	96926.65	235601.11	173570.01	18160.355
Total Capital and Liabilities	2048079.80	1904062.48	1792748.29	2700110.02	2529394.90	2396495.30
Assets						
Cash and Balnces with RBI	115883.84	69825.14	84955.66	144287.55	92056.96	114095.60
Balances with Banks and money at call and short notice	58977.46	56397.51	47593.97	64299.02	64182.20	53065.74
Investments	495027.40	489734.95	398799.57	695691.75	688809.88	579401.26
Advances	1300026.39	1232544.86	1209828.72	1692211.33	1607986.40	1578276.69
Fixed Assets	9329.16	8756.67	8002.16	12379.30	11627.84	10559.78
Other Assets	68835.55	46803.35	43568.21	91241.07	64731.62	61096.23
Total Assets	2048079.80	1904062.48	1792748.29	2700110.02	2529394.90	2396495.30

Notes

- (i) The above results have been reviewed by the Audit Committee of the Board at their meeting held on May 21, 2015 and approved by the Board of directors at their meeting held on May 22, 2015.
- (ii) The working results have been arrived at after considering provisions for Non-Performing Advances, Non Performing Investments, Standard Advances, Restructured Advances, Provision for exposure to entities with Unhedged Foreign Currency Exposure, Depreciation on Investments, Income Tax (including Deferred Taxes) and other usual and necessary provisions. Provision for employee benefits pertaining to Pension, Gratuity and Leave Encashment has been made on the basis of actuarial valuation.
- (iii) The figures for the last quarter are the balancing figures between the audited figures in respect of the full financial year and the published year to date figures upto the third quarter of the current financial year.
- (iv) During the year, the Bank received application money of ₹ 2,970 crores from Government of India against preferential issue on March 31, 2015. The equity shares were allotted on April 01, 2015.
- (v) In terms of the provisions of Section 4 of the State Bank of India Act, 1955, the Central Board of the Bank at its meeting held on September 24, 2014 had considered and approved reduction of the face value of equity shares of the Bank from ₹ 10 per share to ₹ 1 per share and to increase the number of issued shares in proportion thereof. The share split was done on November 21, 2014. All the shares and per share information in the financial result reflect the effect of subdivision for each period presented.
- (vi) During the year, the rate of depreciation on Fixed Assets has been changed to straight line method determined on the basis of useful life as against WDV method being used hitherto. Consequent to the change, the fixed assets and Profit Before Tax of the current year are higher by ₹ 420.76 crores.
- (vii) During the year, the Bank aligned its method with regard to valuation of Plan Assets (from Book Value to Fair Value) with Accounting Standard 15 issued by the I CAI. As a result of the change, the value of Plan Assets of superannuation funds has increased by ₹ 2,183 crores.
- (viii) The Bank has provided a sum of ₹ 2,946 crores during the year towards the Xth Bipartite Wage Settlement which will be effected from November 01, 2012,
- (ix) The shortfall on account of sale of assets to Asset Reconstruction Companies amounting to ₹ 2,803.19 crores is being amortized over

a period of two years, in terms of RBI guidelines. Consequently, ₹ 623.78 crores has been charged to the Profit & Loss Account for the current year. The amount unamortised as at March 31, 2015 is ₹ 2,179.41 crores.

- (x) The Bank in accordance with the RBI guidelines has provided a sum of ₹ 293.08 crores towards Unhedged Foreign Currency Exposure during the current year
- (xi) In terms of RBI guidelines, the Bank utilised ₹ 382 crores of Counter Cyclical Provisioning Buffer during the current financial year (Previous Year: ₹ 750 crores) for making specific provision for NPAs.
- (xii) Provision Coverage Ratio as on March 31, 2015 works out to 69.13% (Previous Year 62.86%).
- (xiii) The Central Board has declared a dividend of ₹ 3.50 per share (@ 350%) for the year ended March 31, 2015 including shares preferentially allotted on April 1, 2015, against money received on March 31, 2015.
- (xiv) Pillar 3 (Market Discipline) disclosures (unaudited) as per RBI guidelines on Composition of Capital Disclosure Requirements as at March 31, 2015 for the Group can be accessed at the Bank's website <http://www.sbi.co.in>.
- (xv) The Bank has received 282 Investors' complaints during the quarter ended March 31, 2015 which have been disposed off. There were no pending Investors' Complaints either at the beginning or end of the quarter.
- (xvi) Previous period figures have been regrouped/reclassified, wherever necessary, to conform to current period classification.

Source: *Mint*, New Delhi, Saturday, May 23, 2015, p. 9.

IMPROVING INTERIM REPORTS

The primary purpose of interim reports are to help the users in prediction of results for the current year. Although interim reporting involves important accounting problems, its need and significance is now being felt by the investors and other users for making sound economic decisions. Edward, Dominiak, and Hedges¹⁰ have proposed following criteria and guidelines for interim reporting.

1. Reports on interim period activities should be designed to materially assist important individual users or user groups to achieve major objectives related to investment and credit decisions.

2. Interim reports for general distribution should be directed towards meeting the needs of both current and prospective shareholders and important representatives of these groups.

3. Interim reports should be designed so as to reduce thampplitude of those exchange price fluctuations that result from misinformation. Misinformation is used here to include failure to communicate and partial communication.

4. Substantial disaggregation of data should be reflected in reports for interim periods. Disaggregation should emphasise disclosure of information about the nature of the events which underlie the reported data.

5. Interim reports should incorporate data developed with an emphasis on forecastability. Unusual events, the effect of which is material in size, should be separately disclosed in interim reports. Materiality should be based on the results of interim period activities. The accounting for and reporting of similar events in

interim statements should be consistent for a given entity over time. Interim reports, should, in substance, articulate with annual reports.

6. Timeliness should be emphasised in the reporting of information about interim period activities. Financial reports should be promptly distributed by publicly owned business firms to external users at least four times during each fiscal year, and usually following the end of each of three months period.

Backer¹¹ has given the following suggestions to enhance the usefulness of interim financial reports.

1. *Adopting fiscal period to operating cycle*—Accounting problems resulting from arbitrary cutoffs can be minimised by selecting a close date which coincides with a time of low activity in a company's natural operating cycle. Businesses which experience more than one distinct seasonal cycle within a year could improve the significance of quarterly statements by reporting for seasonal cycles rather than for calendar years. Reports for periods containing a uniform number of working days rather than for calendar months, and prorating costs on the basis of working days instead of months help to remove some erratic fluctuations in monthly and quarterly operating results.

2. *Smoothing income to minimise fluctuations*—Accounting techniques for smoothing interim income include accrual of anticipated expenses which relate to the whole year rather than reporting them when they arise. For example, provision for bad debts may be accrued monthly rather than only at the end of the year.

3. *Allocating annual costs to interim periods on basis of sales*—Reported profit tends to vary with sales when annual costs are allocated to interim periods on the basis of the period's portion of total annual sales. To have interim period costs and profits vary with sales is advantageous to investors who are seeking to forecast annual profits because forecasts of sales can then more easily be translated into forecasts of profits. However, maximum benefits will result only where annual costs of both manufacturing and nonmanufacturing functions are allocated to periods on the basis of sales.

4. Disclosure to aid interpretations where material amounts of unusual items have been accrued or differed in accounting for interim income, disclosure of the procedures followed may help the users to interpret the results. Since investment decisions are based on future expectations rather than past performance, a view of management's expectations by interim periods would seem to be helpful.

Interim financial reporting, undoubtedly, is useful to managements and shareholders (existing and potential) since economic decisions are made by the investors throughout the year and not necessarily at the end of an accounting period. The preparation of interim reports, say quarterly or half yearly, requires the solution of some accounting problems, e.g., matching problem, inventory valuation problem, besides probably the most important issue as to extent of disclosure in interim reports. It is now argued that interim statement should be a complete financial statement—

complete profit and loss account and balance sheet. Inadequate disclosure of interim information will not achieve the objectives underlying financial reporting. The costs involved in gathering, preparing, developing and distributing the interim information is also an important factor and may act as a restraint in the objective of providing fuller interim information. It has to be satisfied that benefits likely to be derived from interim reports are more than the costs involved therein. If costs of disclosure are within manageable limits, business enterprise should prefer to give interim data to the shareholders, investors and other interested users.

REFERENCES

1. Michael Schiff, *Accounting Reporting Problems—Interim financial Statements*, New York: Financial Executives Research Foundation, 1978, pp. 10 11.
2. Financial Accounting Standards Board, Discussion Memorandum, Analysis of Issues, Related to Interim Financial Accounting and Reporting, Stamford: FASB, 1978.
3. Leonard M. Savoie, "Interim Financial Statements," in John C. Burtan *et.al.*, *Handbook of Accounting and Auditing*, New York: Warren, Gorham and Lanont 1981, pp. 5.3.
4. American Institute of Certified Public Accountants, Interim Financial Reporting, Opinion No. 28, New York: AICPA, 1973, para 5b.
5. American Institute of Certified Public Accountants, *ibid.*, para 5a.
6. Financial Accounting Standards Board, Discussion Memorandum, *op. cit.*, para 37.
7. Michael Schiff, *op. cit.*
8. Dov Fried and Joshua Livnot, "Interim Statements: An Analytical Examination of Alternative accounting Techniques," *Accounting Review* (July 1981), pp. 493509.
9. John C. Shaw, "Interim Financial Statements," in Thomas A. Lee (Ed.) *Developments in Financial Reporting*, Oxford: Philip Allan Publishers, 1981, p. 91.
10. James W. Edwards, Geradlive F. Dominiak and Thomas V. Hedges, *Interim Financial Reporting*, New York: National Association of Accountants, 1972, p.160 170.
11. Morton Bakcer, *Financial Reporting for Security Investment and Credit Decisions*, New York: National Association of Accountants, 1970, pp. 217220.

QUESTIONS

1. What is interim reporting? Explain its relevance for the investors and other external users.
2. Discuss problems involved in preparing interim reports.
3. What developments have taken place in the area of interim reporting.
4. Prepare a comprehensive note on interim reporting practices of Indian Companies. Do you think there is scope for improvement in this area for the benefit of Indian investors.
5. Offer suggestions to improve interim reporting of business enterprises.

6. What are the problems in preparing interim financial reports by business enterprises? What is the position of interim financial reporting in India? (*M.Com., Delhi, 1996*)
7. Critically evaluate AS-25 Interim Financial Reporting issued by ASB in February 2002.
8. What is the need for interim reporting? Explain the problems in interim reporting being faced by business enterprises. (*M.Com., Delhi, 2008*)
9. Discuss the recommendations of AS-25 with regard to disclosure of interim financial information.
10. What are the provisions of AS-25 with regard to Recognition and Measurement?
11. Discuss the SEBI's guidelines on interim reporting.

MULTIPLE CHOICE QUESTIONS

Select the correct answer for the following multiple choice questions:

1. Advertising costs may be accrued or deferred to provide an appropriate expense in each period for

<i>Interim financial reporting</i>	<i>Year-end financial reporting</i>
(a) Yes	No
(b) Yes	Yes
(c) No	No
(d) No	Yes

Ans. (b).

2. A planned volume variance in the first quarter, which is expected to be absorbed by the end of the fiscal period, ordinarily should be deferred at the end of the first quarter if it is

<i>Favourable</i>	<i>Unfavourable</i>
(a) Yes	No
(b) No	Yes
(c) No	No
(d) Yes	Yes

Ans. (d).

3. Due to a decline in market price in the second quarter, Patel Co. incurred an inventory loss. The market price is expected to return to previous levels by the end of the year. At the end of the year, the decline had not reversed. When should the loss be reported in Patel's interim income statements?

- (a) Rateably over the second, third, and fourth quarters.
- (b) Rateably over the third and fourth quarters.
- (c) In the second quarter only.
- (d) In the fourth quarter only.

Ans. (d).

4. An inventory loss from a market price decline occurred in the first quarter. The loss was not expected to be restored in the fiscal year. However, in the third quarter the inventory had market price recovery that exceeded the market decline that occurred in the first quarter. For interim financial reporting, the amount of net inventory should

- (a) Decrease in the first quarter by the amount of the market price decline and increase in the third quarter by the amount of the market price recovery.
- (b) Decrease in the first quarter by the amount of the market price decline and increase in the third quarter by the amount of decrease in the first quarter.
- (c) Not be affected in the first quarter and increase in the third quarter by the amount of the market price recovery that exceeded the amount of the market price decline.
- (d) Not be affected in either the first quarter or the third quarter.

Ans. (b).

5. For external reporting purposes, it is appropriate to use estimated gross profit rates to determine the cost of goods sold for

<i>Interim financial reporting</i>	<i>Year-end financial reporting</i>
(a) Yes	Yes
(b) Yes	No
(c) No	Yes
(d) No	No

Ans. (b).

6. For interim financial reporting, a company's income tax provisions for the second quarter of 2009 should be determined using the

- (a) Effective tax rate expected to be applicable for the full year of 2009 as estimated at the end of the first quarter of 2009.
- (b) Effective tax rate expected to be applicable for the full year of 2009 as estimated at the end of the second quarter of 2009.

- (c) Effective tax rate expected to be applicable for second quarter of 2009.

- (d) Statutory tax rate for 2009.

Ans. (b).

7. Conceptually, interim financial statements can be described as emphasizing

- (a) Timeliness over reliability.
- (b) Reliability over relevance.
- (c) Relevance over comparability.
- (d) Comparability over neutrality.

Ans. (a).

8. Wilson Co., experienced a Rs. 50,000 decline in the market value of its inventory in the first quarter of its fiscal year. Wilson had expected this decline to reverse in the third quarter, and in fact, the third quarter recovery exceeded the previous decline by Rs. 10,000. Wilson's inventory did not experience any other declines in market value during the fiscal year. What amounts of loss and/or gain should Wilson report in its interim financial statements for the first and third quarters?

<i>First quarter</i>	<i>Third quarter</i>
(a) ₹ 0	₹ 0
(b) ₹ 0	₹ 10,000 gain
(c) ₹ 50,000 loss	₹ 50,000 gain
(d) ₹ 50,000 loss	₹ 60,000 gain

Ans. (a)



Human Resource Accounting

Human Resource Accounting (HRA) has attracted a considerable amount of interest in a comparatively short period of time. Although many works on behavioural and organisational aspects of accounting have been conducted, but research, writings, enthusiasms as well as criticisms and disappointment, have greatly flourished in HRA area. Business enterprises often (rightly) proclaim that their labour force (human resources) is their most important asset, while at the same time they fail to recognise it in managerial planning, decision making and in published annual reports. HRA attempts, in most cases, have been directed to an internal, management control perspective. However, the potential usefulness of HRA information would seem to be even greater for the external decision makers than for the company's management. The present chapter focuses on human resource accounting in all its aspects—valuation, usefulness, techniques, and related issues.

CONCEPT OF HUMAN RESOURCE ACCOUNTING

Human resource accounting is the process of measuring and reporting the human resources of an organisation. It is the process of providing information about individuals and groups of individuals, within an organisation to decision makers both inside and outside the organisation. The American Accounting Association's Committee¹ on Human Resource Accounting (1973) defines HRA as 'the process of identifying and measuring data about human resources and communicating this information to interested parties'.

According to Flamholtz²

"Human resource accounting may be defined as the measurement and reporting of the cost and value of people as organisational resources. It involves accounting for investments in people and their replacement cost. It also involves accounting for the economic value of people to an organisation."

In a more limited context, and more consistent with conventional accounting practice, HRA implies human resource as assets, determines invested costs and related cost expirations, and in some cases estimates economic value of the human resources in the organisation. Caplan and Landekich³ have listed the following assumptions which underlay HRA.

1. Human resources provide benefits to an organisation in a fashion similar to the manner in which financial and physical resources provide benefits.
2. The benefits associated with both conventional assets and human resources have value to the organisation

because these benefits contribute in some way to the accomplishment of the organisation's goals.

3. The acquisition of human resources typically involves an economic cost, and the benefits associated with such resources can reasonably be expected to contribute to economic effectiveness. It follows, therefore, that these benefits are essentially economic in nature and are subject to measurement in financial terms.
4. Since the usual accounting definition of an asset involves the right to receive economic benefits in the future, human resources are appropriately classified as accounting assets.
5. It is theoretically possible to identify and measure human resource costs and benefits within an organisation.
6. Information with respect to human resource costs and benefits should be useful in the process of planning, controlling, evaluating and predicting, organisational performance.

METHODS OF ACCOUNTING FOR HUMAN RESOURCES

There are two methods of accounting for human resources:

- I. Human Resource Cost Accounting (HRCA), *i.e.*, cost-based human resource accounting.
- II. Human Resource Value Accounting (HRVA), *i.e.*, value-based human resource accounting.

HUMAN RESOURCE COST ACCOUNTING (HRCA)

HRCA may be defined as the measurement and reporting of the costs incurred to acquire, develop and replace human resources. Generally speaking, (i) historical costs and (ii) replacement costs are recognised in human resource cost accounting model.

HISTORICAL COST (ACQUISITION COST)

This model known as the historic cost model focuses upon the amount of expense incurred during the defined period on formal training and orientation, familiarisation and on-the-job training, and formal development and experience. This is the amount of the additional investment in the acquisition and development of human resources. Acquisition costs involve costs on recruiting, selecting, and hiring people to meet an organisation's present and future human resource needs. These costs refer to the sacrifices that must be incurred to acquire a new employee. Development costs refers to the sacrifice (costs)

that must be incurred to train a person either to provide the level of performance normally expected from an individual in a given position or to enhance the individual's technical, administrative, or interpersonal skills.

Development costs include three components: orientation, off-the-job training, and on-the-job training. These three components generally include costs such as salaries, tuition, materials, travel, and consulting fees. Orientation costs are costs associated with formal orientation of employees. The orientation make employees familiar with personnel policies, company products, facilities, and so on. Orientation costs are generally a mixture of salaries and materials. The salaries are for both the trainer and trainees. Materials may include brochures describing firm policies, history, etc. Off-the-job training costs are incurred in formal training not directly connected with actual job performance. Formal training programmes may be advanced technical training, or management development programmes. Off-the-job training costs may include salaries, tuition meals, travel, facilities costs, consulting fees, and materials. On-the-job training costs are incurred in training an individual on the job itself rather than in formal training programmes. On-the-job training is used not only for production workers but also for, professionals such as accountants, engineers and management trainees. The costs associated with on-the-job training include labour and material costs.

Accounting for Historical Costs

Historical costs of human resources are treated in the same way as expenditure on fixed assets such as buildings, plant and machinery. Upon capitalisation, the amount of investments in human resources will appear as assets on an enterprise's balance sheet, and be written off over the expected employment life of the particular group of human resources employed in the enterprise. This accounting process involves recording of investments in human resources through a capitalisation process; recording of routine (periodic) expirations of such capitalised items using a suitable amortisation procedure; recording of losses on account of special expirations which may result from obsolescence of investments in certain skills or knowledge capabilities or the turnover of personnel; and reporting or communicating to interested parties on the dynamics and conditions of human resources in terms of investments therein.

The determination of a suitable amortisation procedure to recognise expirations in human resources is difficult and highly involved. Human resource investments are of a highly varied nature with different periods of long-term benefits. Further, uncertainties of voluntary employment tenure, physical and mental health conditions of employees, and even mortality add to the complication of deciding upon appropriate amortisation practice.

Ideally, expiration of human resource investments should be determined by association with those periods during which the benefits of the investments are experienced by the entity. As example, costs of recruiting should be amortised over a period of time which is the best estimate of the remaining time that the

individual will remain actively in the employment of the company. Training costs should be amortised over a period which is the best estimate of the time during which the benefits for such training will be enjoyed by the firm. Special training to develop a skill which will be utilised for a short time period should be amortised rapidly. General executive training, on the other hand, may be amortised over the estimated remaining tenure of the recipient with the company. Amortisation time periods should never extend beyond the date of the recipient's tenure with the organisation.

The amortisation practices adopted by a firm should be periodically reviewed and updated, if need arises. A periodic assessment of human resources and positions occupied should be made to identify significant physical health changes in individuals that may justify write-offs or changes in amortisation policy; changes in job requirements or changes in position held by certain individuals that may obsolete the unamortised portion of some human resource inputs and thus call for write-offs; transfer of individuals among departments that may require a regrouping of asset balances for segment accounting; and resignations or lay offs that should be recorded as losses in the amount of the unamortised balances.⁴ These periodic reviews should ordinarily be made by the personnel department with assistance from line managers and supervisors.

As stated earlier, historical cost based HRA will provide asset balance (book value figures) for unamortised investments in human resource to appear on a business firm's balance sheet. They will also provide expense figures for profit and loss account for regular amortisation, obsolesced inputs, health deteriorations, voluntary resignations, lay-offs and other identified causes. An example of how balance sheet and income statement will be prepared in this method, is displayed in Figures 19.1 and 19.2 respectively. All expenditures on personnel (human resources) has been divided into capital and current expenditures, assuming human resources as physical assets of the organisation. In income statements, therefore, the costs incurred on human resources applicable to future periods have been added back.

ABC COMPANY LTD.

Balance Sheet as on 31st December, 2016

Liabilities	Amount (₹)	Assets	Amount (₹)
Capital	26,000	Current assets	17,500
Profit	6,700	Plant & machinery (cost less depreciation)	15,400
Reserve for human resources	4,200	Land and Building cost Less depreciation	18,700
Long term loan	10,000	Net investment in human resources	8,700
Current liabilities	8,900	(cost less depreciation)	
Deferred taxes	4,500		
Total	60,300	Total	60,300

Figure 19.1

ABC COMPANY LTD.**Income statement for the year ended 31st December, 2016**

Net profit after interest	6,500
Add: Human resource costs capitalised	1,600
	8,100
Less: Taxation	1,900
Net profit available for shareholders	6,200
Less: Dividends	2,200
Profit retained	4,000

Figure 19.2**Advantages**

Historical costs based HRA have several advantages. Because they use primarily accounting techniques which have been in common use for many years, this method is relatively easy to develop and apply. In addition management would have little difficulty in understanding the meaning of the information supplied by cost-based systems since the underlying concepts are consistent with those of the conventional (historical) accounting data which management often rely upon. Another important advantage is that the accumulation of the cost of human resource investments in individuals is a much simpler process than attempts to measure the value of these individuals. Thus, historical cost-based approaches avoid some of the behavioural problems which are found in HRA

Historical cost based HRA would be useful to business managers interested in personnel control, evaluation, and lower labour turnover. The availability of human resource costs bring home to managers the sums of money invested in personnel of the relevant department, and the likely costs of replacing staff by persons of similar competence should the former leave the enterprise. This approach can be used in personnel cost control where departments are required to operate under a budgetary system.

Disadvantages

Historical cost-based HRA has the following disadvantages:

1. The principal shortcoming of historical cost approaches relates to the limitations inherent in any accounting system based on historical costs, *viz.*, past, costs are not particularly relevant to decisions about the present and the future. Historically cost-based accounting for human resources has serious limitations for decision making purposes just as it does for financial or physical resources. It can be argued that a balance sheet should reflect the economic value of an organisation's assets and claims thereon, and income measurement should assess the changes in these economic values for specific time periods. Historical cost-based HRA may be useful if historical costs are good representations, of 'economic values'. In today's changing and complex environment it can be claimed that historical cost-based accounting does not reveal human resource values in any

organisation and changes in human resource values as well.

2. The measurement problems in historical cost approaches to HRA can be summarised as follows. First, it is necessary to define and identify those items which are, in fact, human resource costs. A second measurement problem involves distinguishing between those costs which are to be capitalised and those costs which are to be treated as expenses of the period in which they are incurred. An additional measurement difficulty relates to the selection of reasonable procedures for the amortisation of capitalised human resource costs. Although the significance of the measurement problems associated with cost-based systems should not be underestimated, these problems appear to be solvable at least for practical purposes. Moreover, the measurement difficulties associated with these systems appear to be far less complex than those of most of the other approaches to human resources accounting.
3. Historical cost data must always be interpreted carefully keeping in mind the scope and function of the measurement system which has generated the data. In the case of human resource historical costs, there is a danger of reading too much into the meaning of the capitalised figure for a specific individual. This figure indicates nothing more than the unamortised balance of the costs that have been incurred with respect to the individual. It is not a valid measure of his potential contributions to the organisation.

In summary, while cost-based HRA systems are rather severely restricted in the range of their usefulness, within that range, they can be quite worthwhile. Furthermore, the applicability of existing accounting techniques and the familiarity of managers with these techniques suggest that such an approach can serve as a logical starting point.

REPLACEMENT COSTS

Replacement costs can be defined as the estimated costs that would have to be incurred by an enterprise in order to replace its existing human resources with others of similar ability and experience. The determination of replacement cost involves estimates and these estimates are concerned with the present rather than with the future. Flamholtz has developed a concept (model) for calculation of 'positional replacement cost' which he defines as the sacrifice that would have to be incurred today to replace a person occupying a specified position with a substitute capable of rendering equivalent services in the given position. There are three basic elements of positional replacement costs; acquisition cost, development cost, and separation cost. Acquisition and development costs have been discussed earlier. Separation costs is incurred as a result of an employee leaving a position or job in an organisation. It includes three basic components: separation compensation costs, differential pre-separation performance cost, and vacant position cost. These

costs are generally capitalised and amortised, but should be expensed when the employee ceases to be employed.

Separation compensation cost is the cost of severance pay, if any, for personnel. It may range from very little or no cost to a person's salary for one year, and perhaps more. Differential pre-separation performance cost is the cost of lost productivity prior to the separation of an individual from an organization. There is a tendency for performance to decrease prior to separation. In many cases, differential pre-separation performance costs may be difficult to measure for specified individuals but may be measureable from historical performance records by personnel classifications. Vacant position costs may be incurred during a period when a search is made for replacement. If performance in one position has an impact on performance in other position, holders of the latter may perform less effectively when the former is vacant. This difference in performance or less performance can be termed a cost of a vacant position. For example, during the period of searching for a new sales person, an imputed cost may be incurred because of a loss of sales that would otherwise have accrued to the organisation. This is also a vacant position cost.

Evaluation

In a sense, replacement costs can be viewed as representing a bridge between historical cost approaches and economic value approaches. The justification for considering replacement cost as a form of economic value is the proposition that the value to an organisation of an individual's services is reflected by the amount that the organisation would have to pay to replace these services. While the question whether replacement costs represent economic values, is debatable, it can be said that replacement cost is the best available substitute measure of current value. Furthermore, replacement costs are present-oriented rather than future-oriented. Thus, it is not necessary to make estimates about the future in order to determine human resource values in terms of replacement costs.

There are several difficulties associated with the use of replacement costs for human resource accounting. Replacement costs are often irrelevant since management may be either unwilling or unable to replace a particular individual with another person of similar abilities. Further, in some situations, it may not be possible to determine the replacement cost of an individual, and, even when that cost can be determined there is no reason to assume that it will always represent an adequate surrogate for economic value. Also, replacement cost does not necessarily reflect the knowledge and loyalties concerning an organisation that an individual can build up over time.

Replacement costs, since they are based on estimates and not on historic evidence, are subject to reliability problems. However, the use of replacement costs does correct the deficiency of outdated historical financial measurements.

Despite these difficulties, the replacement cost approach to human resource valuation can be used for both internal and external purposes. Replacement cost measurements are helpful to managements in determining rankings of employees. Since

replacement costs are good surrogates in determining employee value to the organisation, this approach to human resource valuation will undoubtedly receive a good deal of attention in the future. In a study, Carpar and Posey⁵ tested the validity of three different measures for personnel evaluations within a CPA firm: (a) a replacement cost model, (b) salary, and (c) a historical cost model. Their study found that (i) replacement cost appears to be the most valid surrogate measure for personnel valuation; and (it) replacement cost tends to approximate the true economic value of an individual within a CPA firm.

HUMAN RESOURCE VALUE ACCOUNTING (HRVA)

HRVA attempts to measure the value of human resources on the basis of benefits accruing to an organisation. The amounts of such benefits are derived from the value differentials attributable to investments in human resources. Many authors have developed models for calculating (estimating) the value of human resources of an organisation. These models have some similarities, but they do vary somewhat in both concept and in choice of surrogates. Some models have been discussed here.

1. Hermanson Model

Hermanson⁶ discusses two possible valuation methods, both of which are based on economic concepts of value: (a) The Unpurchased Goodwill Method, and (b) the Adjusted Present Value Method.

- (a) *Unpurchased Goodwill Method* — Hermanson has suggested that the value of human resources of an organisation may be assessed by capitalising earnings in excess of normal earnings for the industry or group of companies of which the firm is a part. If, for example, the average return on 'owned (tangible) assets' in a particular industry over the past five years has been 10 per cent and the firm has enjoyed a 15 per cent return on its 'owned assets' of ₹ 30,00,000, then its 'unowned assets (human resources)' are assumed to be valued at ₹ 15,00,000 since the profit ₹ 4,50,000 (₹ 30,00,000 x 15 per cent) is assumed to be 10 per cent of total owned and unowned assets of ₹ 45,00,000.

This approach is historical cost based and thus of limited use as a predictor. Also, if it is based on projected earnings rates it would be no better. This approach implicitly assumes a zero value for all human resources in competitive situations since a positive value of human resources requires above average earnings.

- (b) *Adjusted Present Value Method* — This method requires four steps in order to arrive at the value of the human assets.
- (i) Estimate annual wage and salary payments for five years into the future.
 - (ii) Calculate the present value of estimated wage and salary payments by applying a discount factor equal to the normal rate of return in the economy.

- (iii) Calculate an 'average efficiency ratio' based on the previous five years performance. This ratio is found by dividing the actual earnings of the firm by normal earnings for each year and averaging the results.

(In making this calculation, the latter years receive more weight than the earlier years.)

- (iv) Multiply the present value of the future wage and salary payments by the average efficiency ratio. The resulting figure represents the estimated present value of the human resources.

This method also is related to Hermanson's unpurchased goodwill model and shares the same limitations. In addition, it may be criticised on the grounds that future compensation is as much a measure of the liability of the firm employing the individual as it is an asset. The concept, therefore, may relate to the human capital represented in individuals employed by the firm. Both of Hermanson's models are suggested as possibilities for external reporting and management uses.

2. Giles and Robinson Model

Giles and Robinson's⁷ suggest that the valuation of human assets should be made in term analogous to the valuation of a business on a going concern basis. The price-earning ratio, which relates market capitalisation to the latest reported earning figure, is their point of departure. Based on a sample of companies with similar characteristics, an average P/E multiple is computed and then adjusted to arrive at the multiple applicable to the firm by providing for (deducting from the average multiplier) the factors that are not relate to human assets. The multiple is further adjusted as needed, for application to different job categories.

Gross remuneration of employees and all additional expenditures related to investments in human resources are capitalised by using the appropriate multipliers. The technique provides the basic data necessary for periodic human asset balance sheets and income statements, and human asset profiles and projections of the firm.

The multiplier represents a number of year's capitalisation of the annual human resource figure. The total human asset value in a firm is either equal to or less than the amount of 'goodwill' (the going concern valueless net non-human assets). Due allowance is made for other goodwill elements, such as product loyalty, patented processes and the value of long-term contracts. The net change in human assets value in a period is computed as the difference between capitalised amounts which enhance the value and capitalised provisions for diminution or amortisation of value.

3. Lev and Schwartz Model

This model determines present value of future earnings of a person in an organisation. The Model developed by Lev and Schwartz⁸ to estimate human capital value of a person (y years old) is:

$$E(V_u^*) = \int_{t=y}^T \frac{P_u(t+1)y}{(1+r)^t} \cdot \frac{1 \cdot I}{t-y}$$

Where $E(V_u^*)$ = expected value of the human capital value of a person y years old; T = person's retirement age; $P_u(t)$ = probability of the person dying (we note that if this concept is to be useful for a specific firm, then the term 'dying' must include the possibility that the individual will leave the firm for any reason, such as resignation or retirement.); I^* = expected earnings of the person in period i ; r = discount rate specific to the person.

This model provides a reasonable measure of human capital which could be useful for aggregation in macro statistics and in assessing the dynamics and mobility of such capital. While the authors indicate that capital values determined by use of this model will provide financial statement users with valuable information about changes in an organisation's labour force, the model's use for practical decisions of managers of organisations or of potential investors in organisations is obscure or even non existent.

4. Flamholtz Model

Flamholtz⁹ has proposed 'expected realisable value' as a form of economic valuation of the human resources. His model postulates that an individual is not valuable to an organisation in the abstract. An individual is valuable to an organisation in relation to the personal attributes and attitudes of the individual, the nature of the role he occupies and the characteristics of the organisation. On a conceptual and theoretical level, Flamholtz has tried to identify the key variables that determine an individual's value to an organisation and the inter relationships of such variables. He recognises that these determinants may lend themselves to monetary or non monetary indicators. The model developed by Flamholtz is shown in Fig. 19.3.

Flamholtz suggests appropriately that this "model is suggested as a first step toward the development of a theory". It is conceptual, theoretical, and perhaps only impressionistic. One of the most difficult aspects of calculating expected realisable value is the estimation of the value of a person's expected services. Flamholtz has proposed that it may be desirable to use a substitute measure of surrogate, for this purpose. Examples of possible surrogate measures include compensation, replacement cost and performance indexes. In an experiment designed to test the appropriateness of using these measures, Flamholtz found that all three may be relevant for this purpose. He suggests that the choice of the 'best' measure in a specific situation will depend on the intended use of the data.¹⁰

To summarise, according to Flamholtz, the measurement of human resource value of an individual to an organisation requires the following steps:

- (i) Estimate the total time period during which the individual can be expected to render services to the organisation.
- (ii) Identify the various service states (*i.e.*, position) that the individual may occupy during the time he is with the organisation.
- (iii) Measure the value derived by the organisation if the individual occupies the various service states for the specified time periods.

- (iv) Estimate the probability that the individual will, in fact, occupy each state at the specified future time.

5. Ogan Model

Ogan¹¹ attempted to measure in monetary terms the net present value of some of the human resources of a certified public accounting firm. A Human Resource Value Model was utilised in the research which is exhibited in Fig. 19.4. According to Ogan, there are seven major determinants of the value of human resources.

- (i) Monetary value benefit potential.
- (ii) The individual performance index:
 - (a) Efficiency index.
 - (b) Standard work index.
- (iii) Maintenance costs (salaries or wages).
- (iv) Start up costs (recruiting, initial training).
- (v) Training and development costs.
- (vi) Probability of continued employment.
- (vii) Probability of survival.

Ogan believes that his model generates data that are amenable for use in an on going manner like a performance evaluation system or a human resource value accounting system. Another simple but pragmatic use of the model is to regard the periodic adjusted and weighted NPV patterns for each employee as the opportunity costs related to the employees if and when they exit from the firm for reasons other than death or retirement. Also, by using the firm's desired rate of return in discounting, management may be able to isolate those employees with marginal net present value patterns.

Ogan's model has two major limitations which are one, the 'total' value of the individual is not considered, and two, the model is limited for use in professional service organisations. The 'total value' of the individual is not considered because the model specifically dwells on the 'monetary values' of employees which can be measured, primarily, by objective data such as billing rates or maximum billable hours in a year. The model does not concern itself with the value of the complement of the standard work index. This complement comprises the employee's involvement in community affairs, professional associations, administrative duties, client development and training of subordinates.

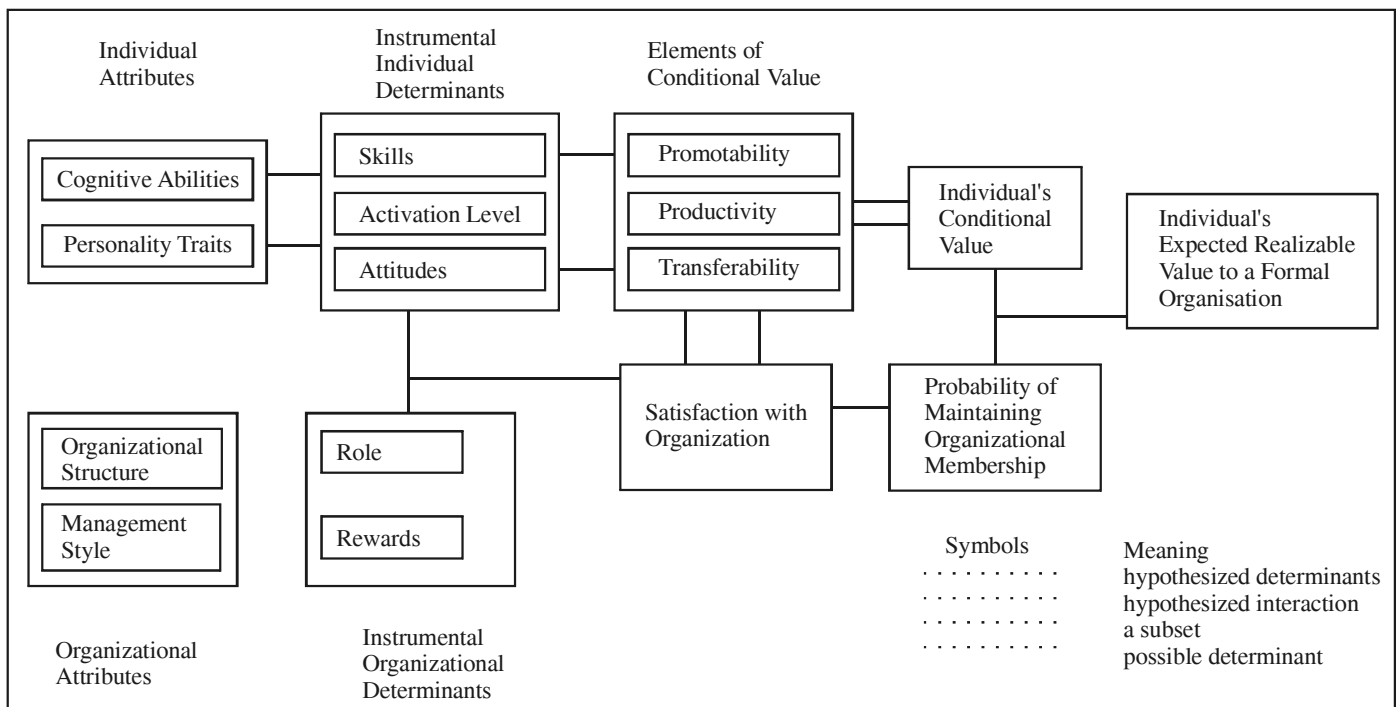


Figure 19.3 : Revised Model of the Determinants of an Individual's Value to a Formal Organization

Source : Eric Flamholtz, 'Human Resource Accounting: A Review of Theory and Research', unpublished paper presented to the Organization Behaviour Division at the 32nd Annual Meeting of the Academy of Management, Minneapolis, Minn., August 15, 1972, p. 10.

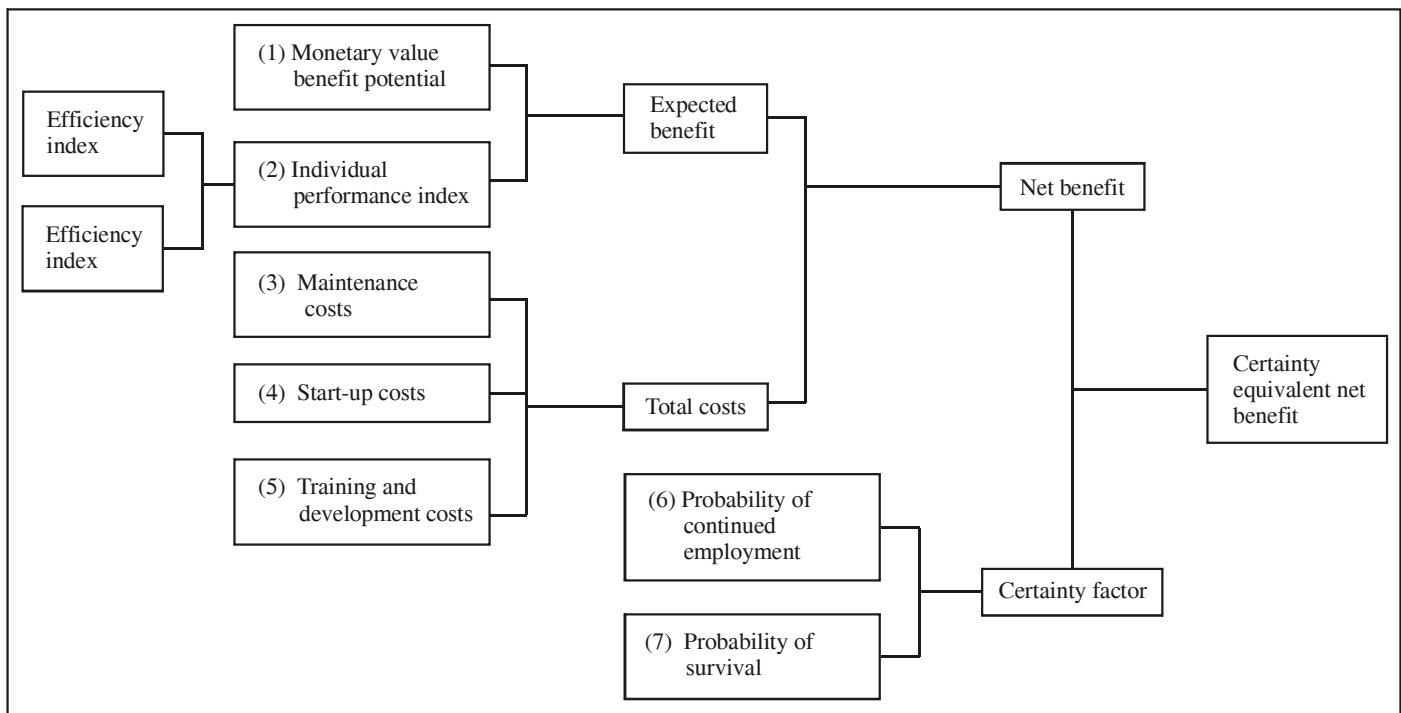


Figure 19.4 : Major Determinants of the Human Resource Value Model

Source : Pekin Ogan., 'Application of a Human Resource Value Model : A Field Study', *Accounting, Organisation and Society*, Vol. 1, No. 2-3, 1976, p. 198.

6. Jaggi and Lau Model

In human resource valuation, there is a problem of forecasting the expected promotion chances and tenure of employees on an individual basis. To overcome this problem, Jaggi and Lau have proposed human resource valuation on a group basis. Jaggi and Lau¹² refer to 'group' as homogeneous group of employees who may not be necessarily working in the same department. They claim that on a group basis it is possible to know the percentage of people (in a particular group or department) likely to get promotions or to leave the organization-before death or retirement in future years. This model assumes that the pattern of employees' movement generally remains constant over time. Therefore predictions based on historical data for one period can be used for future periods also. The authors assert that with some intuitive 'justification, the model is likely to provide greater accuracy and reliability.

Evaluation of Human Resource Value Accounting (HRVA)

HRVA using the present value of expected future benefits approach has strong theoretical appeal. However, in practice, the measurement problems associated with HRVA appear to be considerable. Calculation of the expected future benefits that will be realised from the services of a particular employee requires that these benefits should be identifiable. Since the benefits are defined as being 'economic benefits', they are related to contributions to the future income of the organisation. But, except in a few situations, it is impossible to arrive at any accurate measure

of the income effects resulting from the contributions of a single individual. This is a dilemma which accountants have faced for years and, at least to date, no solution has been found. There is no known technique for obtaining direct measures of the economic benefits that flow from human assets which are part of a larger business asset. In short, it is highly unlikely that the economic concept of human value, as such, represents a proper and feasible solution to the valuation problems of human resource accounting. To minimise the difficulties in valuation problems, sometimes, the salary or compensation is used to arrive at human resource values on the assumption that a relationship exists between an individual's salary and his value to the organisation. This approach has advantage in the sense that much of the required data is readily available. However, those HRVA models which are based on expected future compensation as a part of the computation of human resource values suffer from the difficulties involved in arriving at estimates. Also, if compensation is used to determine human resource values, variations in salary levels will influence human resource measures. Further, the resulting values can be misleading.

Moreover, it can be argued that human resource values will have some influence on salary decisions to be made by management. This results into a circular question : salary determines value of an employee and his value determines salary. This leads to the question as to whether value of an employee being determined or his salary and compensation is being decided.

Besides, estimates of future compensation imply value judgments concerning the future contributions of employees to the Organisation. If an individual is currently considered to have great promise and utility, his human resource value will be very high. If, on the other hand, his future potential appears less promising, his human resource value will be low. It is also true that people develop differently, and some of the assessments upon which the human values are based are certain to be erroneous. For example, employees' salary multipliers may be used to determine their values. But while such method appears to be technically feasible, there are still some serious questions about the legitimacy and usefulness of the values obtained.

The evaluation of HRCA and HRVA and different approaches therein suggest that there is no yet widely accepted technique for the purpose of human resource accounting. Valuation is a problem not only in HRA but is still an unresolved and controversial topic in conventional financial accounting also. It is true that historical costs, and more appropriately replacement costs, appear to be most feasible and usable systems in HRA.

But HRVA recognizes 'values' of employees in an organisation and therefore, it would prove more useful to both managements and external users. There is a need to develop a HRVA model which should not be strong only in theory and concept but should meet criteria of understandability, usefulness, feasibility, and reliability as well.

SIGNIFICANCE OF HUMAN RESOURCE ACCOUNTING

Successful companies manage their human capital well. They hire the right people and train them in the skills they need to help the company perform spectacularly. Peter Cappelli, Professor of Management and Director of the Centre for Human Resources at the Wharton School at the University of Pennsylvania remarked:

"Everyone understands that the quality of people is the key differentiating factor whether they are great as individuals or because they have set up systems that work best". Jim Hatch, principal with Price Waterhouse Coopers (at Saratoga) observed that human capital ROI (return on investment) — the amount of money you get back in profits for every dollar invested in human capital—is a good predictor of mid and long term success.

Human resource accounting information is useful in many respects. The areas where HRA contributes significantly are as follows :

1. Managerial Role of HRA

From management's viewpoint, the primary role of HRA is to provide information necessary to perform the functions of acquiring, developing, allocating, conserving, utilising, evaluating and rewarding human resources.

Acquisition

The acquisition of human resource includes recruiting, selecting, hiring people to meet the Organisation's present and expected future manpower needs HRA can be useful in budgeting

manpower acquisition'. It can provide measurement of the standard costs of recruiting, selecting, and hiring people, which can be used to prepare proposed manpower acquisition budgets.

Development

The development of human resource involves various forms of training designed to enhance the technical, administrative and interpersonal skills of employees. This, in turn, increases their value to an organisation. HRA can help facilitate decisions involving the allocation of resources to human resource development by measuring the expected rate of return on proposed investments. Although most investments in such programmes are made on the basis of faith in their benefits, a more rational decision might be made based on an assessment of the expected return on the proposed human capital investment. The data for such analysis would be provided by human resource accounting.

By providing estimates of the historical and current replacement costs to acquire and develop people for various positions, human resource accounting can help management assess the trade-offs between the costs of recruitment from outside and development from within. Thus, it provides the economic information management needs to assist in formulating personnel acquisition and development policy.

Allocation

The allocation of human resources is the process of assigning people to various organisational roles and tasks. Ideally, management allocates people to jobs in a way that will optimise these three variables: job productivity, human resource development, and individual satisfaction. HRA can be useful to management in making such allocation decisions. It can help quantify the variables involved in the allocation decision and express them in the common denominator of monetary units. This will help management understand the trade-offs involved in allocation decisions and thus enable management to select the optimal course of action. Poor allocation decisions can be costly to individuals and society as a whole, as well as to organisations. Organisations can actually deplete the value of their human assets by failing to assign people to jobs in which they can develop their skills and improve their productivity.

Conservation

Conservation of human resources is the process of maintaining the capabilities of people as individuals and the effectiveness of the human system developed by an Organisation. Unless systematically monitored and maintained, the capabilities of human resource may deteriorate. As a result, an organisation will have to incur either retraining costs or replacement costs to rebuild its human capabilities. HRA can assist management in conserving its human organisation by providing an early-warning system. It can measure and report certain (social psychological) indicators of the condition of the human organisation, and management can assess trends in these variables prior to the actual occurrence of turnover.

Evaluation and control

Human resource valuation is the process of assessing the value of people to an organisation. It involves measuring the productivity (performance) and promotability of people. HRA can be useful in the human resource evaluation process by developing valid and reliable methods of measuring the value of people to an organisation. This method will include both monetary and non-monetary measurements. They will permit human resource management decisions to be made on a cost-value basis.

Human resource valuation will also have an impact on the administration of human resource reward systems. These systems are intended to motivate and reinforce the optimal performance of people in achieving organisational objectives. Human resource valuation will permit organisational rewards to be administered in relation to a person's value to an Organisation.

The above uses of HRA have been depicted in Fig. 19.5

2. Managerial Performance

Human resource accounting information will be useful in determining the performance of managers and the business as a whole. It should be understood that conventional accounting measures of performance such as net income and return on investment not only completely ignore changes in human resources but actually encourage managers to use their human resources in order to improve their performance with respect to the conventional accounting measures. HRA could provide data which would broaden managerial performance evaluations and reduce the emphasis on short run performance indicators found in conventional accounting. By helping to make managers more aware of the significance of human resources in terms of their own success, HRA can contribute to enlightened managerial attitudes and improved leadership styles.

Management's emphasis not to include human resource investments in profit maximization or profit determination makes

Human resource management functions	Generic management process	
	Planning	Control
Acquisition	1. Provides cost information to budget acquisition programs historical and standard costs	1. Provides standard cost of acquisition activities (recruitment, selection etc.) for cost control. 2. Facilitates treatment of personnel acquisition function as profit centre
Development	1. Provides information about cost of development programs for budgetary planning 2. Measures anticipated cost savings from proposed development expenditures 3. Facilitates acquisition development trade-off decisions	1. Provides standard cost information for development activities 2. Can facilitate treatment of training as a profit centre
Allocation	1. Provides information about human resource costs for investment decisions and allocation decisions	1. Can use investment in human resources as criterion for evaluating project performance (return)
Conservation	1. Can use expected cost of turnover in turnover control programmes	1. Monitors investments in human resources to conserve skills 2. Measures economic cost of turnover
Compensation	1. Can use replacement cost in job evaluation for compensation planning	1. Can use replacement costs to monitor compensation rates set by other methods and control for over or underpriced jobs

Figure 19.5 : Overview of Human Resource Cost Accounting's Role in the Personnel Management Process

the reported profit misleading. If investments in human resource are not capitalised, it will cause profit to be significantly understated in periods of rapid human resource building and significantly overstated in periods of human resource deterioration. In this way, managers and external users both draw wrong conclusions and make unwise decisions. The dangers in this area are particularly great while making divisional (segment) performance reports using profit centre accounting.

A manager may emphasise on results to be measured purely by conventional accounting. The result is, in the short run, a division may contribute to profit even though employee attitudes are deteriorating. The manager's actions may be detrimental to the organisation even though profit appears very satisfactory. A satisfactory HRA system can rectify this situation, so as to prevent the rewarding of poor performance and make possible the rewarding of good, more complete performance.

The consideration of investment in human resource would influence the computation of return on assets or return on investments. Using human resource accounting this measure or performance index becomes:

$$\frac{\text{Conventional profit or profit contribution} + \text{change in human resources}}{\text{Conventional asset or investment} + \text{human assets.}}$$

3. Behavioural Implications

The immediate impact of human resource costs on reported profits may lead to decisions that are influenced by tax considerations toward reporting larger or smaller profits for a period. For example, a manager trying hard to minimise tax payments, will look with great favour on human resource investment that is expensed than on physical resource investment to get a short run tax advantage, while a manager already conscious of the embarrassing aspects of a declining profit trend may favour physical resource investment over human resource investment so as to postpone the impact upon reported profits. HRA could avoid this unintended and unjustified bias.

It may be suggested further that HRA is in itself a way of communicating to the people of an organisation that their role is considered valuable and that managers are going to be evaluated, at least in part, on the basis of their contribution to the development of the human resource under their control. If this communication is effective, it will most certainly affect decisions and behaviour. The assessment of human resource conditions is likely to encourage managers to take long run view of their decisions. The impact of human resource investments as well as other decisions and management styles are now represented as a human resource condition precedent to the ultimate productivity or effectiveness of the organisation. In this respect, human resource capital budgeting may prove a highly useful tool where techniques may be developed to justify the amount and mix of periodic human resource investments. Flamholtz¹³ considered the impact of human resource value data on a personnel allocation decision. Using 35 practising CPAs as subjects, Flamholtz found significant differences in decisions by those who used traditional trait

evaluations relative to those who used two types of HRA data. Similarly, Tomassini¹⁴ concludes that HRA data can affect decision preferences differently.

4. External Users' Investment – Decision Making

HRA is not useful to the management alone in achieving its economic goals. It could also be the source of important information for investment decision purposes. The inclusion of appropriate human resource data in published financial statements would, in all likelihood, make such statements for more meaningful in predicting future performance which is, of course, the principal concern of investors. Schwan¹⁵ considered the effects of human resource cost measures on banker decision making. Schwan found that the inclusion of HRA data in published financial statements resulted in, one significantly different ratings of management's preparedness to meet future challenges and opportunities and, two, statistically different predictions of a firm's net income. Hendricks¹⁶ performed a study using accounting and finance students as subjects. His simulated investors made two stock investment capital allocation decisions, one with and one without human resource cost data. The differences in the two decisions were statistically significant, based upon a difference of correlated means to test. Acland¹⁷ finds that external financial decision makers are receptive to quantified behavioural information. Using financial analysts as representatives of the external users, the experimental study showed that this information did have an effect on their investment decisions.

5. Capital Budgeting

Capital budgeting is generally used in making long-term investment decisions. However, existing capital budgeting techniques usually consider only the costs of investments in physical and financial assets and ignore completely the investments in training and other costs associated with human resource that will be devoted to a project. The inclusion of human resource investment costs in the capital budgeting process would add an entirely new dimension and would almost certainly result in different decisions concerning the desirability of some contemplated investment projects.

To conclude, human resource constitute the most significant operational asset of most organizations—business and non-business. Hence, company annual reports containing HRA information would be more adequate, purposeful and useful to business managers and investors. HRA information would be of significance in manpower planning, resource allocation decisions, human resource evaluation and control, evaluation of manager's performance, profit determination and in making capital budgeting decisions.

AUDIT OF HRA INFORMATION

The reporting of HRA information in external annual reports brings with it the question of its audit. Costs incurred in human resource are readily subject to verification by the auditor and thus present no new problems. Cost expirations, on the other hand, if based on the theoretically sound assessment of future

benefits remaining for the organisation, present some problems for the auditor because human resource and behaviour are highly complex. But, conventional accounting also uses estimates, assumptions in many areas such as depreciation related to the future which could be as unpredictable and less accurate.

The verification of value-based data for human resource in annual reports presents a different and more substantial problems for the auditors. However, there has been found a growing interest in value-based accounting data in recent years. Therefore, the possibility for value-based human resource accounting at some time in the future could not be ignored. Flamholtz¹⁸ suggests :

“Human resource accounting will have an impact upon corporate financial reporting. In the future, corporations will report on their investments in human assets. At first this information will be reported in the President’s letter of corporate annual reports. The purpose will be to show management’s attention to building human assets. Some companies may choose, to include this information in a statement of intangibles, and some will include it in proforma financial’ statements. Ultimately, however, it will be included in conventional financial statements as a generally accepted accounting practice.”

LIMITATIONS OF HUMAN RESOURCE ACCOUNTING

Human resource accounting, although greatly useful to managements and other users, suffers from some weaknesses. Such weaknesses are mentioned below:

1. Ethical and Behavioural Limitations

Human resource accounting is viewed by some managers as a method of exercising autocratic control and manipulating employee behaviour. Human resource measures promise to be powerful tools, and such manipulation would not only be a violation of management’s ethical responsibilities but it would almost certainly have a negative effect on organisational climate and individual attitudes. Moreover, even without deliberate attempts to use human resource accounting data for manipulative purposes, the behavioural problems associated with the gathering and reporting of such data are extremely complex.¹⁹

Furthermore, people may react unfavourably as HRA attempts to attach quantitative values to them. Cultural constraints and taboos may create difficulty in arriving at accurate human resource values. Some may fear implication of discrimination or dehumanisation even though HRA may cause managers to show much greater concern for the well being of the organisation’s employees. In order for human resource values to be accepted without resentment, there will need to be a reasonable relationship between an individual’s salary and his human resource value, particularly relative to other members of the organisation. It appears that well developed personnel policies and procedures concerning performance evaluation and compensation are prerequisite to the introduction of an efficient human resource accounting system.

2. Measurement Problems

As stated earlier, human resource accounting may be cost-based or value based. The technical problems of cost-based HRA are not great as accountants deal with such aspects on a regular basis. Many of the cost expirations are readily determinable as individuals leave the organisation or as input costs are made obsolete by changed human resource needs of the company. The major problem for implementing a cost-based HRA system may be one of cost justification since it is difficult, if not impossible, to cost justify any human resource accounting, effort without some experimentation based on faith and conviction — a condition not uncommon in organisation decision making.

The technical problems of value-based human resource accounting are substantial. Recognising this, accountants and business managers may be expected to innovate with great caution. The technical aspects of the measurement problems could be solved easily with the help of psychologists, the psychometricians and behaviouralists. Accountants must act as members of an interdisciplinary team to implement value-based human resource accounting. A substantial amount of additional research and experimentation concerning the development of measurement techniques for human resource accounting will be required. However, measurement systems need not be perfect to be highly useful and therefore, HRA information based on reasonable assumptions could still be useful and preferable in absence of no information,

3. Ownership Criterion

Traditionally, accountants insist on legal ownership and future benefits to be received to treat certain costs as ‘assets’. Human resource investments have not been regarded as assets in the past as they are not similar to fixed assets. However, it can be argued that an organisation should account for and monitor those resources which are most significant in the organisation without regard for legal ownership or certainty of the value represented, and human resource meet such a criterion. The costs (or values) associated with human resources should be capitalised and matched against future benefits accruing to the organisation from such human resource.

4. Other Limitations

Sometimes it is argued that HRA data could be (mis)utilised by labour unions as a part of the justification for wage demands. It is difficult to anticipate how serious these criticisms may prove to be. Also, this will not have any significant negative impact on the development of human resource accounting. A Committee of the American Accounting Association²⁰ has found that the more important obstacles to acceptance of HRA are the following :

- (a) Human resource accounting has to some managers seemed a hastily constructed discipline made up of ‘recycled parts’ from other disciplines. The result is not always pleasant and often the parts have not functioned satisfactorily in their original habitat.

- (b) The field of human resource accounting unfortunately, has an exploitative connotation to some people. A resource is usually something that is used up; and accounting implies using a tool that will make this exploitation process as efficient as possible.
- (c) It is difficult to change management's view of people from being an expense rather than a resource.

In spite of the above limitations, it can be argued that HRA information has great usefulness to corporate managements and investors. The limitations of HRA, although requires careful consideration, are not such that further development of HRA system would be inappropriate or hindered. Gordon *et al.*,²¹ conclude that "it is by no means clear that HRA information can be widely developed with sufficient reliability and validity to be accepted as a meaningful useful evaluative device."

DISCLOSURE OF HRA INFORMATION

Indian companies had not made any serious attempt to provide HRA information in their published annual reports. But, recently, some companies such as BHEL, NTPC, MMTC, SAIL have given some HRA information. The HRA model generally followed by Indian companies has been the 'Lev and Schwartz Model'. Some companies have not followed specific HRA model and have preferred to give some information relating to their human resources.

CONCLUSION

Human resource accounting is an area which is not yet fully developed. Much more research, empirical enquiry and experimentation is necessary to develop a useful human resource accounting system which may command general acceptance and appeal. In this respect, all interested persons—managers, accountants, investors and other users—have a great challenge and responsibility. Human resource accounting deals with variables that are particularly difficult to precisely measure and therefore, has been considered in the past beyond the range of what has been generally considered 'accounting'. However, accountants can develop special skills which can be applied in the development of human resource accounting systems. It is expected that managements and accountants will accept the challenge provided by human resource accounting and will jointly take the initiative in developing human resource accounting systems for their organisations. In future, accounting and reporting system, it can be claimed, will regard human resource as the most important asset of any organization and will incorporate adequate human resource accounting information for the benefit of managements, investors and other external users.

REFERENCES

1. American Accounting Association's Committee on Human Resource Accounting, *The Accounting Review Supplement*, 1973.
2. Eric G. Flamholtz "Human Resource Accounting" in Sidney Davidson and Roman L., Weil (Eds.), *Handbook of Cost Accounting*, New York : McGraw Hill Book Company, 1978, p. 26.2.
3. Edwin H. Caplan and Stephen Landekich, *Human Resource Accountings: Past, Present and Future*, New York: National Association of Accountants, 1974, p. 2
4. R. Lee Brummet, "Human Resource Accounting," in Sidney Davidson and Roman L., Weil (Eds.), *Handbook of Modern Accounting*, New York: McGraw Hill Book Company, 1978, p. 37 8.
5. W.M. Brent Carper and J. Marion Posey, "The Validity of Selected Surrogate, Measures of Human Resource Value: A Fieldstudy," *Accounting Organisation and Society*, Vol. 1, No. 2 3, pp. 143--151.
6. Roger H. Hermanson, Accounting for Human Assets, Occasional Paper No. 14, Michigan State University, East Lansing, Michigan; 1964.
7. W.J. Giles and D.F. Robinson, *Human Asset Accounting*, Institute of Personnel Management and Institute of Cost and Management Accountants, London, 1972.
8. Baruch Lev and Aba Schwartz, "On the use of Economic Concept of Human Capital in Financial Statements," *The Accounting Review* (January 1971).
9. Eric G. Flamholtz, "Towards Theory of Human Resource Value in A Formal Organisation," *The Accounting Review* (October 1972), pp. 666-678.
10. Eric G. Flamholtz, "Should Your Organisation, Attempt to Value its Human Resources?" *California Management Review* (Winter 1971).
11. Pekin Organ, "Application of a Human Resource Value Model A Field Study," *Accounting, Organisations and Society* (November 1976), pp. 195-217.
12. Bikki Jaggi and Hon Shiang Lau, Towards a Model for Human Resource Valuation, *Accounting Review* (October 1974), pp. 321-329.
13. EG Flamholtz, "The Impact of Human Resource Valuation on Management Decisions : A Laboratory Experiment' *Accounting, Organisations and Society*, Vol. 1, No. 2/3, 1976, pp. 153-165.
14. Lawrence A. Tomassini, "Assessiting the Impact of Human Resource Accounting : An Experimental Study of Managerial Decision Preferences", *The Accounting Review* (October 1977), pp. 904-914.
15. E.S. Schwan, "The Effects of Human Resource Accounting Data on Financial Decisions : An Empirical Test," *Accounting, Organisations and Society*, (1976) pp. 219-237.
16. J.A. Hendricks, "The Impact of Human Resource Accounting Information on Stock Investment Decisions," *The Accounting Review* (April 1976), pp. 292-305.
17. Derck Acland, "The Effects of Behavioural Indicators on Investor Decisions: An Exploratory Study," *Accounting Organisations and Society*, Vol. 1, No. 2 3, 1976, pp. 133-142.
18. Eric G. Flamholtz, *Human Resource Accounting*, California, Dickenson Publishing Company Inc., 1974, p. 336.
19. Edwin H. Caplan and Stephen Landekich. *op. ci.t*, p. 123.
20. American Accounting Association, Report of the Committee on Accounting for Human Resources, *The Accounting Review Supplement*, 1974, p. 122.

21. F.E. Gordon, J.G. Rhode and K.A. Merchant, "The Effects of Salary and Human Resource Accounting Disclosures on Small Group Relation and Performance," *Accounting, Organizations and Society*, Vol. 2, No. 4, (1977), pp. 219-236.

QUESTIONS

1. What do you mean by human resource accounting?
2. "Human resource development seeks to nurture a creative human resource fullest potential while focussing on the corporate purpose of excellence in performance." Do you agree with the above statement? Explain how human resource accounting can be helpful in this regard.
3. Discuss historical cost based human resource accounting. Explain the problems involved in it.
4. "Human resource accounting based on economic value is a better technique." Examine this statement critically.
5. Discuss the valuation models developed in HRA area. Which model do you prefer and why ?
6. In what way HRA information would be useful to management?
7. Discuss the possible difficulties in generating HRA information.
8. Mention the attempts made by Indian companies in providing HRA information in their annual reports.
9. Give suitable suggestions for developing a human resource accounting system in a manufacturing concern.
10. Discuss the role of HRA information in making investment decisions by the investors and other users,
11. "People are the most important assets of an organisation, and yet the value of these assets does not appear in the financial statements." Explain.

What steps have recently been taken by different private and public sector companies in India to remove this shortcoming?
Give a format to report the human accounting information in the annual financial statements, *[M.Com., Delhi]*
12. Compare Lev and Schwartz model with Flamholtz model of measuring human resources. Discuss their shortcomings. Explain how Jaggi and Lau model is an improvement over the aforesaid models. *[M.Com., Delhi 1986]*
13. "Human Resource Accounting is an attempt to identify, evaluate and report investments made in resources of an organization that are not presently accounted for in conventional accounting practice."

In the light of this statement, explain the procedures adopted by Indian companies for accounting of human resources for external reporting.



Corporate Social Reporting (CSR)

Introduction

Conventional financial accounting primarily focuses on the measurement and reporting of business transactions between two or more business firms. Financial statements prepared under financial accounting are basically meant to serve the needs of shareholders and potential investors in making sound economic decisions. Exchanges between a firm and its social environment are practically ignored. The conventional financial reporting system is designed to gather, process and report financial results and operating statistics with no regard to social performance information of business enterprises. This nature of financial accounting has led to, in recent years, a serious debate that business activity should conform to socially desirable ends, *e.g.*, that products should not be harmful to users, the pursuit of profit should be constrained by social considerations; the environment should be protected from industrial malpractices in the form of pollution of every kind; and employees should have a right to security of employment. As business enterprises respond to pressures of new dimension – social, human and environmental — they may not necessarily change their basic (business) goals, but they will alter them to reflect the new constraints to be satisfied.

Corporate social responsibility is the continuing commitment by business to behave ethically and contribute to economic development while improving the quality of life of the workforce and their families as well as of the local community and society at large.

CSR is closely linked with the principles of sustainable development, which argues that enterprises should make decisions based not only on financial factors such as profits or dividends, but also based on the immediate and long-term social and environmental consequences of their activities.

The True blood Committee Report¹ observes that “an objective of financial statements is to report on those activities of the enterprise affecting society which can be determined and described or measured and which are important to the role of the enterprise in its social environment”. Similarly, American Accounting Association Committee on Measurement of Social Costs² has emphasised on operational objectives for the corporate enterprises such as increase in annual profit by 8 per cent, an increase in sales by 20 per cent, reduction in pollution levels by 30 per cent and an employee mix that reflects the mix of minorities in communities where plants are located. Recently, a study conducted by Spicer³ concludes that the most profitable, larger companies, in general, were judged by investors to be less risky in terms of both total and systematic risk. In addition, these companies were awarded generally higher price-earnings ratios

than those with poorer pollution-control records. Social accounting is based on the following hypothesis:

“The technology of an economic system imposes a structure on its society which not only determines its economic activities but also influences its social relationships and well-being. Therefore, a measure limited to economic consequences is inadequate as an appraisal of the cause-effect relationships of the total system; it neglects the social effects.”⁴

WHAT IS SOCIAL ACCOUNTING ?

There are many terms which are used for social information* such as social audit, social accounting, socio-economic accounting, social responsibility accounting, and social reporting. These terms have been used interchangeably as they appear to be synonymous. Although the question of terminology is without much significance, its use should characterise appropriate and generally accepted conceptual framework. The term ‘social audit’ has been in much use but it is very clear that this is not ‘audit’ at all but a form of social report. The use of the term audit without the connotation of independent attestation creates some semantic tension. The term ‘social accounting’ is more appropriate than other. Social accounting is rational assessment of and reporting on some meaningful, definable domain of a business enterprise’s activities that have social impact. This aims at measuring (either in monetary or non-monetary units) adverse and beneficial effects of such activities both on the firm and/or those affected by the firm. Being concerned with the social, human and environment constraints on organisational behaviour it measures social costs and benefits. The social accounting information is communicated to social groups both within and outside the firm. Thus, social accounting implies the measurement and reporting, internal or external, of information concerning the impact of a business enterprise and its activities on society. Belkaoui has given the following exhaustive definition of socio-economic accounting:

*“Social information is directly associated with social responsibility.”

Any discourse on social information must acknowledge the multiple effects of business behaviour on society — social information exists only because social groups and business share an accountability relationship. Conceptually, social information is the content of a communicative act which has a dual purpose: the transmittal of expectations to a party perceived as having an obligation and evaluation of the extent to which the obliged party acts to fulfil those expectations. The intent of social information is to establish and maintain accountability relationship between business corporation and various segments of society, in Paul F. Williams, “The Evaluative Relevance of Social Data,” *The Accounting Review* (Jan. 1980), pp. 62-63.

“Socio-economic accounting results from the application of accounting in the social sciences; it refers to the ordering, measuring, analysis, and disclosure of the social and economic consequences of governmental and entrepreneurial behaviour. It includes these activities at the macro and micro level. At the micro level, its purpose is the measurement and reporting of the impact of organisational behaviour of firms on their environment. At the macro level, its purpose is the measurement and disclosure of the economic and social performance of the nation. At the micro level, socio-economic accounting includes, therefore, financial and managerial social accounting and reporting and social auditing. At the macro level, socio-economic accounting includes, therefore, social measurement, social accounting and reporting, and the role of accounting in economic development.”⁵

Social accounting is an expression of a company's social responsibilities and requirement for general corporate accountability. According to Chen,⁶ “as a steward, management's responsibility should be evaluated in terms of both profit and the accomplishment of social objectives.”

USES OF SOCIAL RESPONSIBILITY INFORMATION

Social responsibility information about business enterprises is mainly useful to internal users (management), external users (shareholders and other investors), and in influencing the share prices of a company.

Internal Users

Within a company, the greatest need and the greatest demand for social responsibility information comes from top management, or board of directors. Top management, especially the chief executive officer, needs social performance information to respond to a critical press, to answer shareholders' questions, and to ensure that company policies are followed. Corporate directors, especially because of their growing legal liability, need to know in some detail what sort of social programmes the company is having, and what result it is getting. Directors also need complete information about the effect of the company on society, it is probably more important that they be fully informed as to negative effects, since this is where the criticism will be directed and this is where the directors may have to defend themselves. Labour unions can also be expected to seek social performance information about their companies.

External Users

The external users' demand for social responsibility information is even more diverse. Social accounting and reporting are needed by present and potential investors, by large institutions and individuals. Some studies conducted in this area show the impact of social disclosure on investment decisions. In a survey of institutional investors, Longstreet and Rosenbloom⁷ found that 57 per cent of the respondents indicated that they considered social factors in addition to economic factors when making investment decision. Belkaoui⁸ conducted an experiment

to investigate the impact of socio-economic statements on investment decisions. In the experiment, alternative disclosure of socio-economic accounting information, namely, the abatement costs of pollution, were investigated as accounting techniques that may influence the investment decision of potential users. The theoretical rationale stemming from the linguistic paradigm in accounting was that, in general, the accounting techniques may tend to facilitate or render more difficult various (non-linguistic) managerial behaviours on the part of users, and that in this particular context the investment decision effects from different professional groups using alternative socio-economic information will be different. The findings proves the general relevance of socio-economic accounting information for the banker under any investment strategy and for the accountants only under an investment strategy focusing on capital gains.

Impact on Share Prices

The disclosure of social information helps investors in studying the negative effects of social awareness expenditures on earnings per share along with any compensating positive effects that reduce risk or create greater interest from a particular investment. Between firms competing in the capital markets those perceived to have the highest expected future earnings in combination with the lowest expected risk from environmental and other factors will be most successful at attracting long-term funds. Others believe that ‘ethical investors’ from a clientele that responds to demonstrations of corporate social concern.⁹ Investors of this type would like to avoid particular investments entirely for ethical reasons and would prefer to favour socially responsible companies in their investment decisions.

Various market-based studies have been conducted to know the nature of the market reaction due to the disclosure of social information. Spicer¹⁰ concentrated on ascertaining the extent to which investor perceptions of a moderate to strong association between the investment worth of a company's securities and its social performance on key social issues appeared warranted. A significant association was found which shows that firms in the pulp and paper industry with better pollution control records tend to have higher profitability, larger size, lower total risk, and higher price-earnings ratios than companies with poorer pollution control records. Ingram¹¹ found that the information content of firms' social responsibility disclosure is conditional upon the market segment with which the firm is identified, where the market segment is identified by the type of social disclosure, the industry to which the firm belonged, the sign of the firm's excess earnings in the year of disclosure. Belkaoui¹² reported that the price behaviour of firms making social disclosure was different from the price behaviour of firms not making the disclosure. Truman and Bradley¹³ investigated some of the characteristics of Australian companies that may be associated with their disclosure of social responsibility information. They found that companies which provide social information are on an average larger in size, have a higher systematic risk, and place a stronger emphasis on the long-term than do companies that do not disclose the information. Anderson and Frankle¹⁴ investigated the impact of

voluntary social reporting on the stock marked by using an iso-beta portfolio analysis. Their results strongly support the contention that the market values social disclosure positively. The results have many important implications; economic resources appear to be allocated in the market to securities of those firms that socially disclose; social performance information has an impact on the market; and voluntary accounting information has an impact on the market.

Besides the above, social responsibility reporting has the following benefits:

- Increased transparency
- Informed and accurate decision making
- Better risk and crisis management
- Enhanced brand value and reputation
- Good relations with Government and communities
- Long term sustainability for the company and society as more criticism and suggested improvements are received from internal and external auditors.
- Ensured CSR implementation as Governments monitor standard compliance.

Social accounting and reporting, thus, will make a socially responsible company look better on the 'bottom line' than an irresponsible company. This result is exactly the opposite of that produced by the conventional financial income statement.

SCOPE OF SOCIAL RESPONSIBILITY ACCOUNTING

Brummet¹⁵ has identified five possible areas in which corporate social objectives may be found:

1. Net income contribution
2. Human resource contribution
3. Public contribution
4. Environmental contribution
5. Product or service contribution

The term 'contribution' includes both benefits and costs associated with an organisation's activities. Implicit in this definition of the scope of corporate social responsibility are a variety of users having different purposes in using accounting information.

1. Net income contribution

The growing attention which other social objectives are receiving does not reduce the importance of the income objective. A business organisation cannot survive without an adequate financial surplus; long-range planning includes calculating the minimum return to shareholders. The recognition of the importance of other social objectives does not diminish the importance of the income objectives. On the contrary, it adds meaning to the significance of corporate net income by drawing attention to the circumstances under which it has been produced. In this sense,

there is a clear correlation between income and other objectives. The failure to recognise a social responsibility may well affect the organisation's income performance either in the short term or the long-term. Thus, excessive hours of work under bad working conditions may damage the ability of workers to maintain the level of output. Failure to pay adequate attention to the quality of the products and customer's reactions to poor product quality may ultimately affect sales and income.

2. Human resource contribution

This contribution reflects the impact of organisational activities on the people who constitute the human resources of the organisation. These activities include; recruiting practices; training programmes; experience building, job rotation; job enrichment; wage and salary levels; fringe benefit plans; management union relations; employee skills; employee knowledge; employee attitudes; employee self-actualisation; congruence of employee and organisational goals; mutual trust and confidence; job security, stability of work force, lay-off and recall practices; transfer and promotion policies; occupational health; freedom from undue stress; on-the-job physical environment, and on-the-job safety.

3. Public contribution

This area considers the impact of organisational activities on individuals generally outside the organisation. For example, general philanthropy contributions to educational, cultural, or charitable organisations; financial or manpower support for public transportation; health services, urban housing, daycare centers, minority business, community problem solving, minority group programmes and general volunteer community activities; equal opportunity employment practices; training and employment of handicapped persons; and taxes paid.

The contribution which corporate enterprise may make towards the public good are generally overlooked in the debate on social accounting. It should be noted, for example, that the creation of jobs and the provision of employment are important public contributions, as well as the development of local services which often accompanies corporate expansion into a community. The training and employment of the handicapped is an important corporate social contribution.

4. Environmental contribution

This area involves the environmental aspects of production, covering the use of resources, the production process and the product itself, including recycling and other positive environmental activities. Attention has been drawn in recent years to the negative aspects of organisational activities such as the pollution of air and water, noise, and spoiling of the environment. Moreover, industrial activities lead to a net use of irreplaceable resources and a net production solid wastes.

Corporate social objectives are to be found in the abatement of these negative external social effects of industrial production, and in adopting more efficient technologies to minimise the use of irreplaceable resources and the production of waste.

5. Product or service contribution

This area concerns the qualitative aspects of the organisation's product or service, for example, product utility, product life-durability, product safety serviceability as well as the welfare role of the product or service. Moreover, it includes customer satisfaction, truthfulness in advertising, completeness and clarity of labelling and packaging. Many of these considerations are important already from a marketing point of view. It is clear, however, that the social responsibility aspect of the product contribution extends beyond what is advantageous from a marketing angle.

Gathinji¹⁶ has observed that the impact of any business organization on a society depends on the policies and practices employed in its societal actualization through the following:

- *Employment* — Corporates' role as employers is one of the most important sources of economic development. Companies employ people directly through permanent and contract employees and indirectly through their supplier and outsourcing contracts. Foreign firms' practice of depending on expatriates as opposed to local labour or discrimination in terms of treatment and remuneration between the two implies a very low regard for CSR or the society from and through which the company achieves its objectives.
- *Sourcing and procurement* — The economic impact of funds used in outsourcing and purchasing by corporations can be quite considerable. Sourcing from companies within the community could therefore stimulate economic development within the community.
- *Facilities siting and management* — Societies in which investing companies site their operating facilities receive a boost to their economies through the generation of local tax revenues, local business creation and employment opportunities. Such companies strengthen local revitalization efforts and support local organizations.
- *Financial investment* — Investment of funds by companies on either a short or long-term basis results in various community benefits. Beneficial investment vehicles include the purchase of equity in the local stock market, doing business with community development banks or making investments in community development loan funds.
- *Philanthropy and community investment* — This involves targeting cash and resources towards activities that stimulate job and wealth creation in the community, such as job readiness training, affordable housing, small business development and expansion, economic revitalization, investment in youth education or community health enhancement. Companies do this by donating money to community development organizations, partnering with non-profit agencies and spearheading economic revitalization programmes.

Godfrey, Hodgson, Holmes and Tarca¹⁷ have identified the following issues within the criteria of social and environmental reporting.

- Employees
- Occupational Health and Safety
- Minority and Equity Issues
- Community
- Indigenous People
- Environment
- Energy Use
- Products

This is not an exclusive list. Issues such as charitable and political donations and sports sponsorship may also be included in the analysis of social reporting. A broad interpretation of social and environment reporting should be adopted that recognizes the firm's interaction with the broader community and its stakeholders. Firms that operate within the social setting must therefore be considerate of the demands placed on them, and the need to remain a viable, 'sustainable' entity.

ASSOCHAM-KPMG Study on Corporate Social Responsibility

A study¹⁸ has been conducted jointly by the Associated Chambers of Commerce and Industry of India (ASSOCHAM) and KPMG on "Corporate Social Responsibility: The Why, What and How — An Indian Perspective". The study has concluded that the journey has begun on this front but the real challenges are to apply fundamental business principles to make CSR sharper and focused. The five-point strategy suggested by the study includes focusing on priorities; allocating finance for treating CSR as an investment from which returns are expected, optimizing available resources by ensuring that efforts are not duplicated and existing services are strengthened and supplemented; monitoring activities and liaising closely with implementation partners such as NGOs to ensure that initiatives really deliver outputs and reporting performance in an open and transparent way so that all can celebrate progress and identify for further action.

The Case Study quantitative analysis represents an objective overview of the corporate social responsibility trends in India based on the desktop research and case study analysis of the corporate who have responded to the request by ASSOCHAM to share their CSR efforts and initiatives, for the compendium. 24 case studies were submitted in total and this was used as a base to deduce some directional pointers on the status of CSR and some trends in India. The analysis does not intend or aim to pass a qualitative judgment on any corporate initiative or how good or bad it is, but rather focuses on presenting a broad overview of implementing the CSR practices.

Based on the comparative study of the 24 companies, it was found that while some companies chose to narrow their focus on a few thematic areas, others took a broader view and undertook a larger scope of areas to focus on. Out of 24 case studies that were analyzed, it was found that there were as many as 16

corporates focusing on 3-5 thematic areas, whereas only four corporates catered to 1-2 thematic areas of work and remaining four stuck to six or more thematic areas.

It has been observed that for 37 per cent corporates, the CSR initiative is being implemented through a well structured separated foundation. Among 58 per cent corporates there is a separate CSR department that takes care of the activities to be implemented.

APPROACHES IN SOCIAL RESPONSIBILITY REPORTING

Many different approaches have been debated and used in corporate social accounting and reporting. However, no one approach has been widely recognised as the most appropriate for social accounting and reporting. Some such approaches are as follows:

1. Extension of Financial Statements

One approach to social reporting is to add information within the format of traditional financial statements. This may be done through narrative disclosures or through the addition of new accounts.

(i) Narrative disclosures

The simplest method of reporting social information is through narrative disclosure. The American Accounting Association's Committee on Environmental Effects of Organisational Behaviour has proposed an extension of the current financial reporting model to include certain environmental disclosures; presumably, these disclosures would appear in footnotes to the audited financial statements. The AAA Committee¹⁹ called for the verbal descriptions of the following:

- (a) Identification of environmental problems. Specific organisational problems with regard to control, imposed control standards, compliance deadlines, penalties for non-compliance, environmental considerations contained in executory contracts, and other contingent aspects.
- (b) Abatement goals of the organisation. Detailed description of plans for battement, projection of time schedules, estimates of costs and/or budgeted expenditures.
- (c) Progress of the organisation. Description of tangible progress, cost to date, expected future costs, and pertinent non-monetary information relative to the organisation's attainment of environmental goals.
- (d) Disclosure of material environmental effects on financial position, earnings and business activities of the organisation.

The nature of the narrative disclosure is by definition non-quantitative. It is a necessary first step to allow firms to learn more about the best ways of measuring and disclosing the environmental effects of organisational behaviour.

Quantitative information tends to be more informative and more useful than non-quantitative information; the Committee's recommendation appears to contemplate largely non-quantitative disclosure. This modest reporting method may be, *i.e.*, an appropriate first step towards a goal of more sophisticated and quantified disclosure.

In sum, the AAA Committee's recommendation for verbal disclosure of environmental effects certified by auditors, would result in presentation of clearly useful information that, though not as complete or as quantitative as many might require, would have a chance of early acceptance by the accounting profession because of its simplicity.

(ii) Footnote disclosures

While the narrative disclosure consists of statements, essentially non-quantitative, to be included in the descriptive, non-accounting section of the annual report, the footnote disclosure consists of quantitative measurements on the social involvement of the firms, to be included as an additional footnote in the financial statement section of the annual report. The footnote disclosure may be more useful than the narrative disclosure given, as it would be covered by the auditors' report and opinion. It is, however, limited to the voluntary 'social awareness expenditures' and does not include the remaining social costs and benefits.

(iii) Additional accounts

The AAA Committee on Environmental Effects of Organisation Behaviour also suggested the use of additional accounts for disclosures. The Committee recommended that environmental control expenses be collected in new, separate accounts in the income statement; it also proposed separate disclosure of environmental control expenditures in the statement of sources and application of funds, and separate classification on the balance sheet for environmental control facilities and related depreciation. But the most important modification proposed would reflect liabilities for future pollution control outlays arising out of past transactions, in place of the present practice footnote disclosures. The Committee listed three examples of these liabilities.

- (a) The liability for assessed but unpaid penalties or pollution taxes for non-compliance with standards.
- (b) The liability for estimated penalty or tax (not assessed) for non compliance with standards or deadlines.
- (c) The liability for the estimated cost of voluntary 'restoration' of the environment for past or current damages.

2. New Reporting Formats

Much of the interest in corporate social reporting is in development of new and distinctive reporting formats or models. Present financial statements appear to be too constrained by format and tradition to accommodate the kinds of social information many users feel should be reported. In this respect many attempts have

been made, especially abroad, such as Marlin's Pollution Reports²⁰, Dilley and Weygandt's Social Responsibility Annual Report²¹, Corcoran and Leininger's Environmental Exchange Report²², Abt's Social Audit, and Seidler's Social Income Statement.

(i) Lee Seidler's Social Income Statement

Lee Seidler suggests two social income statement formats, one for a profit seeking organisation (as given in Fig. 20.1) and another for a not-for-profit organisation using a university as an example (as given in Fig. 20.2). In addition to reflecting the contribution a profit-seeking entity from its basic economic activity (approximated by the revenues and costs reported in the traditional income statement), the social income statement adds socially desirable output for which no money is received (external economies) and deducts costs that the entity imposes on society but does not pay for (external diseconomies). The result is a net social profit or loss reflecting the net contribution of the entity to society. The two income statement formats provide a practical framework for social accounting experimentation.

Value added by production of the enterprise		.....
Add: Socially desirable outputs not sold		
(a) Job training	.....	
(b) Health improvement of workers	.....	
(c) Employment of disadvantaged minorities	.....	
(d) Others	.....	.....
Less: Socially undesirable effects not paid for		.....
(a) Air pollution	.....	
(b) Water pollution	.....	
(c) Health problems caused by products	.....	
(d) Others	.....	.....
Net social profit (or loss)		.....

Figure 20.1 : Social Income Statement for a Profit Seeking Organisation

Source: Lee J. Seidler, 'Dollar Values in the Social Income Statement', World (Peat Marwick Mitchell & Co.), *Spring* 1973, p. 21.

Revenues (social benefits)		
Value of instruction to society		.....
Value of research to society		.....
Total revenues		.....
Less Costs (Social costs)		
Tuition paid to University	.....	
Costs of research	.....	
State aid	.....	
Others—lost production, etc.	.....	
Total costs		.....
Profit to society		.....

Figure 20.2 : Social Income Statement of a University

Source: Lee J. Seidler, "Dollar Values in the Social Income Statement," World (Peat Marwick Mitchell & Co.), *Spring* 1973, p. 18.

Because of the difficulty of estimating value added for an institution, such as a university, in which payments for services rendered do not come exclusively from the beneficiaries of those services (but also from grants, legislative appropriations, and the like), the social income statement for many not-for-profit organisations would simply have two sections. One, for benefits to society and another, for costs to society. As in the statement for profit-seeking organisations, this format allows for recognition of benefits and costs that are not formalised through market transactions, such as contributions to knowledge or air pollution.

Seidler notes the difficulty in assigning money value to all items in his statements; but he argues that money measurements are the most common and most useful in social accounting. Of the two models proposed by Seidler, the one for not-for-profit organisation is more informative because it provides estimates of total social benefits and total social costs, rather than net important effects, as does the value added approach. Both formats are comprehensive – they allow for reporting all significant effects of an entity on society – and both are flexible enough to accommodate changing social goals and requirements.

(ii) Abt's Social Audit

One of the most widely quoted examples is the system adopted by Abt Associates Inc. The Abt model presents both stocks (balance sheets) and flows (income statement). All measurements are in money units, as contrasted to physical quantities, rates of change, or other units of measure. The Abt's 1974 report/model attempts to integrate both traditional financial and social effects into a single set of statements. The model provides for extensive explanatory footnotes to explain concepts and measurement approaches; such detailed explanations are appropriate in any reporting model during the present evolutionary stage of social accounting.

The model includes a form of human resource accounting. The present value of the staff is capitalised as a social asset as is the training investment net of amortisation for training obsolescence. The benefits to staff from career advancement, and costs of lay off, involuntary terminations, and inequality of opportunity, are also estimated.

For the company developing its own social accounting techniques, the Abt Model warrants serious study. The Social and Financial Balance sheet may prove to be useful for internal purposes, but appears to provide little on the way of useful information for the public. The Social and Financial Income Statement also needs significant modifications for different industries. The measurement approaches and bases for estimates, which are described in the footnotes, should be particularly useful in suggesting ways of quantifying various social effects.

In Abt's balance sheet, the equivalence between the assets and liabilities rest, on the disputable assumptions regarding the manner in which measurements should be made. The balance sheets prepared in respect of the organisation and the community reflects the firm's engagements and commitments in terms of social actions and financial contributions. It will be noted that the

concept of equivalence in the measurement of assets and liabilities which underpins financial accounting practice and is adhered to in the staff balance sheet, is abandoned in respect of these stakeholder groups. Hence, the concept of social equity does not exist in these balance sheets.

(iii) Estes's Comprehensive Social Benefit-Cost Model

Ralph W. Estes²³ has proposed an accounting model that systematically reflects the worth of all resources consumed, including those resources or values which are free to the Consuming entity (non internalised costs or external diseconomies), and the worth of all benefits produced, including those that provide no compensation to the producing entity (external economics). Estes defines the two terms, social benefit and social cost in the following manner.

Social benefit: Any benefit to society (or to any 'element of society'), whether economic or non economic, internal or external. This social benefits include those benefits provided by an entity for which it is compensated as well as those external economics and bargains for which no compensation (or inadequate compensation) is received.

Social cost: Any cost, sacrifice or detriment to society (or to any element of society), whether economic or non economic, internal or external. Social costs include sacrifices for which compensation is made (such as human services used and paid for) as well as detriments not paid for (such as air pollution); any payments are treated separately as a benefit to society.

Allocation of resources at present depend heavily on information provided through the financial accounting model, which excludes certain benefits (external economics) and detriments (external diseconomies). Estes notices that the financial accounting model generally reflects the view of entity looking out, toward society; benefits (products and services) provided to society are thus indicated by the surrogate of revenues received, whereas costs are measured only by the entity's expenditures. He proposed that improved resource allocations could result from a different viewpoint, that of society looking toward the entity. Benefits to society, in his proposal, would then be measured by the values or utilities actually received by society (which may differ from the amount paid to the entity); while costs would reflect the full detriment to society, and not only those for which the entity pays.²⁴ The opposing viewpoints are illustrated in Fig. 20.3.

Entity	Utility produced	(Social benefits)	Society
	Utility consumed	(Social costs)	
	Financial reporting viewpoint	Social reporting viewpoint	

Figure 20.3 : Reporting Viewpoints

Source: Ralph W Estes, *Corporate Social Accounting*. New York: John Wiley & Sons, 1976, p. 93.

Estes has developed a comprehensive social reporting model which is produced in Fig. 20.4

Social Impact Statement for the year ending December 31, 1981

	(₹)	(₹)	(₹)
Social benefits			
Products and services provided		xxx	
Payments to other elements of society:			
Employment provided			
(salaries and wages)	xxx		
Payments for goods and other services	xxx		
Taxes paid	xxx		
Contributions	xxx		
Dividends and interest paid	xxx		
Loans and other payments	xxx	xxx	
Additional direct employee benefits		xxx	
Staff, equipment, and facility services donated		xxx	
Environmental improvements		xxx	
Other benefits	xxx	xxx	
Total Social benefits			xxx
Social costs			
Goods and materials acquired		xxx	
Buildings and equipment purchased		xxx	
Labour and services used		xxx	
Discrimination			
In hiring (external)	xxx		
In placement and promotion (internal)	xxx	xxx	
Work-related injuries and illness		xxx	
Public services and facilities used		xxx	
Other resources used		xxx	
Environmental damage:			
Terrain damage	xxx		
Air pollution	xxx		
Water pollution	xxx		
Noise pollution	xxx		
Solid waste	xxx		
Visual and aesthetic pollution	xxx		
Other environmental damage	xxx	xxx	
Payments from other elements of society:			
Payments for goods and services provided	xxx		
Additional capital investment	xxx		
Loans	xxx		
Other payments received	xxx	xxx	
Other costs		xxx	
Total social costs			xxx

Social surplus (Deficit) for the year	xxx
Accumulated surplus (Deficit)	
December 31, 1980	xxx
Accumulated surplus (Deficit)	
December 31, 1981	xxx
Standard Footnotes	
1. Significant indirect effects associated with inputs.	
2. Significant indirect effects associated with outputs.	
3. Bases for measurements and estimates.	
4. Progress in areas of current societal concern (such as environmental protection outlays and activities, employment and promotion of minorities and women, and energy conservation efforts).	

Figure 20.4

Source: Ralph W. Estes, *Corporate Social Accounting*, New York: John Wiley and Sons, 1976, p. 96.

Estes has argued that care must be taken in defining the reporting entity or system. The term reporting entity, according to Estes, includes the organisation or corporation itself, all activities of employees carried on, on behalf of the entity and while 'on duty', activities of a board of directors and of shareholders acting collectively for the entity. The term 'reporting entity' for reporting purposes, excludes personal activities of employees, including commuting; activity of customers, including use or misuse of the product; and all other secondary or indirect effects. Estes,²⁵ in this regard, argues:

"The proposed model is a comprehensive report of the direct effects of a single entity on society. It is not designed to show what would happen (how society would be better or worse off) if the entity had not existed during the reporting period; this would require the reporting of such indirect effects as a *pro rata* share of pollution caused by suppliers and detriments produced by users of the entity's products. A model including such information would certainly be useful but would involve substantial double counting among entities.

The present model could in fact reflect indirect effects, but only if they were internalized (*i.e.* built into the entity's cost and reward structure). This would occur if (a) each element of society accurately measured and reported all social benefits and costs created, (b) each element were periodically assessed or rewarded an amount equal to its net social surplus or deficit, and (c) each element then adjusted the prices of its goods and services upward in response to assessments or downward for rewards. Of course, these conditions do not presently obtain; consequently the proposed model reflects significant indirect effects only in footnotes.

According to Estes, this model is somewhat idealistic and may not be presently practical for all firms; the objective is to suggest a standard, a goal, for social reporting. Nevertheless much of the information is already available in every company,

and a serious effort should produce adequate estimates for completion of the report in most companies.

SOCIAL BENEFITS AND SOCIAL COSTS

Corporate social responsibility reporting focuses, primarily, on the measurement and reporting of social benefits and costs arising due to social responsibilities and activities of business enterprises. It is necessary to know what social benefits and costs are associated with such social responsibilities and activities.

Social benefits

Generally speaking, the term 'social benefits' includes the following benefits²⁶:

1. *Products and services provided* — Business enterprises generally provide products and services; these are purchased by customers, which provides *prima facie* evidence of benefit to society. The starting point for valuing such benefits is the exchange prices usually arrived at in response to demand and supply factors. In other words, an automobile that sells for ₹ 10,00,000. presumably, is expected to provide to the purchaser, one element of society, benefit having a present value of at least ₹ 10,00,000. Included in this category of benefits are facilities, equipment, and space provided to other elements of society, for which rent is received.

Care must be exercised, however, to value only direct effects from the products and services provided. Suppose that the automobile referred to above provided the purchaser utility having an estimated present value of ₹ 12,00,000, and that in turn used the auto to provide free transportation to and from work for several neighbours, resulting in additional benefits to the neighbours (but not to the owner) estimated to ₹ 1,50,000. The amount to be reported by the selling firm, including Rs. 2,00,000 in consumer surplus, would be ₹ 12,00,000 not ₹ 10,00,000 or ₹ 13,50,000 (the automobile owner could report social benefits provided of ₹ 1,50,000). Significant indirect effects should be reported in footnotes, but not integrated into the model, since they are not actually provided by the reporting entity.

Upward adjustments, reflecting 'consumer surplus' are required when exchange prices do not adequately measure benefits. Similarly, downward adjustments are required when the exchange price exceeds the utility provided (indicating consumers deficit).

2. *Payments to other elements of society* — Companies render benefits to various elements of society as they pay for goods and services used. The value of employment provided should be separately disclosed; that is, payments to employees represent a social benefit in the amount of money transmitted to such employees and made available for their use. Since the value of human services used is separately reported as a social cost, compensation that is less than the value of services used results in a lower net social surplus (or, greater social deficit).

Other significant payments included in this section include loans, contributions, dividends, interests, taxes, and assessments it should be noted that the benefit provided by a firm disbursing

money is the money itself; what the recipient entity does with that money should be credited to that separate entity. In this case significant indirect effects might be reported in a footnote but should not be integrated into the model.

3. Additional direct employee benefits — The value of most fringe benefits should be reported in this category, *e.g.*, the value of experience provided, training programmes, special opportunities provided, and rewarding work that provides utility to the employee over and above the monetary remuneration.

4. Staff, equipment, and facility services donated — When business firms make available their officers and employees to other organisations, benefits are provided separate from the compensation paid to the employees. These benefits might be estimated at the cost that would have been incurred by the outside organisation if it had hired persons with the qualifications required.

Companies, sometimes, allow society to use otherwise idle equipment and facilities. Benefits may, thus, be provided even though there is virtually no cost to the company. Value of these benefits may be estimated as the amount of rent the society or user organisations would have paid if they had rented other facilities. This may be different from, and probably less than, the amount of rent the company could have obtained for the facilities if it had rented them to a profit-making organisation.

5. Environmental improvements — When companies provide clean areas, plant trees, landscape eroded terrain, and clean polluted lakes, benefits accrue to society. The company is charged for the social costs of environmental damage done; hence it should receive credit for benefits provided through restoration of a previously damaged environment. Valuation is difficult for these benefits and is, probably, not accurately reflected by the amount of outlay. Community surveys, shadow pricing, and economic studies might be used to develop suitable estimates.

6. Other benefits — Companies may provide to society benefits not falling within the above categories. These would include such programmes as free day care centres, special assistance to minority enterprises, and sponsorship of public interest television programmes at a cost exceeding the advertising value.

Social costs

'Social costs', generally, include the following costs²⁷:

1. Goods, and materials acquired — Raw materials acquired by an entity represent a sacrifice to society to the extent of the value in alternative use.

2. Building and equipment purchases — When the reporting entity acquires a building or piece of equipment, the utility from that item is lost to the rest of society for as long as it is held by the entity. This cost to society should be approximated by the exchange price, adjusted downward for producers surplus.

3. Labour and services used — The cost to society of human services used is the sacrifice in time and effort made by the employees (as elements of society); this can, probably, be

approximated by the benefits that they could obtain in alternative employment and other activities. This raises difficult measurement problems. When the measurements involve excessive subjectivity, it may be reasonable to value employee services at the amount paid for them, with some adjustment for underutilisation, nepotism, favouritism, producers' surplus and the like.

4. Discrimination — Entities may engage in two forms of discrimination: external discrimination, or discrimination in hiring, and internal discrimination, or discrimination in placement, advancement, and training. External discrimination imposes direct cost on those women and minorities (or any other targets of discrimination, for that matter) who would otherwise have been hired by the company. Their social cost is the present value of income lost and the value of experience forgone.

The social cost of internal discrimination is the present value of lifetime sacrificed income and experience caused by a delay in advancement of one year (continuing discrimination in succeeding years would be charged in the social reports of those years). Internal discrimination should be easier to value, since a limited number of specifically identifiable individuals are involved.

5. Work-related injuries and illness — Any injury and/or illness attributed to the entity and its activities should be reported as a social cost. The cost of an injury or illness might be estimated as the present value of lost income plus an increment for discomfort, frustration, and delayed experience. This cost can, of course, be reduced by installation of safety devices, elimination of unhealthy conditions, health monitoring and similar efforts.

6. Public service and facilities used — This category includes the reporting entity's share of police and fire protection, the legislative and judicial system, and Government activities at all levels. Many of these services are so pervasive as to make estimation of one entity's share exceptionally difficult. The amount of taxes paid might be used as a starting point. In addition, industry studies might be undertaken to produce guidelines or adjustment factors for firms within the industry.

7. Environmental damage — The entity imposes damage on the environment most noticeably through the production and waste disposal processes, but damage is also done by delivery trucks, salesmen's automobiles, construction, and some advertising. The damage comes in several forms — air and water pollution, noise, plant-life destruction, terrain damage, trash and litter, and even visual pollution. In measuring environmental damage, the objective is to estimate the utility lost to society through the entity's activities or omissions. In the case of water pollution, estimates may be sought for lost recreational utility, value of fish and plant life destroyed, increased treatment cost down-stream, and impairment of living conditions proximate to the waterway. Air pollution may require estimates of lost utility due to pollution-related illness (medical costs, lost productivity, shortened life span, and discomfort), damage to exterior finishes, impairment of living conditions, and plant-life damaged or destroyed. The social cost of noise may be based on estimates of the value of current discomfort and long-term hearing impairment.

8. *Payments for other elements of society* — Customers, lenders, investors, and others make payments to the reporting entity; in so doing they are sacrificing the utility that such purchasing power could command. This sacrifice is a cost to society *vis-a-vis* the reporting entity. Payments from customers might be netted against the value of the products and services provided, but the proposed gross disclosure would be more informative especially when market imperfections result in a significant difference between the value of products or services and the amount paid.

MEASUREMENT OF SOCIAL COSTS AND BENEFITS

The greatest problem in social accounting and reporting is an apparent lack of valid and reliable measurement technique. Social measurement often 'requires valuation of goods, services and effects that have not been exchanged in the market and consequently do not have recorded exchange or market prices. Several approaches for social measurements can be used.

1. Surrogate Valuation

When a desired value cannot be directly determined, a surrogate value needs to be estimated, that is, some item or phenomenon that is logically expected to involve approximately the same utility or sacrifice as the item in question. For example, assume that we want to estimate the value of building facilities loaned by a company to some community groups. In this case, a surrogate valuation can be obtained by determining the amount of rent such groups would have to pay if they rented commercial facilities having the same utility. Surrogate valuation has weaknesses; a wrong thing could be measured or a surrogate may be selected which is not sufficiently related in value to the item under consideration. In spite of this drawback, surrogate valuation is one of the most useful tools available in social accounting.

2. Survey Techniques

Survey techniques involve obtaining information from those affected elements of society — who make the sacrifice or who receive the utility — for measurement of social cost and benefits. In this, a simple approach is to ask individuals directly what something is worth to them. In this direct inquiry method, several criteria must be fulfilled:

- (a) The user or affected individual must have a clear appreciation of the impact on him of the item under consideration.
- (b) He must be able to relate this impact to monetary units, either directly or through the use of surrogates.
- (c) He must be willing to give a truthful answer or at least must have no discernible reason for lying.

3. Restoration or Avoidance Cost

Certain social costs may be valued by estimating the monetary outlay necessary to undo or prevent the damage. Some social

effects cannot be undone and, in such cases, the restoration Cost estimate is supplemented with estimates of such additional damage. An example would be the damage to automobiles and vehicles from streets and roads during rainy season. This damage can be prevented if proper care is taken. Suppose the damage to a car amounted to ₹ 3,000, but the cost of preventive measures would have been only ₹ 1,500. Therefore, ₹ 1,500 is the proper value to be assigned to this social cost.

4. Appraisals

Independent appraisals may be useful for valuing certain goods, buildings, and land. These will often reflect nothing more than an expert estimate of market value and are, thus, analogous to surrogate valuation performed by an outside expert. When appraisals are used, it is necessary that we understand the basis for them and interpret the results accordingly.

5. Analysis

Many times an economic and statistical analysis of available data produces a valid and reliable measure of value. Estimates of the increased earnings value of education have relied on present value analysis of comparative earnings rates and life expectancies.

The above measurement approaches generally provide an adequate set of choice for virtually any special measurement problem. They must be used, however, with care and proper understanding in full recognition of their respective weaknesses and especially with careful attention to the attributes that are ultimately intended to be measured. The Sachar Committee Report²⁸ has suggested that company social report needs to be developed both in quantity and monetary terms.

Audit of Company Social Report

Opinion differs as to whether the corporate social report should be verified by an auditor. One school of opinion holds that social information be examined by an auditor. It will increase the credibility of information for the benefit of the users. However, some feel that audit would result in a reduction of rhetoric. Auditors do not seem to possess the knowledge or experience to determine the useful information which should be collected, analysed and reported.

American Accounting Association's Committee on Social Costs (1974) is of the opinion that independent attestation to social reports appears unlikely, unless at some future time their use by external parties becomes widespread. Then attestation, based upon an independent review, would add a desired degree of credibility. Bauer and Fenn²⁹ have observed that "if the social audit develop viably, the accounting profession will be centrally involved, both in setting up systems to gather data and in testing the truth of the data for the purpose of improving its credibility. This is a matter of considerable interest in the accounting profession, but at this point everyone in the race is standing on the same starting line. The most important task now is to start running only in that way will we learn what the track is really like".

SOCIAL RESPONSIBILITY DISCLOSURES

Many attempts have been made in various countries to supplement conventional financial statements by information on the social performance of firms. Countries where such attempts have been made are United State, United Kingdom, Australia, France, Germany, Japan, New Zealand, Netherlands, etc. Significant attempts have been made by U.S. firms to provide social responsibility disclosures in their annual reports. In UK since 1975, some of the largest British companies are publishing a value added statement. The practice of corporate social reporting in Germany is proceeding along the following three different experimental systems.

- (a) A broadly based and partially integrated reporting linking company expenditures to social benefits.
- (b) An extension of the traditional reporting of socially relevant information.
- (c) Corporate social accounting and reporting.³⁰

SOCIAL DISCLOSURE PRACTICES IN INDIA

The Government of India appointed a Committee under the chairmanship of Justice Rajinder Sachar to consider and report on the changes that are necessary in the form and structure of the the Companies Act. The Committee³¹ recommended the inclusion of the following, *inter alia*, in the director's report:

"Steps taken by the company in various spheres with a view to discharging its social responsibilities towards different segments of the society, quantifying where possible and in monetary terms. The Board should also report on the future plans of the company towards the discharge of its social responsibilities and duties."

In 1981, The Institute of Chartered Accountants of India after making a survey found that 123 out of 202 companies provided some information in their directors reports about company contribution in social responsibility areas. The findings are summarised in Fig. 20.5.

Item	No. of Companies
Employee welfare	47
Donation for social causes	28
Spreading education	14
Aid in national distress	12
Family planning and health	12
Employment growth	3
Workers' participation in management	2
Pollution control	1

Figure 20.5 : Social Responsibility Accounting

Source: Research Committee of ICAI Precedents in Published Accounts. The Institute of Chartered Accountants of India, 1981.

The Companies (Amendment) Act, 2013 provides that under clause 135, Indian companies have social responsibility obligations. It has the following provisions in this regard.

Every company having:

- a net worth of ₹ 500 crores or
- turnover of ₹ 1,000 crores or more or
- net profit of ₹ 5 crores or more

during any financial year shall constitute a Corporate Social Responsibility Committee of the Board consisting of three or more directors, out of which at least one director shall be an independent director.

The Board's report under clause 134(3) shall disclose the composition of the Corporate Social Responsibility Committee.

The Corporate Social Responsibility Committee shall,

- (a) formulate and recommend to the Board, a Corporate Social Responsibility Policy which shall indicate the activity or activities to be undertaken by the company as specified in Schedule VII;
- (b) recommend the amount of expenditure to be incurred on the activities referred to in (a) above; and
- (c) monitor the Corporate Social Responsibility Policy of the company from time-to-time.

Activities which may be included by companies in their CSR policies

Activities relating to:

- (i) Eradicating extreme hunger and poverty
- (ii) Promotion of education
- (iii) Promoting gender equality and empowering women
- (iv) Reducing child mortality and improving maternal health
- (v) Combating human immunodeficiency virus, acquired immunodeficiency syndrome, malaria and other diseases
- (vi) Ensuring environmental sustainability
- (vii) Employment enhancing vocational skills
- (viii) Social business projects
- (ix) Such other matters as may be prescribed.

The Board of every company shall,

- (a) after taking into account the recommendations made by Corporate Social Responsibility Committee, approve the Corporate Social Responsibility Policy for the company and disclose contents of such policy in its report and also place it on the company's website, if any, in such manner as may be prescribed,
- (b) ensure that the activities as are included in Corporate Social Responsibility Policy of the company are undertaken by the company; and
- (c) ensure that at least two per cent of average net profits of the company made during three immediately preceding financial years is spent in every financial year on such policy.

If a company fails to provide or spend such amount, the Board shall specify reasons for not spending the amount in its report.

Till recently, all CSR spending was strictly voluntary in nature. However, India became the first country in the world to mandate a minimum CSR spending (2% of average profits of past three years) for corporations above a certain size.

The Institute of Chartered Accountants of India (ICAI) recently issued a Guidance Note which will help India Inc in accounting for its corporate social responsibility (CSR) expenses.

To ensure transparent financial reporting, this guidance note requires the company to debit (charge) its profit and loss account (P&L a/c) with the CSR expenses incurred by it during the year. Further, such expenses are to be shown as a separate line item in the P&L a/c.

Further, ICAI's guidance note has also addressed issues of a shortfall by a company in meeting with the minimum CSR expenditure criteria and also those instances where a company has spent more than the minimum requirement.

The legal obligation to comply with CSR norms kicked in as of April 1, 2014. Such, expenses will reflect for the first time in the financial statements of India Inc., as of March 31, 2015.

There can be scenarios where a company spends more or less than the minimum 2% criteria. ICAI's guidance note states that the Companies Act requires the board of directors of a company to specify the reasons for not meeting with the CSR obligations. In light of this, if there is any shortfall, no provision is required to be made in the profit and loss account of the company. For instance, if the 2% criteria required a CSR spend of at least ₹ 50 lakh, but the company spends only ₹ 40 lakh during the year, the difference of ₹ 10 lakh need not be provided in its profit and loss statement. A provision would have reduced the book profits of the company. However the directors will be required to state in their report the reasons for such shortfall.

ICAI's guidance note also looks at a scenario, when a company spends more than the minimum requirement. The issue in this scenario was whether the excess amount of CSR spent can be carried forward to be adjusted against amounts to be spent on CSR activities in the future. To illustrate, if a company spent ₹ 60 lakh, instead of the minimum required ₹ 50 lakh, could this excess ₹ 10 lakh be carried forward and adjusted against next year's CSR required expenditure? ICAI's guidance note has clarified that, since "2% of the average net profits of immediately preceding three years is the 'minimum' amount which is required to be spent under section 135(5) of the Companies Act the excess amount cannot be carried forward for any future adjustment."

The approach suggested in the guidance note of not carrying forward excess expenditure and for not providing for shortfalls in a particular year are justified. This is also the intent of the law makers to let market and peer pressure work.

ICAI's guidance note has also illustrated that, in some cases, the CSR expenditure could result in creation of a tangible asset —

say a school building. Invariably, the future economic benefit from a 'CSR asset' would not flow to a company, thus even the expenditure towards creation of an asset should be charged to the P&L a/c (and not capitalized in the balance sheet).

If a company, as part of its CSR activities, supplies goods manufactured by it or renders services, these goods and services will also form part of the CSR expenditure and will be duly valued and charged to the company's P&L a/c.

Figure 20.6. Illustrates the features of Guidance Note issued by ICAI.

- India Inc will for the first time record CSR expenditure for the fiscal 2014-15.
- ICAI requires CSR expenditure to be shown as a separate line item in the P&L a/c
- Any shortfall in meeting minimum CSR requirement need not be provided for in the P&L a/c
- Likewise, any excess spent over the minimum CSR requirement cannot be carried forward and adjusted next fiscal.
- Even a tangible asset, say a school building, will be reflected as an expenditure in P&L a/c
- The ministry of corporate affairs will track CSR spends via the financial statements.

Figure 20.6: Guidance Note: Recording Social Expenditures

Conclusion

The conceptual thinking about corporate social reporting has grown at a rate faster than what has been done in practice. The social responsibility information about business enterprises are not only important for external users, public interest groups, Government, etc., but also for managements in planning and decision making areas. In pursuance of their basic goals, all organisations have a social commitment. The debate on a suitable corporate social reporting model is continuing. At present, the primary objectives for business enterprises should be to provide disclosure about their society related activities. If a business enterprise decides to wait for a perfect model, completely reliable measures, generally accepted reporting standards, and qualitative characteristics applicable to social information, it would be failing in its responsibilities as a stable and forward looking employer and a good citizen. Business enterprises should be ready to accept growing challenges emerging in social accounting and reporting area.

While attempts should be made by accountants, accounting bodies, social scientists, and accounting researchers to develop a useful and feasible social reporting framework, the (immediate) goal should be to develop some social responsibility disclosures which have relevance and usefulness. The social reports developed by business enterprises might vary as to structures and the items to be included in reports and, therefore, at this stage of development, corporate social reports need not be completely uniform. Corporate social reporting has, in the meantime, many potential areas for future research especially in India, such as determination and valuation of social costs and

benefits, development of a social reporting model, determination of qualitative characteristics (reporting standards), impact of social responsibility disclosure on managerial decision making and external users investment decision making. Regardless of the final results and the most satisfactory solution to these issues, companies should go ahead and respond to growing pressures in social accounting area. A patient and sincere approach, in this regard, on the part of corporate organizations, will yield immediate useful results that can be built on and steadily improved toward a goal of complete and satisfactory social accounting and reporting model.

REFERENCES

1. American Institute of Certified Public Accountants, Objective of Financial Statements, AICPA, October 1973, p. 55.
2. American Accounting Association's Committee on the Measurement of Social Costs, *Supplement to the Accounting Review*, 1974, p. 100.
3. Barry H. Spicer, "Investors, Corporate Social Performance and Information Disclosure: An Empirical Study" *Accounting Review* (January 1978), p. 108.
4. S.C. Mobley, "The Challenge of Socio-Economic Accounting," *Accounting Review* (October 1970), p. 6.
5. Ahmed Belkaoui, *Socio-Economic Accounting*, Westport: Quorum Books, 984 p. 7.
6. R.S. Chen, "Social and Financial Stewardship," *Accounting Review* (July 1975) pp. 533-543.
7. B. Longstreth and D. Rosenbloom, *Corporate Social Responsibility and the Institutional Investor*, New York: Praeger, 1973.
8. Ahmed Belkaoui, "The Impact of Socio Economic Accounting Statements on the Investment Decisions: An Empirical Study," *Accounting, Organisation and Society* (September 1980), pp. 263-283.
9. American Accounting Association, Report of the Committee on External Reporting, *Accounting Review Supplement* (1969), p. 118.
10. Barry H. Spicer, *op. cit.*, pp. 94-111.
11. R.W. Ingram, "An Investigation of Information Content of (Certain) Social Responsibility Disclosures," *Journal of Accounting Research* (Autumn 1978), pp. 270-285.
12. Ahmed Belkaoui, "The Impact of Disclosure of the Environmental Effects of Organisational Behaviour on the Market," *Financial Management* (Winter 1976), pp. 26-31.
13. K.T. Trotman and G.W. Bradley, 'Associations Between Social Responsibility Disclosure and Characteristics of Companies,' *Accounting, Organisations and Society*, No. 4 (1981), pp. 355-362.
14. John C. Anderson and Alan W. Frankle, "Voluntary Social Reporting: An Iso Beta Portfolio Analysis," *The Accounting Review* (July 1980), pp. 467-479.
15. R.L. Brummet, "Total Performance Measurement," *Management Accounting* (November 1973).
16. Ndung'u Gathinji, "Corporate Social Responsibility' United Nations Conference on Trade and Development, Disclosure of the Impact of Corporation on Society, Current Trends and Issues, UN, New York, 2004, p. 66.
17. Jayne Godfrey, Allon Hodgson, Scott Holmes and Ann Tarca, *Accounting Theory*, VIth Edition, John Wiley and Sons, 2006, p. 632.
18. Summit Proceedings, First International Summit on Corporate Social Responsibility organised by Ministry of Corporate Affairs, 29-30 January, 2008, New Delhi, *The Times of India*, January 30, 2008.
19. American Accounting Association's Committee on Environmental Effects of Organisation Behaviour, *The Accounting Review Supplement* 1973, p. 110.
20. W. John Tepper Marlin, "Accounting for Pollution," *Journal of Accountancy* (February 1973), pp. 41-46.
21. Steven C. Dilley and Jerry J. Weygandt, "Measuring Social Responsibility: An Empirical Test" *Journal of Accountancy* (September 1973), pp. 62-70.
22. A Wayne Corcoran and Wayne E. Leininger, Jr., 'Financial Statements – Who Needs Them?' *Financial Executive* (August 1970), pp. 34-38, 45-47.
23. Ralph W. Estes, *Corporate Social Accounting* New York: John Wiley and Sons, 1976.
24. Ralph W. Estes, *ibid.*, p. 93.
25. Ralph W. Estes, *ibid.*, p. 94.
26. Ralph W. Estes, *op. cit.*, pp. 95-100.
27. Ralph W. Estes, *ibid.*, pp. 101-104.
28. Sachar Committee Report of the High Powered Expert Committee on Companies and MRTTP Acts, Ministry of Law, Justice and Company Affairs, New Delhi, August 1978, p. 97.
29. Raymond A. Bauer and Dan H. Fenn, "What is a Corporate Social Audit", *Harvard Business Review* (Jan. Feb. 1973), p. 48.
30. Meinoff Dierkes, "Corporate Social Reporting in Germany: Conceptual Developments and Practical Experience," *Accounting, Organisations and Society*, No. 1/2, (1979), p. 92.
31. Sachar Committee Report. of the High Powered Expert Committee on Companies and MRTTP Acts, *op. cit.*, p. 95.

QUESTIONS

1. "A business firm's commitment (should be) to service not only those directly connected with the company's activities but equally to the community at large". Discuss the above statement giving arguments
2. "In the environment in which a company operates cannot rightfully concentrate wholly on its own specific interests and disclaim all responsibility for promoting the community's welfare." Do you agree with the above statement? Give reasons.
3. "An objective of financial statements is to report on those activities of the enterprise affecting society which can be determined and described or measured and which are important to the role of the enterprise in its social environment." (Trueblood Committee Report, 1973). In the light of above statement, examine the objectives of financial statements.
4. Explain the meaning of the term, 'social reporting'.
5. How is social responsibility information useful to managers and investors? Discuss it fully.
6. Discuss the effect of social disclosures on the share prices of a company.
7. Explain the social responsibility areas where an organisation can play an important role.

8. Now should social accounting information be reported in published annual reports? Which method of disclosure, do you think, will be the most appropriate?
9. Evaluate the following social reporting models: (a) Abt's Social Audit, (b) Lee J. Seidler Model, (c) Ralph W. Estes's Model.
10. What do you mean by 'social benefits' and 'social costs'. How are they measured in social accounting?
11. Explain the need for a conceptual framework in social accounting and reporting
12. "Social responsibility information to be relevant and useful, should meet certain qualitative characteristics.' In the light of this statement, discuss the qualitative characteristics applicable to social responsibility information.
13. Evaluate social responsibility disclosures practices in Indian Companies, What suggestions would you give to improve the disclosure practices in this regard?
14. (a) What do you understand by 'Corporate Social Performance'?
(b) Discuss the standards of corporate social reporting as proposed by Ralph W. Estes. *[M. Com. Delhi]*
15. What are the five possible areas identified by Brummet, in which corporate social objectives may be found? Discuss in brief the relevance of each area for social reporting and identify the area which you consider to be the most important. *[M. Com. Delhi, 2002]*
16. Discuss in detail different areas of social performance for preparing corporate social reports. *[M. Com. Delhi, 1995]*
17. Discuss briefly the major objectives of corporate social accounting approach. What is its relevance in the present day context? *[M. Com. Delhi, 2000]*



Value Added Reporting

CONCEPT OF VALUE ADDED

Value Added indicates the 'net value' or 'wealth' created by the enterprise during a specified period. No enterprise can grow if it fails to generate wealth. The Value Added has been defined by *The Corporate Report*¹ (Accounting Standards Steering Committee, UK) as the wealth, the company has been able to create by its own and its employees efforts during a period. Thus, value added is a form of wealth. But not all forms of wealth are Value Added. Things like land minerals, metals, coal, oil, timber, water and similar sorts of things are wealth but they are provided by nature. Value Added is the kind of wealth that is generated by the efforts and ingenuity of mankind².

The term 'Value added' means the market price of the output of an enterprise less bought-in goods and services. At the primitive level, a man goes into a forest and cuts down a tree. He converts it into a house, furniture and other articles for his own use. In doing so, he 'adds value' to the raw material provided by nature. In the complex industrial society, a manufacturing business buys raw materials, components, fuel and other various services. It converts these into products which can be sold for more than the cost of the raw materials and other purchases. In doing so, the business 'adds value' to the materials by the processes of production. Similarly, a farmer generates wealth by growing crop, and breeding animals, then selling them for more than the cost of the seeds, fertiliser, foodstuffs and other materials used.

Value Added may be generated even when little or no material is involved. A hairdresser 'adds value' by offering a service for which customers pay. The costs of the materials are small. An entertainer provides a service. The customer pays for the added value of the enjoyable experience. A doctor also provides services with little material cost. People pay directly or indirectly for the added value of good health.

The term 'Value Added' has also been defined in Volume I of the Annual Survey of Industries which is published by Central Statistical Organisation (CSO), India. According to this definition 'Value Added represents the part of the value of the products which are created in the factory and is computed by deducting from the gross ex-factory value of output, the gross value of input'. The definition can be shown as follows:

Value Added = Gross Ex-factory Value of Output - Gross Value of Input.

Where, Output = Aggregate value of product + Work done for customers + Sale value of goods sold in the same condition as bought + Stock of semi-finished goods (that is, closing and opening).

Value of Products = Value of products manufactured for sale during a year where value is ex-factory, exclusive of any incidental expenses on sale.

and Input = Gross value of materials, fuels etc. + Work done by other concerns for the firms + Non-industrial services bought + Depreciation + Purchase value of goods sold in the same condition as bought.

The Annual Reports on the working of Public Sector Companies (Bureau of Public Enterprises), has defined Value Added as the excess value of production over the cost of materials, power etc., which are necessary for processing. Thus,

Value Added = Value of production - Cost of materials, power, etc.,
where, the value of production = Sales Value + Value of increase or decrease in finished and semi-finished goods.

The concept of Value Added has been defined by E.S. Hendriksen as "the market price of the output of an enterprise less the price of the goods and vices acquired by transfer from other firms. Thus, all employees, owners, creditors and governments (through taxation) are recipients of the enterprise income. This is the total slice that can be divided among the various contributors of factor inputs to the enterprise in the production of goods and services"³. Value added is used to pay those who contribute to its creation. In most companies, the biggest slice of the value added goes to the employees in the form of wages, salaries, bonuses, the employers' contribution to pensions and all other forms of remuneration or employment cost. Another slice goes to those who provide the capital. This is paid either in the form of dividends or interest. Another slice goes to the government in the form of taxes. The final slice of added value is retained in the business in the form of depreciation and retained profit. Thus, it can be rightly said that value added is a measure of the wealth generated by the collective efforts of those who work in a business or industry—the employees and owners—managers and those who provide the capital—the investors.

VALUE ADDED STATEMENTS

The Value Added Statement shows the value created, added or generated and the distribution of it to interested groups, that is, to employees, shareholders, promoters of capital and the government. It is a statement which shows the income of a company as an entity and how that is divided among people who

have contributed to its creation. It puts profit into proper perspective *vis-a-vis* the whole enterprise as a collective effort by capital, management and the employees. Out of the value added comes wages, taxes, interest and dividends and funds for further investment. The interdependence of manpower and capital is made more apparent by the Value Added Statement. Thus, instead of concentrating on the profit available for proprietors, as in the profit and loss account, it regards the activities of the company as a collective effort by several groups of people, and shows how the resultant value added is shared between them⁴.

A Value Added Statement is simply a means of representing the profit and loss account in a form which emphasizes the concept of the business enterprise as a collective effort by capital, management, employees and government. It shows the wealth which the business has created and how it has been distributed among those who have created it⁵. The proponents of value added say that there are advantages in defining 'income' in such a way as to include the rewards of a much wider group than just the shareholders. The 'income' of this team is called 'value added' and equals net profit with tax, interest and wages costs all added back⁶.

The structure of double-entry systems means that there is another way of arriving at value added, which is by deducting from sales revenue the cost of all materials and services which were bought-in from outside suppliers. This will give the same figure for value added, because the rewards of the wider team must equal gross team revenues (that is, sales) less amounts payable to persons outside the team (that is, bought-in costs). The relationship between value added and profit can be expressed algebraically:

$$R = S - B - \text{Dep} - W - I - \text{Div} - T \quad (i)$$

where, R = Retained Profit

S = Sales revenue

B = Bought in materials and services

Dep = Annual depreciation charge.

W = Year's wage cost

I = Interest payable for the year

Div = Dividends payable for the year

T = Corporate Taxes

Re-arranging (i) we have

$$S - B - \text{Dep} = W + I + \text{Div.} + T + R \quad (ii)$$

The above equation can be shown by way of the following statement.

Gross value added of a manufacturing company

Sales	X	
Add: Royalties and other direct income	X	
Less: Materials and Services used	X	
Value added by trading activities		X
Add: Investment Income	X	
Add/Less: Extraordinary items	X	X
Gross Value Added		X

Applied as follows:

To employees as salaries, wages, etc.	X
To government as taxes, duties, etc.	X
To financiers as interest on borrowings	X
To shareholders as dividends	X
To retained earnings including depreciation	X

It can be noticed that in Gross Value Added, depreciation is an application of value added rather than a cost to be deducted in calculating value added. Following are the arguments in favour of GVA (*i.e.*, depreciation being considered an application of value added)

- GVA can be derived more objectively than NVA. This is because depreciation is subject to personal judgement and partiality than are bought-in costs.
- GVA report depreciation along with retained profit. The resultant subtotal usefully shows the portion of the year's VA which has become available for reinvestment.
- GVA format brings closer correspondence between VA and national income figures. This is because economists generally prefer gross measures of national income as compared to net national income.

However, there are also good reasons for reporting NVA, such as,

- Wealth Creation (*i.e.* VA) will be overstated if no allowance is made for the wearing out or loss of value of fixed assets which occurs as new assets are created.
- NVA is a more correct basis for calculating productivity bonus than GVA. The productivity of a company may increase because of additional investments in modernization of plant and machinery. Consequently, the value added component may improve significantly. In such case, employees of the company should be given some share of additional VA as productivity bonus. But if the share is based on GVA then no recognition is given to the need for an increased depreciation charge.
- The matching concept demands that depreciation be deducted along with bought-in costs to derive NVA.

Value added statement (VAS) or reporting is a modified version of the profit loss account. Like profit and loss account, the VAS reveals the operating performance of a company at a given point in time, using both accrual and matching procedures. However, the VAS does not aim to provide a profit (or loss) figure as in the case of profit and loss account but a figure or return to a larger group of capital and labour providers (*i.e.*, owners, employees), other claimants or interested parties.

Fig. 21.1 shows the preparation of a value-added statement and also indicates as to how a VAS can be derived from the profit and loss account.

UTILITY OF VALUE ADDED STATEMENT

Value added statement is useful to the following user groups:

Investors

Value added statements are useful to external users in making economic decisions and other uses. Value added can be useful in predicting corporate earnings, dividends and in turn the rates of return on the securities. It is argued that prediction of corporate earnings can be achieved by the use of more involved models incorporating both accounting and non-accounting data and reflecting the firm's specific characteristics as well as industry and economy wide expected events. That is, prediction of a company's future earnings will require a package of predictive indicators, with appropriate package varying, over time and over companies. There is no need to demonstrate that value added information is sufficient for predicting future company earnings. However, it is true to observe that its disclosure could lead to better predictions of those earnings (and through them the securities return) than if it were not disclosed.

Creditors

Although investors' investment objectives differ from creditors' objectives, both attempt to maximise their utility and that individual utilities are, in turn, a function of two variables — expected return and the (total) risk attached to the return from any investment. In this situation, the information requirements of loan creditors are essentially the same as that for equity investors.

Employees

Employees need to make decisions continuously about their relationships with company. That is, they must decide whether to take up, or remain in, its employment and also how much, as well as what kind of work effort to put in exchange for returns from employment. Co-determination of the structure of the effort-return relationship through individual or collective bargaining, is another decision situation which periodically confronts the employees. Gray, Owen and Maunders⁷ argue:

1. It has been suggested that information disclosure in general may be a significant attitudinal structuring tool from management's point of view, in that voluntary provision of information to employees and their negotiating representatives may help towards more positive attitudes towards management. Value added information might be a particularly valuable constituent of this kind of disclosure initiative from management's point of view, insofar as it can serve to draw attention to the interdependence of employees and other stakeholder groups' contributions to the firm's activities. From the point of view of employees, however, unless we are prepared to argue that they should be influenced in this way, value added information would appear to have no direct, relevance in relation to attitudinal structuring, except insofar as its use by management could provide an indicator that the latter may be trying to influence attitudes in a direction favourable to management.

	(₹)	(₹)
Sales		20,00,000
Less: Materials	2,00,000	
Wages	4,00,000	
Services purchased	6,00,000	
Interest paid	1,20,000	
Depreciation	80,000	
		14,00,000
Profit before tax		6,00,000
Income tax (assuming 50% tax rate)		3,00,000
Profit after tax		3,00,000
Less: Dividends payable		1,00,000
Retained Earnings		2,00,000

Value-added Statement

Sales		20,00,000
Less: Bought in materials and services and depreciation		8,80,000
Value Added (available for distribution or retention)		11,20,000
Distributed as follows:		
To employees		4,00,000
To providers of capital:		
Interest	1,20,000	
Dividends	1,00,000	2,20,000
To Government		3,00,000
Retained earnings		2,00,000
Value Added		11,20,000

Figure 21.1 : Profit and Loss Account

The assumptions underlying the preparation of Value Added Statement are:

1. Value Added Statement is no substitute but a supplement to the profit and loss account.
2. It is based on items and figures obtained in the Profit and Loss Account and the accounting concept remain the same in preparing the Value Added Statement.
3. It is different from the profit and loss account to the extent, the latter contains, the non-value added debits and credits like provisions, non-trading losses, appropriations as well as non-trading incomes like profit on sale of scrap, interest on securities, dividend, etc. They do not find a place in the Value Added Statements, which merely addresses itself to reveal the contributions of factors of production by re-classifying the accounting heads.

2. If value added information can be useful in predicting the level of future income from employment, it will presumably also be useful in predicting the pattern (*i.e.*, variability) of that income, and insofar as variability (non-stability) of income is regarded as undesirable by employees, this information should be relevant to their decision making. Perhaps more important than forecasting the stability of future earnings, as represented by variations in future payments as a result of collective bargaining for example, will be forecasting future continuity of employment. Clearly these two are related, insofar as the quantity of employment in a firm is a function of the price of labour (at least in the long run).

3. There is a question of whether value added information may be useful in relation to predicting the non-pecuniary factors associated with employment, where these are relevant to employee's decisions. Certain of the non-pecuniary factors, coming under the headings of conditions of work, fringe benefits, holiday entitlements, etc., will be a matter for collective bargaining and, as such, may be linked to value added information.

Government

Value added information is already, of course, collected on behalf of the government for use in measurements of the national income, which involves aggregating (amongst other things) the net output (value added) of firms. The reason why value added rather than sales or the sales value of production (both measures of gross output) is used in order to avoid "double counting" in the aggregation process, since the cost of materials and services which would be included in gross output of one firm will probably already have been included in the gross output measures of its suppliers. Hence national income, if it involved aggregating gross outputs would be a function of the degree of vertical integration in the economy. Thus, value added information from firms forms a useful function in macroeconomic measurement and forecasting, from government's point of view.

DISCLOSURE OF VALUE ADDED STATEMENT

Some Indian Companies prepare value added statements and provide them in their annual reports for the benefit of external users and others. Fig. 21.2 shows Value Addition Statement reported in the published annual report of Bharat Heavy Electricals Ltd.

Illustrative Problem 1

From the following details, calculate the Gross Value Added and Net Value Added of ABC Co.

Profit and Loss Account for the year ended 31 March 2016

Particulars	₹ 000s	Notes	₹ '000
Sales			8,540
Trading Profit		A	766
Less: Depreciation	121		766
Interest	56	B	(177)
Add: Rent from let out properties			33
Profit Before Tax			622
Less: Provision for tax		C	(275)
Profit After Tax			347
Less: Extra Ordinary Items		D	(7)
			340
Less: Dividend Paid and Payable			(136)
Retained Profit			204

Notes:

A.	Trading Profit is arrived at after charging	(₹ 000)
*	Salaries, Wages, etc. to employees	1,475
*	Directors' Remuneration	145
*	Audit Fees	90
*	Hire of Equipment	115
B.	Interest figure is ascertained as under:	
	Interest paid on Bank Loans and Overdrafts	65
	Interest received	(9)
	Net Interest	56
C.	Provision of Taxes includes a transfer of ₹ 57(₹ 000) to the credit of Deferred Tax Account.	
D.	Extraordinary items	(₹ 000)
	Surplus on Sale and Lease back of properties	8
	Loss of Cash by theft	(15)

Solution

Expenditure debited in deriving Trading Profit (as per Note A) = 1,475 + 145 + 90 + 115 = 1,825.

Cost of Bought Out Materials = Sales-Expenses as per Note A Trading Profit = 8,540 – 1,825 – 766 = 5,949.

Value Added Statement of ABC Co. for the year ended 31.03.2016

Particulars	₹ 000	₹ 000
Sales/Turnover		8,540
Less: Bought in Materials	5,949	
Manufacturing and		
Other Expenses (90 +115)	205	6,154
Value Added by Trading Activities		2,386
Add: Other Income		
(Rent = + 33; Interest Received = + 9)	42	
Extraordinary Items (as per Note D)	(7)	35
TOTAL VALUE ADDED		2,421

(₹ in crores)

Description	2014-15	2013-14	2012-13	2011-12	2010-11
A. Generation of Value Addition					
Value of Production	29755	37077	47219	47815	41527
(less excise duty)					
Less: Direct Material, Power & Fuel and Payments to Contractors	17772	22031	27759	28717	23051
Value Added	11983	15046	19460	19098	18476
Less: Other Operating Exp. (Net of Income)	3224	2982	3196	2479	3461
Net Value Addition	8759	12064	16264	16619	15015
% to value of production	29.44%	32.54%	34.44%	34.76%	36.16%
B. Application of Value Addition					
Employees payments	5450	5934	5753	5466	5410
% to net value addition	62.22%	49.19%	35.37%	32.89%	36.03%
Depreciation	1077	983	953	800	544
% to net value addition	12.30%	8.15%	5.86%	4.81%	3.62%
Financing charges:					
– Interest on borrowings	92	133	125	51	55
% to net value addition	1.05%	1.10%	0.77%	0.31%	0.36%
Tax Provision (Income tax, Def. Tax & Prior Period)	721	1554	2818	3262	2994
% to net value addition	8.23%	12.88%	17.32%	19.63%	19.94%
Dividend (incl. dividend tax)	341	810	1544	1821	1775
% to net value addition	3.90%	6.71%	9.49%	10.95%	11.82%
Retained Profit	1078	2651	5071	5219	4236
% to net value addition	12.30%	21.97%	31.18%	31.41%	28.22%

Figure 21.2 : Value Addition Statement

Source: Bharat Heavy Electricals Ltd. Annual Report, 2014-15, p. 261.

Applied as follows		
1. To Employees Salaries, Wages, etc.	1,475	61%
2. To Management as Directors' Remuneration	145	6%
3. To Government as Taxes, Duties, etc., (Tax Provn 275 – Deferred Tax 57)	218	9%
4. To Financiers as Interest on borrowings	65	3%
5. To Shareholders as Dividends	136	6%
6. To Retained Earnings as —		
(a) Depreciation	121	5%
(b) General Reserves	204	8%
(c) Deferred Taxation	57	2%
TOTAL APPLICATION	2,421	100%

Illustrative Problem 2

Prepare a Gross Value Added Statement from the following summarised Profit and Loss Account of Raymond Co. Show also the reconciliation between Gross Value Added and Profit before Taxation:

Profit & Loss Account for the year ended 31st March, 2017

Income	Notes	Amount	
		(₹ in lakhs)	(₹ in lakhs)
Sales		610	
Other Income		25	
			635
Expenditure:			
Production & Operational Expenses	1	465	
Administration Expenses	2	19	
Interest and Other Charges	3	27	
Depreciation		14	525
Profit before Taxes			110
Provision for Taxes			(16)
			94
Balance as per Last Balance Sheet			7
			101
Transferred to:			
General Reserve		60	
Proposed Dividend		11	71
Surplus Carried to Balance Sheet			30
			101

Notes:

1. Production & Operational Expenses:	(₹ in lakhs)
Increase in Stock	112
Consumption of Raw Materials	185
Consumption of Stores	22
Salaries, Wages, Bonus & Other Benefits	41
Cess and Local Taxes	11
Other Manufacturing Expenses	94
	<u>465</u>
2. Administration expenses include inter alia audit fees of ₹ 4.80 lakhs, salaries & commission to directors ₹ 5 lakhs and provision for doubtful debts ₹ 5.20 lakhs.	
3. Interest and Other Charges:	(₹ in lakhs)
On Working Capital Loans from Bank	8
On Fixed Loans from IDBI	12
Debentures	7
	<u>27</u>

Solution

**Value Added Statement
for the year ended 31st March, 2017**

	₹ in lakhs	₹ in lakhs
Sales		610
Less: Cost of bought in material and services:		
Production and operational expenses	413	
Administration expenses	14	
Interest on working capital loans	8	
		<u>435</u>
Value added by manufacturing and trading activities		175
Add: Other income		25
Total Value Added		<u>200</u>

Application of Value Added:

	₹ in lakhs	%
To Pay Employees: Salaries, Wages, Bonus and Other Benefits	41	20.50
To Pay Directors : Salaries and Commission	5	2.50
To Pay Government Cess and Local Taxes	11	
Income Tax	16	
	<u>27</u>	13.50
To Pay Providers of Capital Interest on Debentures	7	
Interest on Fixed Loans	12	
Dividend	11	
	<u>30</u>	15.00
To Provide for Maintenance and Expansion of the Company: Depreciation	14	
General Reserve	60	
Retained Profit (30-7)	23	
	<u>97</u>	48.50
Grand Total	<u>200</u>	<u>100.00</u>

Reconciliation between Total Value Added and Profit Before Taxation:

	₹ in lakhs	₹ in lakhs
Profit before Tax		110
Add back:		
Depreciation	14	
Salaries, Wages, Bonus and other Benefits	41	
Directors' Remuneration	5	
Cess and Local Taxes	11	
Interest on Debentures	7	
Interest on Fixed Loans	12	
Total Value Added		<u>200</u>

Illustrative Problem 3

Given below is the summarised Profit and Loss Account of ABC Ltd.:

**Summarised Profit and Loss Account for the year ended
31st March, 2017**

	Notes	Amount (₹ '000)
Income:		
Sales	1	28,525
Other Income		756
		<u>29,281</u>
Expenditure:		
Operating cost	2	25,658
Excise duty		1,718
Interest on Bank overdraft	3	93
Interest on 10% Debentures		1,157
		<u>28,626</u>
Profit before Depreciation		655
Less: Depreciation		(255)
Profit before tax		400
Provision for tax	4	(275)
Profit after tax		125
Less: Transfer to Fixed Asset Replacement Reserve		(25)
		<u>100</u>
Less: Dividend paid and payable		(45)
Retained profit		<u>55</u>

Notes:

1. This represents the invoice value of goods supplied after deducting discounts, returns and sales tax.
2. Operating cost includes ₹ ('000) 10,247 as wages, salaries and other benefits to employees.
3. The bank overdraft is treated as a temporary source of finance.
4. The charge for taxation includes a transfer of ₹ ('000) 45 to the credit of deferred tax account.

You are required to:

- (a) Prepare a value added statement (Net) for the year ended 31st March, 2017.
 (b) Reconcile total value added with profit before taxation.

Solution:

Value Added Statement
For the year ended March 31, 2017

	₹ ('000)	₹ ('000)	%
Sales		28,525	
Less: Cost of bought in material and services:			
Operating cost	15,411		
Interest on bank overdraft	93	15,504	
Gross Value Added		13,021	
Less: Depreciation		(255)	
Net Value Added		12,766	
Add: Other income		756	
Available for application		13,522	
Applied as follows:			
To pay employees:			
Wages, salaries and other benefits		10,247	75.78
To pay government:			
Corporation tax & excise duty		1948	14.41
To pay providers of capital:			
Interest on 10% Debentures	1,157		
Dividends	45	1,202	8.89
To provide for the maintenance and expansion of the company:			
Fixed Assets	25		
Replacement Reserve	45		
Deferred Tax Account	55	125	0.92
Retained profit			
		13,522	100.00

(b) Reconciliation between Total Value Added and Profit before Taxation

	₹ ('000)	₹ ('000)
Profit before tax		400
Add back:		
Excise duty	1,718	
Wages, salaries and other benefits	10,247	
Debenture interest	1,157	13,122
Total Value Added		13,522

Illustrative Problem 4

From the following data, prepare a Value Added Statement of XYZ Company for the year ended 31.03.2017

Particulars	₹	Particulars	₹
Decrease in Stock	24,000	Sales	40,19,000
Purchases	20,20,000	Other income	55,000
Wages & Salaries	10,00,000		
Manufacturing & Other Expenses	2,30,000		
Finance Charges	4,69,000		
Depreciation	2,44,000		
Profit Before Taxation	87,000		
Total	40,74,000	Total	40,74,000

Particulars	₹
Profit Before Taxation	87,000
Less: Tax Provisions	(40,000)
Income Tax Payments (for earlier years)	(3,000)
Add: Earlier Year Profit brought forward	38,000
Profit After Taxation	82,000
Appropriations of PAT	
Debenture Redemption Reserve	10,000
General Reserve	10,000
Proposed Dividend	35,000
Balance carried to Balance Sheet	27,000
Total	82,000

Solution:

Value Added Statement for the year ended 31.03.2017

Particulars	₹	₹
Sales/Turnover		40,19,000
Less: Bought in Materials		
• Decrease in Stock		24,000
• Purchases	20,20,000	20,44,000
Value Added by Trading Activities		19,75,000
Add: Other Income		55,000
GROSS VALUE ADDED		20,30,000
Applied as follows –		
1. To Employees Salaries, Wages, etc.	10,00,000	
2. To Other Service Providers as Manufacturing & Other expenses	2,30,000	
3. To Government as Taxes, Duties, etc. (40,000 + 3,000)	43,000	
4. To Financiers as Interest on borrowings	4,69,000	
5. To Shareholders as Dividends	35,000	
6. To Retained Earnings as		
• Depreciation	2,44,000	
• Debenture Redemption Reserve	10,000	
• General Reserve	10,000	
TOTAL APPLICATION		20,41,000
VALUE DEFICIT (Reduction in P & L A/c balance = 38,000 – 27,000)		(11,000)

Note: Alternatively, the reduction in Retained Profits (38,000 – 27,000) may be considered as an adjustment/reduction against the entry “To Retained Earnings” and the Value Deficit need not be shown.

ECONOMIC VALUE ADDED (EVA)

A sea change in the organisational goals from the earlier socio-economic issues to the newly minted shareholders' value has led to a revolutionary change in the performance measurement criteria of corporate entities from the traditional profit based measures e.g., Earnings Per Share (EPS), Return on Capital Employed (ROCE), Return on Net Worth (RONW), Net Profit Margin (NPM), Operating Profit Margin (OPM) etc., to the new 'trendier' value-based performance measures, like Market Value Added (MVA), Shareholder Value Added (SVA), Cash Value Added (CVA), Total Quality Management (TQM), Balanced Scorecard (BSC), Financial Re-engineering (FR), and Economic Value Added (EVA). Among these concepts, Economic Value Added (EVA) has received attention and recognition in accounting and finance literature as a vital tool to measure corporate performance.

EVA, the value-based benchmark used for judging the financial performance of any business entity may be literally defined as the quantum of economic value generated by a company in excess of its cost of capital. It essentially seeks to measure a company's actual rate of return as against the required rate of return. It is a way to measure a corporate's real profitability recognizing the fact that the capital employed in any business has a cost — irrespective of the general belief that equity has no cost. Thus, EVA is nothing but accounting for the cost of capital and determining the sufficiency or insufficiency of earnings generated by a firm to cover the cost of capital, *i.e.*, whether a firm is a value generator (value creator) or a value destroyer.

COMPUTATION OF EVA

Operationally defined, EVA is the difference between the net operating profits after taxes (NOPAT) and capital charge *i.e.*, cost of capital employed (COCE) or the product of capital employed with the difference between the Return on Capital Employed (ROCE) and the Cost of Capital Employed (COCE) *i.e.*,

$$\text{EVA} = \text{Net operating profits after taxes (NOPAT)} - \text{Capital Charge (WACC} \times \text{CE)}$$

where WACC = Weighted Average Cost of Capital

CE = Capital Employed

$$\text{NOPAT} = \text{Profits after depreciation and taxes but before interest cost}$$

OR

$$\text{EVA} = \text{Capital Employed (CE)} \times \left[\text{Return on Capital Employed (ROCE)} \right] - \text{Cost of Capital Employed (COCE)}$$

1. NOPAT refers to quantum of net operating profit remained in the business after the payment of taxes but before interest. Addition and subtraction of non-operating income and expenses to the net profit figure

and making certain other adjustments for turning accounting profits into economic profits is also advocated. To convert the GAAP earning into EVA, Stern Stewart has identified about 164 potential adjustments to GAAP. But due to diverse accounting disclosure practices adopted in India and abroad following are the adjustments being felt quite sufficient in Indian context to convert the accounting profit, also known as GAAP earnings, into economic profit or EVA *e.g.*,

- Research and development,
- Accounting for acquisitions,
- Depreciation,
- Goodwill,
- Non-interest bearing current liabilities (NIBCLs),
- Revaluation reserve etc.

Any change in the accounting adjustments will yield a different EVA number. The diagram given in Fig. 21.3 clearly exhibits all the potential EVAs as running along a spectrum:



Fig. 21.3: The EVA Spectrum

True EVA:

The most theoretically correct and accurate measure of economic profit, calculated with all relevant adjustments to accounting data and using the precise cost of capital for each business unit in a company.

Basic EVA:

The EVA which we would get using unadjusted GAAP operating profits and the GAAP balance-sheet. It is an improvement on regular accounting earnings as it recognizes that equity capital has a cost.

Disclosed EVA:

The EVA which is computed by making about a dozen standard adjustments to publicly available accounting data. It is much better than basic EVA but not as good as it should be for internal management etc.

Tailored EVA:

The EVA peculiar to the organizational structure, business mix, strategy and accounting policies of each company.

2. WACC is the weighted average of the cost of debt (*ki*), cost of equity (*ke*) and cost of preference capital (*kp*), if any, with weights equivalent to the proportion of each in the total capital.
3. Capital Employed (CE) is the next element required for calculating EVA and can be calculated through the assets side or the 'liabilities side of a balance sheet.

From the assets side of the balance sheet:

CE = Current Assets – Non interest bearing current liabilities (*i.e.*, Net Working Capital + Net Fixed Assets)

From the liability side of the balance sheet: —

CE = Interest bearing debt (short-term as well as long-term) + Net worth less any non-operating assets.

The mechanism of EVA is very simple. Applying the above mentioned methodology if the result is positive, the firm in question has created value over the period and if the EVA is negative, it will be termed as a value destroyer. A company having consistently high EVA implies that it has been successful in creating value for the business. It has effectively utilized the resources in the most profitable use. On the other hand, a company having oscillating EVA or consistently negative EVA indicates that there is something wrong with the Company.

The procedure of computing EVA is further explained herein with the help of a hypothetical company's income statement and balance sheet:—

Income Statement

		₹
Net Sales		26,000
	₹.	
Cost of goods sold	14, 000	
Selling & distribution expenses	41000	
Depreciation	1,500	
Other operating expenses	1,000	20,500
Operating Income		5,500
Interest expenses		-2,000
Income Before Tax		3,500
Income tax (35%)		-1,225
Net Profit After Tax		2,275

Balance Sheet

Liabilities	Amount	Assets	Amount
	₹		₹
Total Equity Capital:		Land & Building	6,500
	₹	Equipment	4,100
Share Capital	3,000	Other long-term Assets	4,900
Retained	4,300	Inventory	2,500
Earnings		Accounts Receivable	
Profit Loss A/c	2,100	(A/R)	4,000
Long-term Debt	7,600	Cash	1,500
Account Payable (A/P)	1,000		
Accrued Expenses (A/E)	2,500		
Short-term Debt	3,000		
	23,500		23,500

Step I: Calculate Net Operating Profit After Tax (NOPAT)

	₹
Operating Income	5,500
Tax(35%)	1,925
NOPAT	3,575
or	
Net Profit	2,275
+ Interest expense (1 – Tax Rate)	1,300
NOPAT	3,575

Step II: Identify Company's Capital

	₹
Total Liabilities	23,500
Less:	₹
Account Payable (A/P)	1,000
Accrued Expenses (A/E)	2,500
Capital (C)*	20,000

*Company's Capital = Total Liabilities – Non-interest. bearing liabilities

Step III: Determine Capital Cost Rate (CCR)

Here, CCR = 10%

The reason is that owners expect 13% return for using their money because less than that is not attractive to them; this is about the return that investors can get by investing long-term with equal risk (stock, mutual funds of other companies). The company has ₹ 9400/23500 ~ 40% (or 0.4) of equity with a cost of 13%. It has also 60% debt and assume that it has to pay 8% interest for it. So the average capital costs would be:

$$\begin{aligned}
 \text{CCR} &= \text{Average equity proportion} \times \text{Equity Cost} + \text{Average Debt} \\
 &\text{Proportion} \times \text{Debt Cost} = (40\% \times 13\%) + (60\% \times 8\%) \\
 &= 0.4 \times 13\% + 0.6 \times 8\% \\
 &= 5.2\% + 4.8\% \\
 &= 10\%
 \end{aligned}$$

Step IV: Calculate Company's EVA:

$$\begin{aligned}
 \text{EVA} &= \text{NOPAT} - C \times \text{CCR} \\
 &= ₹ 3,575 - ₹ 20,000 \times 10\% \\
 &= ₹ 3,575 - ₹ 2,000 \\
 &= ₹ 1,575
 \end{aligned}$$

Thus, it is clear that the company has created an EVA of ₹ 1,575.

Illustrative Problem 5

Compute EVA' of ABC Ltd. for 3 years from the information given
(₹ in Lakhs)

Particulars	Year 1	Year 2	Year 3
Average Capital Employed	3,000.00	3,500.00	4,000.00
Operating Profit before Interest (adjusted for tax Effect)	850.00	1250.00	1600.00
Corporate Income Taxes	80.00	70.00	120.00
Average Debt + Total Capital Employed (in %)	40.00	35.00	13.00
Beta Variant	1.10	1.20	1.30
Risk Free Rate (%)	12.50	12.50	12.50
Equity Risk Premium (%)	10.00	10.00	10.00
Cost of Debt (Post Tax) (%)	19.00	19.00	20.00

Solution:**EVA Statement**

Particulars	Year 1	Year 2	Year 3
1. Cost of Equity (K^e) = Risk Free Rate + (Beta × Equity Risk Premium)	12.5 + (1.1 × 10) = 23.50%	12.5 + (1.2 × 10) = 24.50%	12.5 + (1.3 × 10) = 25.50%
2. Cost of Debt (K^d) (given)	19.00%	19.00%	20.00%
3. Debt – Equity Ratio (Debt = given; Equity is bal. fig.)	40% & 60%	35% & 65%	13% & 87%
4. WACC = [$(K^d \times \text{Debt \%} + K^e \times \text{Equity \%})$]	21.70% (23.50 × 60% + 19 × 40%)	22.58% (24.50 × 65% + 19 × 35%)	24.79% (25.50 × 87% + 20 × 13%)
5. Average Capital Employed (given)	3,000.00	3,500.00	4,000.00
6. Capital Charge (Fair Return to Providers of Capital i.e., Average Capital Employed × WACC) (4 × 5)	3,000 × 21.70% = 651.00	3,500 × 22.58% = 790.30	4,000 × 24.79% = 991.60
7. Operating Profit before Taxes & Interest	850.00	1,250.00	1,600.00
8. Less: Taxes Paid	80.00	70.00	120.00
9. Operating Profit after Taxes (This is the return to the Providers of Capital i.e., Debt and Equity)	770.00	1,180.00	1,480.00
10. Capital Charge (computed in 6 above)	651.00	790.30	991.60
11. Economic Value Added (9 – 10)	119.00	389.70	488.40
12. EVA as a % of Average Capital Employed	3.96%	11.13%	12.21%

Illustrative Problem 6

ABC Ltd. provides you with the following summarized balance sheet as at 31st March 2017.
(₹ in lakhs)

Liabilities	Amount	Assets	Amount
Share Capital 981.46		Fixed Assets (Net)	2,409.90
Reserves and Surplus 1,313.62	2,295.08	Current Asset	50.00
Long term Debt	144.44		
Sundry Creditors	20.38		
	2,459.90		2,459.90

Additional information provided is as follows:

(i) Profit before interest and tax is ₹ 2,202.84 lakhs

(ii) Interest paid is ₹ 13.48 lakhs.

(iii) Tax rate is 40%

(iv) Risk Free Rate = 11.32%

(v) Long term Market Rate = 12%

(vi) Beta = 1.62 (highest during the period)

(vii) Cost of equity = 12.42% and cost of debt 5.6%.

You are required to calculate Economic Value Added of ABC Ltd.

Solution

EVA = NOPAT – Weighted Average cost of Capital Employed

$$\frac{2,295.08}{2,439.52} \times 12.42\% + \frac{144.44}{2,439.52} \times 5.6\%$$

$$= 11.69\% + 0.33\% = 12.02\%$$

$$*2,295.08 + 144.44 = ₹ 2,439.52 \text{ lakhs}$$

NOPAT = [PBIT – Interest – Tax] – Interest (net of tax)

	₹ in lakhs
PBIT	2,202.84
Less: Interest	(13.48)
	2,189.36
Less: Tax @ 40%	(875.74)
	1,313.62
Add: Interest (net of tax) [13.48 × (1 – 0.40)]	8.09
	1,321.71

EVA = NOPAT – WACC × CE

$$= 1,321.71 \text{ lakhs} - (12.02\% \times 2,439.52 \text{ lakhs})$$

$$= 1,321.71 \text{ lakhs} - 293.23 \text{ lakhs} = ₹ 1,028.48 \text{ lakhs.}$$

Illustrative Problem 7

The Capital Structure of XYZ Ltd. is as under:

- 80,00,000, Equity Shares of ₹ 10 each = ₹ 800 lakhs
- 1,00,000, 12% Preference Shares of ₹ 250 each = ₹ 250 lakhs
- 1,00,000, 10% Debentures of ₹ 500 each = ₹ 500 lakhs
- Terms Loan from Bank @ 10% = ₹ 450 lakhs

The Company's Statement of Profit and Loss for the year showed PAT of ₹ 100 lakhs, after appropriating Equity Dividend @ 20%. The Company is in the 40% tax bracket. Treasury Bonds carry 6.5% interest and beta factor for the Company may be taken as, 1.5. The long run market rate of return may be taken as 16.5%. Calculate Economic Value Added.

Solution**Computation of Economic Value Added**

Particulars	₹ in lakhs
Profit before Interest and Taxes (from W.N.1)	578.33
Less: Interest (50 + 45)	(95.00)
	483.33
Less: Taxes	(193.33)
	290
Add: Interest (net of tax) [95 × (1 - 0.40)]	57
Net Operating Profit After Taxes	347
Less: Cost of Capital (WACC × Capital Employed)	(2,000 × 12.95%) (259.00)
Economic Value Added	88.00

Working Notes:**1. Calculation of Profit Before Tax**

Particulars	Computation	₹ in lakhs
Profit before Interest and Taxes	Balancing figure	578.33
Less: Interest on Debentures	10% × ₹ 500 lakhs	(50.00)
Interest on Bank Term Loan	10% × ₹ 450 lakhs	(45.00)
Profit Before Tax		483.33
Less: Tax @ 40%	(₹ 290.00 ÷ 60%) × 40%	(193.33)
Profit after Tax		290.00
Less: Preference Dividend	12% × ₹ 250 lakhs	(30.00)
Residual earnings for equity shareholders		260.00
Less: Equity Dividend	20% × ₹ 800 lakhs	(160.00)
Net balance in Profit and Loss Account	Given	100.00

2. Computation of Cost of Equity :

$$= \text{Risk Free Rate} + \text{Beta} \times (\text{Market Rate} - \text{Risk Free Rate})$$

$$= 6.5\% + 1.5 (16.5\% - 6.5\%) = 21.5\%$$

3. Cost of Debt

$$\text{Interest} \quad \quad \quad \text{₹ 45 lakhs}$$

$$\text{Less: Tax (40\%)} \quad \quad \quad \text{(₹ 18 lakhs)}$$

$$\text{Interest after Tax} \quad \quad \quad \text{₹ 27 lakhs}$$

$$\text{Cost of Debt} = \frac{27}{450} \times 100 = 6\%$$

4. Computation of Weighted Average Cost of Capital

Component	Amount	Ratio	Individual Cost	WACC
Equity	₹ 800 lakhs	$800 \div 2000 = 0.40$	$K_e = 21.5$	8.6
Preference	₹ 250 lakhs	$250 \div 2000 = 0.125$	$K_p = 12$	1.5
Debt (500 + 450)	₹ 950 lakhs	$950 \div 2000 = 0.475$	$K_d = 6$	2.85
Total	₹ 2,000 lakhs		K_c	12.95%

SUPERIORITY OF EVA OVER TRADITIONAL MEASURES

Performance measurement systems that were successful in the past are becoming obsolete and in some cases are dysfunctional and obstructive to improvements. A dynamic and more competitive environment requires dynamic benchmarks to get a clear picture of:—

- What is really happening to the performance of a business firm?
- Whether the firm is a value generator or a value destroyer?

Ultimately, the value-based performance measures e.g., Economic Value Added (EVA) have appeared on the scene. EVA is touching new heights day by day and when compared with the traditional measures it occupies a place of pride on the following grounds:—

- (i) EVA is a performance measure most directly linked to the definitive and reliable measure of wealth creation which is Market Value Added (MVA), the difference between the market value of an enterprise and the capital contributed by shareholder and lenders. MVA is in fact the cumulative amount by which a company has enhanced or diminished shareholder wealth.
- (ii) ROCE, RONW, ROI etc., consider only one side of the performance i.e., they consider the borrowing cost but ignore the cost of equity. This leads the decision makers and financial analyst toward a failure to highlight whether the return is commensurate with the risk of underlying assets. In turn, it ultimately results into biased and inappropriate decisions regarding rejection of economically profitable project or acceptance of unviable projects. For instance, a company's current ROCE is 20% and its overall cost of capital is 16%. It receives a new investment opportunity with an estimated ROCE of 18%, cost of capital remains the same (i.e., at 16%). To maximize ROCE one will reject the said opportunity. But actually, if accepted, would have added two per cent economic surplus to the shareholder wealth. In another case, the present ROCE of a company is 12% and cost of capital is 16%. It receives a new investment opportunity with an estimated ROCE of 14% with no change in cost of capital. Again, to maximize

ROCE the said opportunity will be accepted by the company. But this will destroy shareholder's wealth as shareholders want to maximize the absolute return above the cost of capital and not to maximize percentages.

On the contrary, EVA mechanism gives due recognition to the cost of equity in all managerial decisions from board-room to the shop floor and thus provides a comprehensive and reliable yardstick to measure the shareholders' value creation (or destruction) by an individual business entity focusing towards maximization of absolute return above the cost capital.

- (iii) The EVA financial management system eliminates all the inconsistencies among various parameters resulting from the use of different criteria/financial measures for different corporate functions under the typical traditional financial management system, by incorporating all business issues, for instance, reviewing a capital budgeting process, valuing an acquisition, considering strategic plan alternatives, assessing performance, communicating or rewarding management into an integrated criteria of creating value. This would unite all employees in the pursuit of the single goal of creating value. Managers will certainly have to consider margins, turnover ratios, unit costs and a host of other variables, but the anxiety is always in the context of their impact on EVA. EVA system, thus, covers the full range of managerial decisions against a typical traditional system with inconsistent standards, goals and terminology as exhibited in Fig. 21.4.

The focus on a single measure also simplifies decisions, communication channels get strengthened, decision making speeded up, teamwork bolstered, and parochial behaviour declined, when everyone is putting on the same oar⁸.

- (iv) Further, it links the management compensation to the shareholder value in a much refined manner. With EVA the bonus targets are set every year as a percentage

gain in EVA and there is no cap on the maximum amount of bonus payment. A part of the bonus earned is banked and paid in later years. EVA results that are below target will shrink the banked bonus and *vice-versa*. Thus, EVA-based compensation system ties management's interest with those of shareholders and the value creation motion will permeate the whole organization.

- (v) EVA captures the performance status of corporate system over a broader canvas *i.e.*, to arrive at true profits, cost of borrowed capital as well as cost of equity should be deducted from net operating profits. Further to maximize earnings is not sufficient, at the same time consumption of capital should be minimum /optimum under an EVA based system.
- (vi) The utility of EVA simply does not end by indicating the degree of wealth creation. It goes beyond that to pinpoint the lacunae in the business performance. A regular monitoring of EVA throws light on the problem areas of a company and thus helps managers to take corrective actions.
- (vii) EVA does have an extremely important role in strategy formulation. It is used to assess the likely impact of competing strategies on shareholder wealth and thus helps the management to select the one that will best serve shareholders. It can be particularly effective in this regard when it is augmented by new tools such as Real Option Analysis, Balanced Scorecard, Activity-based Costing and Activity-based Management.
- (viii) It also fits well with the concepts of corporate governance and thus is considered to be the best corporate governance system. EVA bonus system does this by giving employees an ownership stake in improvements in the EVA of their divisions or operations. This causes employees to behave like owners and reduces or eliminates the need for outside interference in decision making.

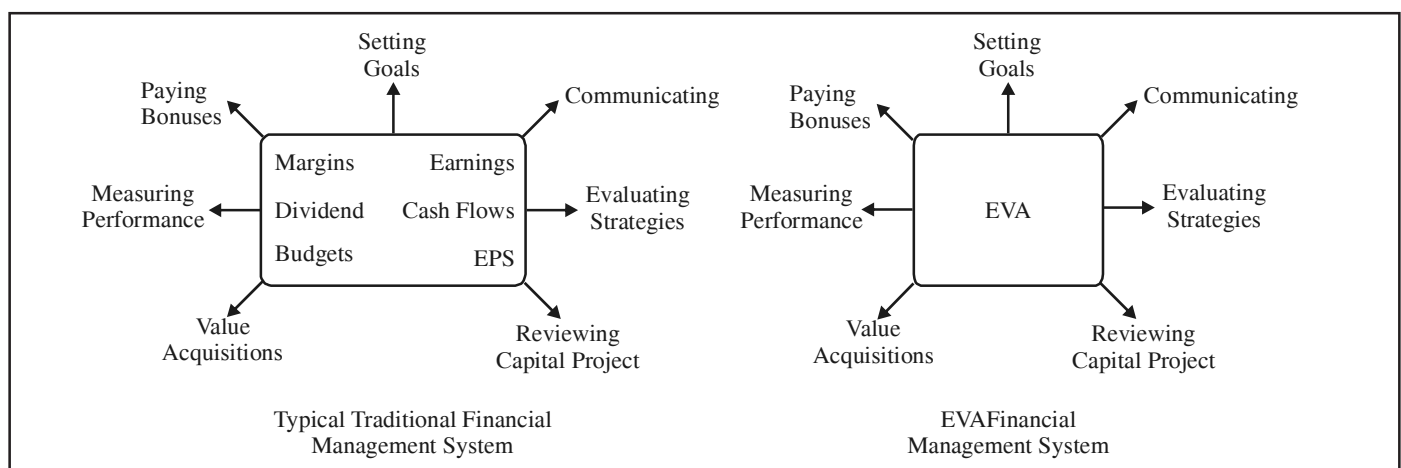


Figure 21.4

- (ix) The issue of capital charge compels operating managers to use assets more diligently by focusing directly on the costs associated with inventories, receivables and capital equipment. It enables managers to routinely and automatically consider the cost of capital in every decision and accurately assess the trade-off between operating costs and capital costs. Combining operating costs and capital costs in a single profit measure that is expressed in rupee rather than a rate of return, gives EVA another unique quality. Hence managers could use EVA to guide their future resource allocation decisions and economic income of the firm by any of the following strategies or a combination of these, as exhibited in Fig. 21.5.

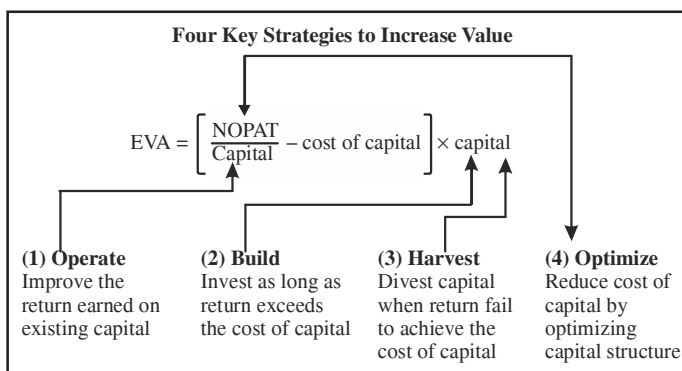


Figure 21.5

Hence, EVA as a performance measure captures the real performance of a corporate system over a broader canvas.

- (x) EVA is also an ideal technique for companies operating in new-age sectors. The typical knowledge industry is not capital intensive, and the companies operating in these industries are not faced with too many decisions involving huge amounts of capital. Moreover in such industries returns on the capital invested are immediate. As a result, EVA is almost a made-to-order performance metric for the knowledge industries.

IMPLEMENTING EVA

Measuring EVA is not enough—rather one needs to adopt it and implement it. Implementing EVA is a 4 step process, also called as ‘the 4 M process’ and these 4 Ms are:—

1. Measurement,
2. Management System,
3. Motivation,
4. Mindset.

The 4 Ms depicting process of EVA is displayed in Fig. 21.6

(1) *Measurement* — Any company that wishes to implement EVA should institutionalize the process of measuring the metric, regularly. This measurements should be done after carrying out the prescribed accounting adjustments, using the formula:

$$EVA = (ROCE - COC) \times \text{Capital Employed}$$

Or

$$EVA = NOPAT - (WACC \times \text{Capital Employed})$$

(2) *Management System* — Further, the company should be willing to align the management system to the EVA process. The EVA based management system is the basis on which the company should take decisions related to the choice of strategy, capital allocation, merger & acquisitions, divesting business and goal setting. In effect, each one of a company’s activities should be aligned to, and derived from the company’s EVA process.

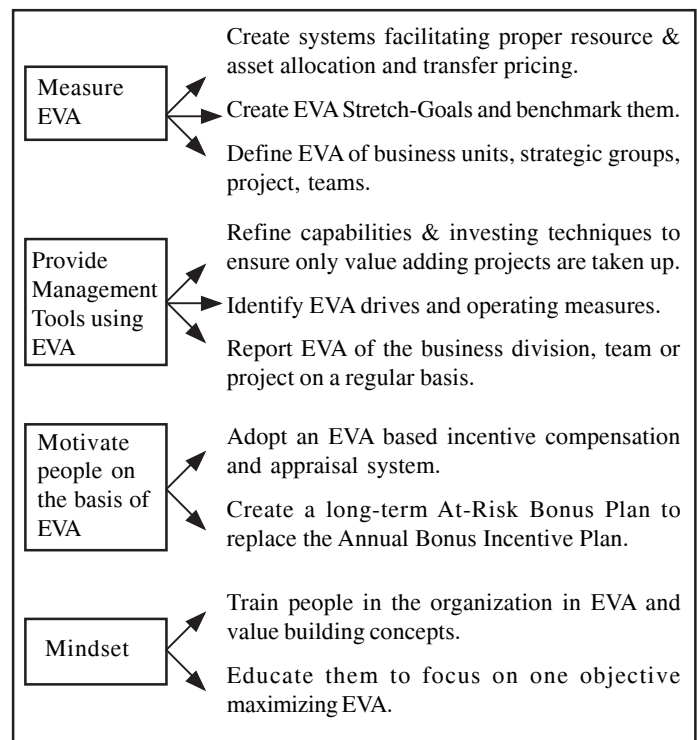


Fig. 21.6 : The 4 Step Process of Implementing EVA

(3) *Motivation* — Companies should decide to implement EVA only if they are prepared to implement the incentive plan that goes with it. This plan ensures that the only way in which managers can earn a higher bonus is by creating more value for shareholders. Sales-based incentives reward managers for incremental sales without considering the costs involved, and profits based reward systems can be the source of resentment, at least among those managers who believe that their rewards are based on variables beyond their control. An EVA-based incentive system, however, encourages managers to operate in such a way as to maximize the EVA, not just of the operations they oversee but of the company as whole.

(4) *Mindset* — Like other transformation techniques, the effective implementation of EVA necessitates a change in the culture and mindset of the Company. All constituents of the organization need to be taught to focus on one objective—maximizing EVA. This singular focus leaves no room for ambiguity and also it is not difficult for employees to know just what actions of their will create EVA, and what will destroy it.

Other major issues related to the implementation of EVA are the geographical or cultural context, the relative simplicity or complexity in adopting it as a measure of corporate performance in some countries, the characteristics of a company, identifying the particular stage in the organizational life style when it works best and its suitability to one particular industry. A lot of attempts have been made to investigate and solve these issues. It has been found that there is no particular geographical or cultural context and no particular stage in a firm life cycle where and when EVA can be best implemented. The ideal company to implement it is one in which the board of directors and the senior management want to improve the efficiency of a firm, take advantage of opportunities quickly and align the interests of the management and shareholders. As far as the industry is concerned, the nature of industry is far less important than the attitude of management. The management must surely wish to have the benefits of EVA.

EVA Disclosures in India

The number of Companies that have turned to economic value added (EVA) or other value added statement over the past few years as a new and modified way to gauge corporate financial performance is going up. Highly rated companies like Coca Cola, AT&T, Quaker Oats, Briggs and Stratton have set up separate EVA measurement systems in their organizations. Indian Corporate is also recognizing the importance of EVA. Particularly, after the liberalization on foreign holdings in Indian Companies, the concept of shareholder value is gaining ground. Some companies *e.g.*, Hindustan Lever, NIIT, Infosys Technologies, Hyderabad based Dr. Reddy Laboratories have already made EVA a part of their published Annual Reports and others *e.g.*, Ranbaxy Laboratories, Samtel India Ltd. have started calculating EVA as an internal report. Several hundred front line managers have already undergone orientation and training in implementing EVA in their business activities.

ITC began consciously examining its shareholder value creating capabilities in 1996. According to the CEO of ITC, the concept of EVA has been followed as it enables the company to clearly identify value-drivers from the perspective of the capital market, and once they are identified, it becomes possible for the company to focus their internal processes on them and take every strategic decision in a manner that contributes to the enhancement of shareholder value.

Figure 21.7 and 21.8 exhibit statement of economic value added prepared by Hindustan Unilever Ltd. and ACC Ltd. and published in their annual reports.

Figure 21.7: Economic Value Added

Additional Information: Economic Value Added (EVA)

What is EVA?

Traditional approaches to measuring 'Shareholder's Value Creation' have used parameters such as earnings capitalization, market capitalization and present value of estimated future cash flows. Extensive equity research has established that it is not earnings per se, but VALUE that is important. A measure called 'Economic Value Added' (EVA) is increasingly being applied to understand and evaluate financial performance.

***EVA = Not Operating Profit after Taxes (NOPAT) – Cost of Capital Employed (COCE), where,**

NOPAT = Profits after depreciation and taxes but before interest costs. NOPAT thus represents the total pool of profits available on an ungeared basis to provide a return to lenders and shareholders, and

COCE = Weighted Average Cost of Capital (WACC) x Average Capital Employed

*Cost of debt is taken at the effective rate of interest applicable to an 'AAA' rated company like HUL for a short-term debt, net of taxes. We have considered a pre tax rate of 9.63% for 2013-14 (9.13% for 2012-13).

*Cost of Equity is the return expected by the investors to compensate them for the variability in returns caused by fluctuating earnings and share prices.

Cost of Equity = Risk free return equivalent to yield to long term Government Bonds (taken at 8.80% for 2013-14)

+

Market risk premium (taken at 3.98%) (x) Beta variant for the Company. (taken at 0.709) where Beta is a relative measure of risk associated with the Company's shares as against the market as a whole.

Thus HUL's cost of equity = 8.80% + 3.98% (x) 0.709 = 11.62%

What does EVA show?

EVA is residual income after charging the Company for the cost of capital provided by lenders and shareholders. It represents the value added to the shareholders by generating operating profits in excess of the cost of capital employed in the business.

When will EVA increase?

EVA will increase if:

- Operating profit can be made to grow without employing more capital, i.e. greater efficiency.
- Additional capital is invested in projects that return more than the cost of obtaining new capital, i.e. profitable growth.
- Capital is curtailed in activities that do not cover the cost of capital *i.e.*, liquidate unproductive capital.

EVA in practice at Hindustan Unilever Limited.

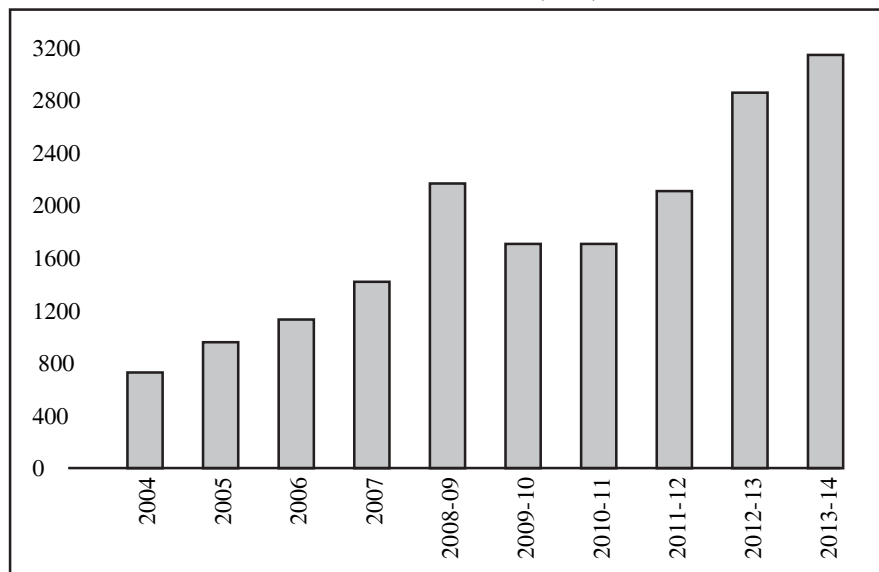
In Hindustan Unilever Limited, the goal of sustainable long-term value creation for our shareholders is well understood by all the business groups. Measures to evaluate business performance and to set targets take into account this concept of value creation.

EVA Trends: 2004-2014 (Unaudited)

(₹ Crores)

Particulars	2004	2005	2006	2007	2008-2009 (15 months)	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014
Cost of Capital Employed (COCE)										
1. Average Debt	1,588	360	163	382	342	119	2	0	0	0
2. Average Equity	2,116	2,200	2,515	2,402	1,928	2,497	3,118	3,462	4,018	3,715
3. Average Capital Employed (1) + (2)	3,704	2,560	2,678	2,748	2,270	2,616	3,120	3,446	4,018	3,715
4. Cost of Debt, post-tax %	5.19	3.38	5.90	6.24	3.91	3.95	5.36	6.20	6.02	6.36
5. Cost of Equity %	14.77	15.50	16.38	17.59	14.47	12.51	12.93	10.10	10.07	11.62
6. Weighted Average Cost of Capital % (WACC)	10.66	13.80	15.74	16.03	12.88	12.12	12.92	10.10	10.07	11.62
7. COCE (3) x (6)	395	353	421	446	365	317	403	350	405	432
Economic Value Added (EVA)										
8. Profit after tax, before exceptional items	1,199	1,355	1,540	1,743	2,501	2,103	2,153	2,599	3,314	3,555
9. Add: Interest, after taxes	82	12	7	17	17	5	0	1	17	24
10. Net Operating Profits After Taxes (NOPAT)	1,281	1,367	1,547	1,760	2,518	2,108	2,153	2,600	3,331	3,579
11. COCE, as per (7) above	395	353	421	446	365	317	403	350	405	432
12. EVA (10) – (11)	886	1,014	1,126	1,314	2,154	1,791	1,750	2,250	2,926	3,147

Economic Value Added (EVA) ₹ Crores



Source: Hindustan Unilever Ltd., Annual Report 2013-14, p. 127

Figure 21.8: Economic Value Added [EVA] Statement
(₹ Crore)

	2013	2012*	2011	2010	2009
Capital employed	8,367	8063	8,221	7,355	6,932
Avg. Capital Employed	8,215	8,142	7,788	7,144	6,339
EVA					
Net operating profit after taxes	1,096	1,288	1,325	1,120	1,607
Cost of Capital	1,084	981	950	821	694
EVA	12	307	375	299	913
Return on Capital employed (%)	13.34	15.82	17.01	15.68	25.35
Weighted Average Cost of Capital (%)	13.20	12.05	12.20	11.49	10.95
EVA/ Capital Employed (%)	0.15	3.77	4.82	4.19	14.40
Enterprise Value					
Market Capitalisation (As at December, 31)	20,806	26,836	21,345	20,194	16,362
Add: Debts	35	163	511	524	567
Less: Cash and Cash Equivalents	2,621	3,137	2,932	2,388	1,876
EV (Enterprise Value)	18,220	23,862	18,923	18,330	15,053
EV/Yr. End Capital Employed (Times)	2.38	2.96	2.30	2.49	2.17

*Net Operating profit excludes exceptional item and tax impact on the same.

Source: ACC Ltd., Annual Report 2013, p. 18.

MARKET VALUE ADDED (MVA)

Concept

Market Value Added (MVA) is the difference between the current market value of a firm and the capital contributed by investors. If MVA is positive, the firm has added value. If it is negative the firm has destroyed value.

To find out whether management has created or destroyed value since its inception, the firm's MVA can be used:

$$\text{MVA} = \text{Market value of capital} - \text{capital employed}$$

This calculation shows the difference between the market value of a company and the capital contributed by investors (both bondholders and shareholders). In other words, it is the sum of all capital claims held against the company plus the market value of debt and equity.

The higher the MVA, the better. A high MVA indicates the company has created substantial wealth for the shareholders. A negative MVA means that the value of the actions and investments of management is less than the value of the capital contributed to the company by the capital markets, meaning wealth or value has been destroyed.

The aim of the company should be to maximize MVA. The aim should not be to maximize the value of the firm, since this can be easily accomplished by investing ever increasing amounts of capital.

EVA and Market Value Added

- (1) EVA and MVA may move in the same direction. However, MVA depends on stock prices/future expectations of investors.
- (2) EVA is used for managerial assessment more than MVA. EVA reflects performance over a year, while MVA reflects performance over the company's whole life. EVA can be applied to individual decisions or other units of a large company, while MVA must be applied to the whole company.
- (3) The relationship between EVA and Market Value Added is not clear than the relationship between EVA and Firm Value.
- (4) The market value of a firm reflects not only the expected EVA of current assets but also the expected EVA from future projects and assets.

Illustrative Problem 8

The capital structure of Johnson Ltd. whose shares are quoted on the NSE is as under:

Equity Shares of ₹ 100 each fully paid	₹ 505 lakhs
9% Convertible Pref. Shares of ₹ 10 each	₹ 150 lakhs
12% Secured Debentures of ₹ 10 each	₹ 5 lakhs
Reserves	₹ 101 lakhs
Statutory Fund	₹ 50,50,000

The Statutory Fund is compulsorily required to be invested in Government Securities. The ordinary shares are quoted at a premium of 500%; Preference Shares at ₹ 30 per share and debenture as per value.

You are required to ascertain the Market Value added of the company and also give your assessment on the market value added as calculated by you.

Solution

Market Value Added (MVA) is the difference between the current market value of a firm and the capital contributed by investors (both debenture holders and shareholders). In other words, it is the sum of all capital claims held against the company plus market value of debt and equity. If MVA is positive, firm has added value.

Market Value Added = Market value of firm less amount invested in the firm

		₹ in lakhs
Equity Share Capital (market value) (505 lakhs x 600%)		3030
Preference share capital (15,00,000 × 30)		450
Debentures		50
Current market value of firm		3,530
Less: Equity Share Capital	505	
Preference share capital	150	
Reserves	101	
Debentures	50	
Statutory Reserve	50.50	(856.50)
Market Value Added		2,673.50

The significant Market Value addition implies that the management of Johnson Ltd. has created wealth for its shareholders and that market investors are willing to pay a price greater than the historical net worth of the company.

Illustrative Problem 9

Vijay Ltd. furnishes the following information from which you are required to calculate the Economic Value Added (EVA) of the company and also explain the reason for the difference, if any, between the EVA as calculated by you and the MVA (Market Value Added) of Vijay Ltd. amounting to ₹ 7010 crores.

Common share of ₹ 10 face value	79,10,000 Shares
10%. Debentures of ₹ 100 face value	2,50, 000 Debentures
10% rate	30%
Financial Leverage	1.1 Times
Capital Reserves (₹ in lakhs)	54
Free Reserves (₹ in lakhs)	75
Securities Premium (₹ in lakhs)	80

It is common practice for companies in the industry to which Vijay Ltd. belongs to pay at least a dividend of 12% p.a. to its common shareholders.

(CA Final, Nov. 2015)

Solution

(a) Computation of Economic Value Added

	₹ in lakhs
NOPAT	192.50
Less: Cost of Capital	(137.50)
Economic Value Added	55.00

MVA of Vijay Ltd. is ₹ 7,010 crore.

The MVA of ₹ 7,010 crore is the difference between the current market value of Vijay Ltd. and the capital contributed by the fund providers. While EVA measures current earning efficiency of the company, MVA takes into consideration the EVA from not only the assets in place but also from the future projects/activities of the company. The difference between MVA over EVA thus represents the value attributed to the future potential of the company & may change from time to time based on market sentiments. In short, the MVA is the net present value of all future EVA's.

Working Notes:

1. Calculation of Net Profit before interest and tax

Interest on Debentures = 2,50,000 units × 100 × 10% = ₹ 25,00,000

Therefore, Financial Leverage

$$= \frac{\text{Profit before Interest \& Taxes (PBIT)}}{\text{PBIT less Interest}}$$

$$1.10 = \frac{\text{PBIT}}{\text{PBIT} - ₹ 25,00,000}$$

$$1.10 (\text{PBIT} - ₹ 25,00,000) = \text{PBIT}$$

$$1.10 \text{ PBIT} - ₹ 27,50,000 = \text{PBIT}$$

$$1.10 \text{ PBIT} - \text{PBIT} = ₹ 27,50,000$$

$$0.10 \text{ PBIT} = ₹ 27,50,000$$

$$\text{PBIT} = ₹ 2,75,00,000$$

2. Calculation of NOPAT

NOPAT = PBIT – Interest – Tax + Interest (net of tax)
or

NOPAT = PBIT – Tax

$$\text{NOPAT} = ₹ 2,75,00,000 \times (1 - 0.3) = ₹ 1,92,50,000.$$

3. Calculation of Weighted Average Cost of Capital (WACC)

	₹ in lakhs	₹ in lakhs (1)	Weight (2)	Cost % (3)	WACC % (4) = 2 × 3
Equity Shareholders' fund					
Common Shares	791				
Securities Premium	80				
Free Reserves	75				
Capital Reserves	54				
		1,000	0.80	12	9.6
Debenture holders' fund		250	0.20	7*	1.4
		1,250	1.00		11.00

Cost of Capital = Capital Employed × WACC%

$$= ₹ 1,250 \text{ lakhs} \times 11\%$$

$$= ₹ 137.50 \text{ lakhs}$$

*Rate of interest on debentures is taken net of tax of 30%.

REFERENCES

1. 'The Corporate Report', ASSC (London: 1975).
2. E.G. Wood, "Added Value: The Key to Prosperity", Business Books, 1978.
3. E.S. Hendriksen, *Accounting Theory*, Irwin, 1982, p. 165.
4. David Pendrill, 'Introducing, a Newcomer The Value Added Statement', *Accountancy*, December-1977, p. 92.
5. Keith Mitchell, "Know the Corporate Report", *Accountancy*, Dec., 1976, p. 102.
6. Stuart Burchall Colin Clubb and Anthony Hopwood, "A Message from Mars and other Reminiscences from the Past", *Accountancy*, October 198 1, p. 96.

7. R. Gray, D. Owen and K. Maunders, *Corporate Social Reporting, Accounting and Accountability*, Prentice Hall, 1987.
8. Ahindra Chakrabarti, "Economic Value Added (EVA) Performance Metric To Sustain Competitiveness", *Global Business Review*, 1:2, pp. 279 299.
4. What is economic value added?
5. Explain the computation of economic value added.
6. How is EVA superior to traditional performance measures?
7. Discuss the considerations to be kept in mind for implementing EVA.

QUESTIONS

1. Define value added reporting. How is value added report different from profit and loss account?
2. Discuss the relevance of value added reports for the investors and creditors.
3. In what way value added reports are beneficial to employees?
8. Discuss disclosure practices of Indian companies with regard to EVA.
9. Offer suggestions to improve EVA disclosures by Indian firms.
10. What is market value added? What is the relationship between EVA and MVA.



Environmental Accounting and Reporting

CONCEPT

The issue of environmental accounting and reporting is considered a subset of the wider concept of social reporting. While companies add value through their activities, they also extract value for which they do not pay. Their activities and operations give rise to external environmental impacts such as the contamination of ground water, traffic congestion, poor urban air quality, global climate change and so on. The costs of these external impacts are paid by the rest of society. Prices do not reflect costs and as such companies (and individuals) are not paying the full/true costs of their production and consumption decisions. Society's increasing awareness of environmental issues has encouraged companies to consider their interactions with the natural environment.

Emblemsvag and Bras¹ define environmental accounting as follows:

"Environmental accounting, also referred to as life cycle accounting, total cost accounting, green accounting and full cost accounting, serves primarily to support environmental initiatives and policies by including the costs and benefits that are derived from the effects of the environment on the general ledger. It is therefore essentially a financial reporting and analysis of environmental aspects as they are manifested on the general ledger".

Gray and Bebbington² includes the following in environmental accounting:

- Recognising and seeking to mitigate the negative environmental effects of conventional accounting practice.
- Separately identifying environmentally related costs and revenues within the conventional accounting systems.
- Taking active steps to set up initiatives in order to ameliorate existing environmental effects of conventional accounting practice.
- Devising new forms of financial and non-financial accounting systems, information systems and control systems to encourage more environmentally benign management decisions.
- Developing new forms of performance measurement, reporting and appraisal for both internal and external purposes.

- Identifying, examining and seeking to rectify areas in which conventional (financial) criteria and environment criteria are in conflict.
- Experimenting with ways in which sustainability may be assessed and incorporated into organisational orthodoxy.

NEED FOR ENVIRONMENTAL REPORTING

Corporate enterprises are facing the challenges to determine their true profits which are environmentally sustainable ones. For this companies need to account for the environment. They should take account of its most significant external environmental impacts and in effect, to determine what profit level would be left (if any) if they attempted to leave the planet in the same state at the end of the accounting period as it was in the beginning.

Rupert Howes³ observes:

"Why should companies be interested in doing this? Because their own sustainability and long term future are inextricably linked to their ability to reduce their environmental impacts and to continuously improve their overall environmental performance. Legislation is increasingly forcing companies to internalise some of their external costs. Consumer and local community expectations as to what constitutes good corporate environmental governance are increasing, and financial institutions are also starting to take an interest in corporate environmental performance. Without the right systems in place, companies will be unable to meet the future expectations of their customers, shareholders, regulators, as well as a more environmentally aware financial sector. 'First movers' will clearly have an advantage and this is a challenge..."

The problem, in part, stems from the failure of accounting systems—at the national level and at the corporate level—to account fully for 'natural' capital. While companies account for the depreciation of manufactured capital, to ensure that productive capacity and hence the ability to generate future returns and income is maintained, no account is made for the degradation of natural capital when calculating corporate profits. Natural capital can be thought of as the exploitable resources of the earth's ecosystem, its oceans, forests, mountains and plains, that provide the raw material inputs, resources and flows of energy into our production processes. It also consists of a range of 'ecosystem services'. These services include the provision of an atmosphere and a stable climate, a protective ozone layer, and the

absorptive capacities to disperse, neutralise and recycle the material outputs and pollution generated in ever increasing quantities from our global economic activities. While some account is taken of the depletion of resources, no account is taken of the degradation of what has been described as 'critical natural capital', the essential ecosystem services without which no life, let alone economic activity, would exist.⁴

Solomon and Solomon⁵ find the following incentives and disincentives for corporate environmental reporting.

Incentives

- to improve the company's corporate image;
- to market the company;
- to market company products;
- peer pressure from companies in the same industry;
- to comply with regulations;
- pressure from customers/consumers;
- to attract investment;
- as an acceptance of a change in society's ethics;
- to acknowledge social responsibility;
- as a result of company ethics;
- as a form of political lobbying;
- to meet the demand for environmental information.

Disincentives

- reluctance to report sensitive information;
- general lack of awareness of environmental issues;
- there is no legal obligation for companies to report environmentally;
- possible damage to companies' reputation;
- to avoid providing information to competitors;
- cost of disclosure;
- to avoid providing incriminating information to regulators;
- inability to gather the information;
- lack of awareness of competitive advantage;
- insufficient response feedback from stakeholders;

- companies generally believe they do not have an impact on the environment;
- users may not understand the information.

USERS OF CORPORATE ENVIRONMENTAL REPORTS

There is a need to identify users of corporate environmental reports. Many researchers and organisations have suggested different user groups which overlap to a greater or lesser extent or differ from those suggested by other organisations. User groups suggested in the literature are as follows:

- legislators and regulators;
- local communities;
- employees;
- shareholders;
- customers;
- insurance companies;
- ethical investors;
- environmental groups;
- quangos;
- local Government;
- potential investors;
- banks;
- media;
- suppliers;
- stock market;
- Central Government;
- industry associations.

COSTS AND BENEFITS OF ENVIRONMENTAL REPORTS

Gray and Bebbington⁶ have identified some costs and benefits related to environmental reporting as displayed in Fig. 22.1

	Potential costs	Potential benefits
To the company	● Design and format ● Printing and distribution ● Increased risks ● Distraction from real issues ● Increased enquiries ● Negative reactions to information ● Increased attention from pressure groups ● Not believed ● Decreased favour in financial community ● Licence to operate open to scrutiny	● Public relations ● Encourage transparency ● Employee morale ● Self-belief in culture ● Diversion from real issues ● Smokescreen ● Forestall legislation ● increased cooperation ● Better stakeholder relationships ● Educate public ● Educate investors ● Focus on information collection ● Experimentation ● Keeping oneself better informed
To society	● Higher prices ● Lower wages ● Lower dividends ● Constraint of business growth ● Diversion from real issues ● Smokescreen ● Forestall legislation ● Too much information	● Increased accountability transparency and democracy ● Better relationship with business ● Choice about conflicts ● Decisions about sustainability ● Value of experimentation ● Better informed ● 'Market' better informed

Figure 22.1 : Some costs and benefits associated with environmental reporting

Environmental Costs

Business firms need to manage and control both external environmental costs from their activities and internal environmental costs relating to waste management, energy consumption etc. Companies going for environmental accounting should identify internal environmental costs in the first instance.

These costs are:

- Costs of monitoring emissions.
- License, permits and authorisation costs.
- Special insurance fees to cover the use of hazardous chemicals.

- Payment of fines and charges.
- Costs of operating an environmental department.
- Capital spending with an environmental component.

Fig. 22.2 shows a number of costs and activities that may be relevant when implementing pollution prevention control and/or environmental accounting. In the 'Costs Traditionally Traced' column we find costs that are typically traced to specific processes. The 'Environmental Compliance Costs' column contain costs that occur as a direct result of environmental compliance efforts, while in 'Related Oversight Costs' column we find costs that arise as an indirect result of attempting to satisfy various compliance requirements.

Costs Traditionally Traced	Environmental Compliance Costs	Related Oversight Costs
<i>Depreciable Capital Costs</i> ● Engineering ● Procurement ● Equipment ● Materials ● Utility connections ● Site preparations ● Facilities ● Installations <i>Operating Expenses</i> ● Start-up ● Training ● Initial raw material ● Working capital ● Raw materials ● Supplies ● Direct labour ● Utilities ● Maintenance ● Salvage value	<i>Receiving Area</i> ● Spill response equipment ● Emergency response plan <i>Raw Material Storage</i> ● Storage facilities ● Secondary containment ● Right-to-know training ● Reporting and record keeping ● Safety training ● Safety equipment ● Container labels <i>Process Area</i> ● Safety equipment ● Right-to-know training ● Waste collection equipment ● Emission control equipment ● Sampling and testing ● Reporting and record-keeping <i>Solid and Hazardous Wastes</i> ● Sampling and testing ● Containers ● Labels and labelling ● Storage areas ● Transportation fees ● Disposal fees <i>Air and Water Emission Controls</i> ● Permit preparation ● Permit fees ● Capital costs ● Operating expenses ● Recovered materials ● Inspection and monitoring ● Record-keeping and reporting ● Sampling and testing ● Emergency planning ● Discharge fees	<i>Purchasing</i> ● Product/vendor research ● Regulatory impact analysis ● Inventory control <i>Engineering</i> ● Hazard analysis ● Sampling and testing <i>Production</i> ● Employee training ● Emergency planning ● Medical monitoring ● Rework ● Waste collection ● Disposal management ● Inspections and audits <i>Marketing</i> ● Public relations <i>Management</i> ● Regulatory research ● Legal fees ● Information systems ● Penalties and fines ● Insurance <i>Finance</i> ● Credit costs ● Tied-up capital <i>Accounting</i> ● Accounting system development ● Accounting system maintenance

Figure 22.2 : Business Activities Creating Environmental Compliance Costs, Compliance Oversight Costs and Non-environmental Costs (Hamner and Stinson 1995)

Source: B. Hamner and C.H. Stinson, "Managerial Accounting and Environmental Compliance Costs", *Journal of Cost Management for the Manufacturing Industry* (Summer, 1995), pp. 4-10.

GUIDELINES FOR ENVIRONMENTAL REPORTING

There are two forms of environmental reporting which are being debated

1. Reporting within the company annual report.
2. Reporting through separate environmental report.

It has been argued that discussion of environmental issues within the annual report are somewhat superficial. This does not enable business firms to report extensively on environmental performance but to give only partial reviews of environmental policy. The disclosure of some aspects of environment such as energy costs, waste disposal costs, legal compliance costs, costs of packaging, fines for breaking consents, etc., represents a simple and cheap way of reflecting some environmental aspects within the financial statements. Any attempt to use financial statements for environmental disclosures will require adjusting existing GAAP to reconcile the conflict between financial accounting and environmental issues. Gray and Bebbington⁷ comment:

“Ultimately, however, reporting and accounting for the environment cannot be entirely satisfactory within a conventional financial accounting framework. Not only will financial statements – for the foreseeable future at least — remain primarily an economic construct within which environmental (and social) issues will always be subservient, but environmental issues are very much bigger and very much more important than any GAAP-type framework can recognize – let alone cope with. In order to fully recognize environmental issues in organizations and perhaps even to develop some real environmental accountability, other forms of environmental (and social) accounting and reporting (both financial and non-financial become necessary.”

Environmental reporting can be done through separate stand-alone environmental reports.

There is no consensus yet about the best place for the environmental reporting. It is apt to comment that business enterprises should pay adequate attention to environmental issues in the published annual report. Organizations are not only economic entities — they are social and environmental as well, and certainly have significant social and environmental impacts — or ‘externalities’. One can argue that the externalities are part of the price by which the economic gains have been won and should, therefore, be shown alongside the financial statements. An organisation has a social and environmental as well as economic dimension to performance. A successful company should be evaluated across the spectrum of its activities. Those companies who are having all-round performance would be rewarded by the society. However, if the companies are having financial success at the expense of society and environment, society and public will react accordingly.

Many studies and Committees have suggested a number of guidelines for environmental reporting. Some such studies,⁸ are Public Environmental Reporting Initiative (PERI) Guidelines (1994), The Global Reporting Initiative, CICA (1994), GEMI (1997), KPMG (1997), Deegan and Newson (1997) etc. Fig. 22.3 contains

many guidelines taken from various studies and researches for preparing environmental reporting.

Policy

- (1) Statement of environmental policy.
- (2) Key environmental impacts.
- (3) Steps taken to monitor compliance with policy statement.
- (4) Statement of compliance with policy statement.

Plans and Structure

- (1) Structural and responsibility changes undertaken in the organization to develop environmental sensitivity (e.g., VP of environment, committees, performance appraisal of line managers).
- (2) Status of EMS and levels of accreditation.
- (3) Plans for EMS activities introduction of EIA, environmental audit, projects, investment appraisal criteria, etc.
- (4) Stakeholder consultations and responses thereto.

Financial

- (1) Spend on environmental protection — capital revenue, reaction to/anticipation of legislation, voluntary/mandated, damage limitation /proactive (enhancement) initiatives.
- (2) Pattern of future environmental spend — both to meet legislation and that, which is voluntary, capital/revenue split.
- (3) Actual and contingent liabilities and provisions, (e.g., ‘Super fund’ type problems), impact on financial audit, impact on financial results.
- (4) Details of environmental fines.

Activity

- (1) Overview of resource use, emissions and wastes in, for example, a simplified mass balance.
- (2) Procedures for, results of and issue of compliance with standards report.
- (3) Environmental audits and issue of summary/results.
- (4) Environmental performance indicators and trends therein.
- (5) Targets and progress towards them.
- (6) Analysis of dealings with regulatory bodies/ fines /complaints.
- (7) Awards/commendations received
- (8) Analysis of investment/operating activity influenced by environment considerations.
- (9) Analysis of voluntary (e.g., community) projects undertaken.

Sustainable Management

- (1) Identification of critical, natural sustainable/substitutable and man-made capital under the influence of the organization. Transfers between categories.
- (2) Examination of social justice issues and social account.
- (3) Examination of all unsustainable activities.
- (4) Estimates of ‘sustainable costs’ (i.e., which would have to be incurred to return the organization to same position it was in before the activity)
- (5) Assessment and statement of input/output resource-flows and changes therein,

Attestation and Audit

- (1) Attestation of the environmental report and criteria used.
- (2) Statements made under EMAS and recognition of context and limitation.

Figure 22.3 : Guidelines for Environmental Reporting

Probably the most significant aspect in the development of environmental reporting within a conventional financial accounting framework has come from the United Nations Centre for Transnational Corporations Inter-governmental Working Group of Experts on International Standards of Accounting and Reporting (UNCTCISAR). The Ninth Session of UNCTCISAR [1991] made detailed recommendations as to the types of environmental disclosure that corporations should undertake. The intention of the UNCTCISAR was that these recommendations should be adopted by sovereign governments. The recommendations from the Ninth Session are summarized in Fig. 22.4.

In the directors report:

- Environmental issues pertinent to the company and industry.
- Environmental policy adopted.
- Improvements made since adopting the policy.
- Enterprise's environmental emission targets and performance against these.
- Response to government legislation.
- Material environmental legal issues in which the enterprise is involved.
- Effect of environmental protection measures on capital investment and earnings.
- Material costs charged to current operations.
- Material amounts capitalized in the period.

In the notes to the financial statements:

- The accounting policies for recording liabilities and provisions, for setting up catastrophe reserves and for disclosing contingent liabilities.
- \$/£ amount of liabilities, provisions and reserves established in the period.
- \$/£ amount of contingent liabilities.
- Tax effects.
- Government grants received in the period.

Figure 22.4 : Recommendations for environmental financial reporting from the UNCTCISAR's 9th session

Gray⁹ in his study has suggested a number of reports to be prepared within environmental accounting: a compliance report or audit; an ethical audit; a waste audit; an energy audit; an emerging issues audit; environmental impact assessment appraisal/ analysis; a general environmental audit; and a financial environmental audit. The purposes of each are evident from the titles. The compliance report or audit would make sure that the organisation complies with legal requirements in relation to the environment. The ethical audit refers to above-the-law requirements which management may require. Setting such requirements would necessitate an open discussion about a large range of issues within the organization. The waste audit should identify waste, the costs associated with the treatment and disposal of waste, and that which may be recycled. A similar modification to the accounting and management information system would allow energy flows to be audited. The emerging issues audit would act as a reminder that the problems of the environment are ongoing, and that initiatives must be maintained.

In another study, Gray¹⁰ provides suggestions for additional disclosures. The first group (of additional disclosures) is taken from a United Nations initiative:

Financial information:

- disclosure of amount spent on environmental matters (possibly enabling capitalisation due to spend impact on EPS), will possibly be split between regulated and voluntary costs;
- disclosure of environmental contingent liabilities – most especially those arising from remediation costs under 'Super fund' type legislation;
- disclosure of anticipated pattern of future environmental expenditure (possibly split between regulated and voluntary costs).

Non financial information:

- disclosure of environmental policy for the organisation;
- disclosure of organisational activity in the environmental field, including such matters as emissions statements.

The second group is much more detailed and is adapted from Gray's own study:

1. Compliance and ethical audits (meeting legal requirements and the organisation's code of conduct).
2. Waste and energy audits (efficient use of inputs),
3. Environmental budget. (financial and non financial targets and performance appraisal).
4. Environmental impact assessment, environmental hurdle rates, BPEO – Best Practicable Environment Option, BATNEEC – Best Available Technology Not Entailing Excessive Costs, environmental risk assessment (reappraisal of the environmental sensitivity of the organisation's investment policy).
5. Environmental asset accounting and maintenance (accounting for natural assets, accounting for sustainability – the cost in terms of natural resources of the increases in man-made capital).
6. Environmental and social reporting including environmental policy, environmental contingencies, environmental spend, emission statement, compliance-with-standard report. Disclosure of natural and man-made assets *plus* transfers between the categories.

ENVIRONMENTAL DISCLOSURE IN INDIA

Most Indian firms tend to provide environmental disclosures in social responsibility reports (SRR) prepared by them. If they are not preparing SRRs, environmental disclosures are found in the Directors' Report/ Chairman's statement /human resource statement, etc.

Figures 22.5 and 22.6 give an example of environmental reporting practices followed by two large-sized Indian Company (Infosys Ltd. and I.T.C. Ltd.)

ENVIRONMENT

It is our endeavor not only to deliver best-in-class sustainable business practices, but to also set benchmarks for other organizations and the society to follow. We have identified climate change as a key operational risk. We have taken up specific goals for carbon neutrality, water conservation, waste management and biodiversity. A dedicated Green Initiatives team along with the Facilities team have steadily worked to achieve the stated goals.

Health, safety and environment policy, and certifications

Our Health, Safety and Environment (HSE) policy is a declaration of our commitment to protecting the environment, sharing best practices and providing a safe and healthy workplace for our employees. The policy is accessible to all our employees worldwide on Sparsh (our intranet), and is displayed at strategic locations on our campuses.

All our campuses in India are certified to ISO 14001-2004. Documented objectives and targets are established at the corporate and development center levels. Operational controls are implemented for our impact management, based on severity. Our goals and their progress are monitored at regular intervals.

Energy efficiency strategies

Our energy consumption is mainly through the use of electricity and high speed diesel used for generators and boilers. Conservation of electricity has been one of our focus areas and we have reduced our per capita electricity consumption through some of our key strategies, mentioned below. These measures also help reduce the stress on the regional grids for power availability to our local communities.

Central command center

We have set up a central command center to monitor, manage and optimize our electricity consumption, remotely. We now have building efficiency expert manage operations, provide remote technical expertise for all locations, and analyze data to identify optimization opportunities. This centralized monitoring has helped us make diagnostics smarter, and thus enhance operational effectiveness.

Green buildings

In fiscal year 2014, we were awarded the Leadership in Energy and Environment Design (LEED) Platinum rating for five of our buildings in Mysore, Mangalore, Pune and Hyderabad. We now have 10 LEED Platinum-rated buildings and two buildings with GRIHA 5-star rating, making a total of about 3.4 million sq. ft. with green certification — the highest in India for office buildings.

Retrofits

Our innovative approach to redesign and retrofit our air conditioning systems has helped us achieve 10.1 MW reduction in connected load in the last three years. This has resulted in savings of nearly 174 million units of electricity. Most retrofits have a short payback time of about three years and can be replicated easily in other commercial buildings. For fiscal year 2014 alone, 2.9 MW connected load was reduced.

Adoption of renewable energy

Our goal is to source 100% electricity from renewable sources by fiscal year 2018. We used 75.6 million units of electricity in fiscal year 2014. We installed rooftop solar plants of 392 kW at our Hyderabad campus and over 1,000 kW capacity in our Chennai campuses – 306 kW at Sholinganallur and 765 kW at Mahindra City.

Energy-efficient IT infrastructure

We have implemented significant measures to make our IT infrastructure more energy efficient by adopting a multi-pronged strategy as elaborated below:

Virtualization and consolidation

Continuing the adoption of the latest technology concepts such as virtualization, consolidation, and cloud in order to reduce the physical footprint of our servers, we have further expanded our internal private cloud capacity, with MyCloud. Used for software development and testing purposes, MyCloud now has a capacity of around 8,500 virtual machines. Around 30% of instances provisioned on Mycloud this year were addressed through virtual machines that were released, thus facilitating better reuse.

We have continued to expand our Network-Attached Storage (NAS)-based virtualization, this year. We have virtualized 39% of NAS files, resulting in a reduction of 29% in the power demand of NAS boxes. In addition, we have deployed tools, which automatically check and shutdown idle project-specific servers yielding, higher power savings.

Data centers and server rooms

We have standardized and incorporated eco-friendly designs for data center and server rooms to ensure a reduction in power consumption. We have revamped and released around 800 sq. ft of server room or laboratory space this year. Also, using hot-cold aisle separation and custom-made cages for the consolidation of racks, we have optimized our air conditioning usage. Recently, a Tier-3 datacenter has been commissioned at our Australia campus, this data center has attained a high standard of Power Usage Effectiveness (PUE) of 1.4 and can be partially powered by solar energy. Rainwater can be used in cooling towers, which has resulted in reducing in up to 25% of power consumption.

Video/Audio conferencing

Our video and audio conferencing (VC and AC) usage has increased steadily this year too, indirectly cutting down the travel requirements of our employees. We have doubled our VC capacity and have rolled out a new plug-in for self-booking. This has resulted in a sizable increase in our VC usage by more than 100% compared to last year. Our audio conference usage has increased by over 13% since last year.

Building strategic partnerships

We continue to work with some of the most renowned research institutes and adopt many global best practices to implement the latest sustainable technologies at our new and existing buildings. We have strategic partnerships with the following organizations as on fiscal year 2014.

- Lawrence Berkeley National Laboratory (LBNL) for PACE-R, a proposal for India-US joint clean energy R&D
- Saint Gobain for research on building energy efficiency in hot and humid climates
- United Technologies Research Group to develop solutions on fault diagnostics and operational efficiency improvements in buildings
- Collaboration with World Business Council for Sustainable Development (WBCSD) on energy efficiency in building.

Emissions

Our emissions include greenhouse gases (GHG). Sox NOx and Ozone Depleting Substances. Other emissions from the stacks connected to generators, boilers and diesel operated fire hydrant pumps are also monitored on a monthly basis. There have been to deviations from the specified limits.

Our operations warrant the use of refrigerants in our Heating Ventilation and Air conditioning (HVAC) systems, which have varied Ozone Depleting Potential (ODP). We have made a conscious effort to switch over to refrigerants with a zero ODP.

Water efficiency

As a responsible organization, we are committed to conserve water. Water has become a scarce resource in our country. We have taken voluntary annual goals to reduce our fresh water consumption and to harvest rainwater. Rain water harvesting has helped replenish the ground water tables in and around our campuses.

Waste management

We have a focused approach towards waste management and establish strategic annual targets to ensure environment friendly disposal of waste in adherence to legislations, as applicable. Our initiatives are spread across three dimensions — influencing social behavior, process optimization, and the implementation of technology. We have set up bio-gas and organic water composting plants in some of our campuses and are in the process of setting up similar plants at all our India locations.

Biodiversity

Our biodiversity policy is our commitment to conserve and promote biodiversity across all our campuses. We continue to organize tree plantation drives with an emphasis on native and endangered species on our campuses.

All our campuses in India are located on government-approved land (industrial zones) and comply with the guidelines issued by the Ministry of Environment and Forests. Government of India, and do not encroach on any protected or high-biodiversity regions.

Eco advocacy and eco group activities

We advocate positive sustainability actions among our employees to encourage good citizenship behavior. We sponsor and support employee-run volunteer eco groups, which take up projects that address sustainable living, conservation of electricity and water, recycling of waste, reducing carbon emissions, and afforestation. These groups also partner with local communities around our campuses to work on various sustainability-related initiatives.

Compliance

We did not have any monetary or non-monetary sanctions imposed on us for non-compliance with environmental laws and regulations during fiscal year 2014.

Figure 22.5: Infosys Ltd's Environmental Reporting

Source: Infosys Ltd.' Annual Report 2013-14, pp. 118-119.

Protection and restoration of the environment

ITC is a global exemplar in environmental sustainability and takes pride in being carbon positive, water positive and solid waste recycling positive for many years. The Company has contributed to building environmental security by not only ensuring efficient use of resources but also by augmenting precious natural resources. Board approved policies on life cycle assessment of products and services, Environment, Health and Safety and Responsible Sourcing provide the necessary direction towards climate change mitigation and adaptation efforts as well as natural resource replenishment initiatives. Such efforts include implementation of a low carbon growth strategy across its businesses, integrated soil and water conservation programmes and the creation of large-scale sustainable livelihoods amongst the marginalised sections of society.

The Company has sought to align with the NAPCC (National Action Plan on Climate Change) of the Government of India to respond to the challenges emerging from the threat of climate change. Some of the measures implemented include continual improvement in specific energy consumption (energy consumed per unit of production), enhanced use of renewable energy and expansion of forestry projects to improve ITC's positive carbon footprint.

The Company has computed its Green House Gas inventory in line with the ISO 14064 standard, which has been assured at the highest "Reasonable Level" by a third-party assurance provider.

Resource conservation, waste segregation and recycling

The Company has spearheaded measures across business units to ensure waste minimisation, segregation at source and solid waste recycling. During the year 2013 14, such focussed efforts resulted in over 99% of the solid waste generated within the Company's business units being diverted from landfills and recycled. The Company has collaborated with local municipal agencies to work on community waste management in several areas through its Wealth Out of Waste (WOW) initiative, which is a part of ITC's CSR programmes.

Water management stewardship

The Company has undertaken several water conservation and harvesting initiatives to enhance its positive water footprint. These include adoption of benchmarked practices to achieve zero effluent discharge in the Company's operating units and the establishment of rainwater harvesting structures both within the company's premises and in the catchment areas of its operations. These initiatives not only lower fresh water intake but also maximise groundwater recharge, reduce run off and provide precious water to farmers. Most of ITC's units have achieved reduction in their specific water intake (water withdrawn per unit of production) and many units have recycled their treated effluents in house and achieved a zero effluent discharge status. ITC has initiated pilot studies to work towards water security for all stakeholders within the local watershed context of its business units.

Cleaner production methods, use of energy efficient and environment-friendly technologies

The Company is a pioneer in the green buildings movement, which commenced with the establishment of the ITC Green Centre at Gurgaon in 2004, the then largest LEED® Platinum rated building in the world. The latest achievement in this category is the LEED® Platinum certification for ITC Grand Chola, the 600-key super-premium luxury hotel complex in Chennai, which is the world's largest LEED® Platinum certified green hotel. ITC Grand Chola has also secured a 5 Star GRIHA rating, the highest national rating for green buildings in India. The Company incorporates validated green attributes while setting up new infrastructure. Efforts are underway to have existing building and factories meet these validated green norms. The recently commissioned ITC Green Centre at Manesar has been certified as a LEED® Platinum rated building (for commercial interiors). In addition, it has also been awarded the BEE 5 Star rating by the Bureau of Energy Efficiency, Government of India.

The Company has also pioneered Elemental Chlorine Free (ECF) pulp & paper/paperboards in India and taken further steps towards cleaner production by introducing 'Ozone bleaching' technology, another first in the country. ITC continues to invest in reducing air emission levels through adoption of cleaner technologies/fuels, monitoring of combustion efficiencies and investments in state-of-the-art pollution control equipment, such as plasma filters and electrostatic precipitators etc. Its units monitor significant air emission parameters, such as Particulate Matter (PM), Nitrogen Oxides (NOX) and Sulphur Dioxide (SO₂) to ensure compliance with internal norms that are more stringent than regulatory requirements.

Implementation of environment, health & safety management systems

In pursuit of its EHS Policy commitments, the Company has established Environment, Health and Safety Management systems, certified by accredited agencies in line with International Standards like ISO 14001 and OHSAS 18001. Within the purview of certified management systems, contingency plans are developed and implemented to prevent, mitigate and control environmental disasters.

An integrated database management system has been implemented across the Company to monitor and review sustainability performance through defined key performance indicators. Standard Operating Procedures have been prepared to define, collate and support audits of data for ensuring accuracy and verifiability.

Figure 22.6: ITC Ltd.'s Environmental Reporting

Source: ITC Ltd., Report and Accounts, 2014, Business Responsibility Report, pp. xi-xiii.

SUSTAINABILITY REPORTING

Enterprises are under increasing pressure to report on the impact they have on society and on how they manage this impact. Their coverage is much wider than just employment issues. Such reports carry a variety of labels, but they are most often called sustainability reports. A sustainability report is more comprehensive than an environmental and/or a social report, first because it includes the economic impact of the organizations, and second because not only does it assess the enterprise's impact on society and compare its performance over the years, but also it assesses the sustainability of the enterprise's operations and products in relation to the development of society.

Savitz¹¹ observes:

"As the Corporate Social Responsibility movement continues to gain momentum worldwide, corporations need standards and measures to define responsible business practices. One such standard — sustainability — has emerged as the international benchmark for corporate citizenship. Sustainability is defined as the "triple bottom line" — the measure of an organization's economic, environmental and social performance."

World Business Council for Sustainable Development (2002) defined Corporate Sustainability as "the commitment of business to contribute to sustainable economic development, and to work with employees, their families, the local community and society at large to improve their quality of life."

Sustainability Reporting is sometimes also called as — Corporate Responsibility Reporting (CRR) or Triple Bottom Line (TBL) Reporting. 'Sustainability' is an attempt to provide the best outcomes for the human and natural environment both at present and in future. Sustainability is meeting the needs of the present generation without compromising the ability of future generations to meet their own needs.

Elkington¹² developed the term "triple bottom line" to support the case for reporting environmental and social performance together with economic performance, and to systematically disclose the impact of companies on economic prosperity, environmental quality and social justice. Sustainability reports 'triple bottom line reports' emphasise on the three aspects: profits (economic), people (social), and planet (environmental).

In India, The Securities and Exchange Board of India (SEBI) issued a Circular on Business Responsibility Reports, dated August 13, 2012, recognizing the broader public pursuit in corporate disclosures and reports. The provisions of circular are compulsory for top 100 listed entities based on market capitalization at BSE and NSE as on March 31, 2012, and are applicable with effect from financial year ending on or after December 31, 2012 (SEBI, 2012). The Circular by SEBI (2012) requires listed companies to practice the national voluntary guidelines on social, environmental and economic responsibility issued by the Ministry of Corporate Affairs (MCA). Moreover, it has made it mandatory for listed companies to uniformly disclose their responsibility efforts and drives in the Business Responsibility Reports (BRRs) as part of the Annual Reports.

GLOBAL REPORTING INITIATIVE (GRI)

The Global Reporting Initiative (GRI) has made an attempt, at the international level, to encourage reporting on economic, environmental and social impacts of organizational activities. The GRI committee delivered the first set of sustainability reporting guidelines in June 2000. The GRI aims to develop a voluntary reporting framework that will elevate sustainability reporting practices to a level equivalent to that of financial reporting in rigor, comparability, verifiability and general acceptance.

Preface to G4 of the GRI Sustainability Reporting Guidelines (2016) states:

"An ever increasing number of companies and other organizations want to make their operations Sustainable. Moreover, expectations that long-term profitability should go hand-in-hand with social justice and protecting the environment are gaining ground. These expectations are only set to increase and intensify as the need to move to a truly sustainable economy is understood by companies' and organizations' financiers, customers and other stakeholders.

Sustainability reporting helps organizations to set goals, measure performance, and manage change in order to make their operations more sustainable. A sustainability report conveys disclosures on an organization's impacts — be they positive or negative — on the environment, society and the economy. In doing so, sustainability reporting makes abstract issues tangible and concrete, thereby assisting in understanding and managing the effects of sustainability developments on the organization's activities and strategy.

Internationally agreed disclosures and metrics enable information contained within sustainability reports to be made accessible and comparable, providing stakeholders with enhanced information to inform their decisions."

G4's Sustainability Reporting Guidelines (2016)

The GRI Sustainability Reporting Guidelines (the Guidelines) offer Reporting Principles, Standard Disclosures and an Implementation Manual for the preparation of sustainability reports by organizations, regardless of their size, sector or location. The Guidelines also offer an international reference for all those interested in the disclosure of governance approach and of the environmental, social and economic performance and impacts of organizations. The Guidelines are useful in the preparation of any type of document which requires such disclosure.

The Guidelines are developed through a global multi-stakeholder process involving representatives from business, labor, civil society, and financial markets, as well as auditors and experts in various fields, and in close dialogue with regulators and governmental agencies in several countries. The Guidelines are developed in alignment with internationally recognized reporting related documents, which are referenced throughout the Guidelines.

The GRI Sustainability Reporting Guidelines are periodically reviewed to provide the best and most up to date guidance for

effective sustainability reporting. The aim of G4, the fourth such update, is simple: to help reporters prepare sustainability reports that matter, contain valuable information about the organization's most critical sustainability-related issues, and make such sustainability reporting standard practice.

It is crucial for society and markets that sustainability reporting evolves in terms of content, and from an exceptional activity undertaken by a minority of leading companies to a standard practice.

Together with being more user-friendly than previous versions of the Guidelines, G4 has an increased emphasis on the need for organizations to focus the reporting process and final report on those topics that are material to their business and their key stakeholders. This 'materiality' focus will make reports more relevant, more credible and more user-friendly. This will, in turn, enable organizations to better inform markets and society on sustainability matters.

While organizations may monitor and manage a far wider array of sustainability related topics due to their everyday management activities, this new focus on materiality means that sustainability reports will be centered on matters that are really critical in order to achieve the organization's goals and manage its impact on society.

The Guidelines have been developed through an extensive process involving hundreds of reporters, report users and professional intermediaries from around the world. G4 therefore offers a globally, relevant framework to support a standardized approach to reporting, encouraging the degree of transparency and consistency that is required to make information useful and credible to markets and society.

G4 is designed to be universally applicable to all organizations, large and small across the world. The features of G4 to make the Guidelines easier to use, both for experienced reporters and for those new to sustainability reporting from any sector – are supported by other GRI materials and services.

As with all GRI Guidelines, G4 includes references to widely accepted and used issue-specific reporting documents, and is designed as a consolidated framework for reporting performance against different codes and norms for sustainability.

G4 also provides guidance on how to present sustainability disclosures in different report formats: be they be a stand-alone sustainability reports, integrated reports, annual reports, reports that address particular international norms, or online reporting.

The emerging idea of integrating strategic sustainability-related information with other material financial information is a significant and positive development. Sustainability is, and will increasingly be central to the change that companies, markets and society will be navigating. Sustainability information that is relevant or material to a company's value prospects should therefore be at the core of integrated reports.

G4 (GRI) — Main Features

The GRI Sustainability Reporting Guidelines (2016)¹³ discusses Reporting Principles and Sustainability Reporting Guidelines (Standard Disclosures) for preparing sustainability reports by the organizations.

I — Reporting Principles

The Reporting Principles are fundamental to achieving transparency in sustainability reporting and therefore should be applied by all organizations when preparing a sustainability report. *The Implementation Manual* outlines the required process to be followed by an organization in making decisions consistent with the Reporting Principles.

The Principles are divided into two groups: Principles for Defining Report Content and Principles for Defining Report Quality.

The Principles for Defining Report Content describe the process to be applied to identify what content the report should cover by considering the organization's activities, impacts, and the substantive expectations and interests of its stakeholders.

The Principles for Defining Report Quality guide choices on ensuring the quality of information in the sustainability report, including its proper presentation. The quality of the information is important to enable stakeholders to make sound and reasonable assessments of performance, and take appropriate actions.

1. PRINCIPLES FOR DEFINING REPORT CONTENT

These Principles are designed to be used in combination to define the report content. The implementation of all these Principles together is described under the Guidance of G4-18 on pp. 31-40 of the *Implementation Manual*.

Stakeholder Inclusiveness

Principle: The organization should identify its stakeholders, and explain how it has responded to their reasonable expectations and interests.

Stakeholders can include those who are invested in the organization as well as those who have other relationships to the organization. The reasonable expectations and interests of stakeholders are a key reference point for many decisions in the preparation of the report.

Sustainability Context

Principle: The report should present the organization's Performance in the wider context of sustainability.

Information on performance should be placed in context. The underlying question of sustainability reporting is how an organization contributes, or aims to contribute in the future, to the improvement or deterioration of economic, environmental and social conditions, developments, and trends at the local, regional or global level. Reporting only on trends in individual performance (or the efficiency of the organization) fails to respond to this underlying question. Reports should therefore seek to present performance in relation to broader concepts of sustainability. This

involves discussing the performance of the organization in the context of the limits and demands placed on environmental or social resources at the sector, local, regional, or global level.

Materiality

Principle: The report should cover Aspects that:

- Reflect the organization's significant economic, environmental and social impacts; or
- Substantively influence the assessments and decisions of stakeholders

Organizations are faced with a wide range of topics on which they could report. Relevant topics are those that may reasonably be considered important for reflecting the organizations economic, environmental and social impacts, or influencing the decisions of stakeholders, and, therefore, potentially merit inclusion in the report. Materiality is the threshold at which Aspects become sufficiently important that they should be reported.

Completeness

Principle: The report should include coverage of material Aspects and their Boundaries, sufficient to reflect significant economic, environmental and social impacts and to enable stakeholders to assess the organization's performance in the reporting period.

Completeness primarily encompasses the dimensions of scope, boundary, and time. The concept of completeness may also be used to refer to practices in information collection and whether the presentation of information is reasonable and appropriate,

2. PRINCIPLES FOR DEFINING REPORT QUALITY

This group of Principles guides choices on ensuring the quality of information in the sustainability report, including its proper presentation. Decisions related to the process of preparing information in a report should be consistent with these Principles. All of these Principles are fundamental to achieving transparency. The quality of the information is important to enable stakeholders to make sound and reasonable assessments of performance, and take appropriate actions.

Balance

Principle: The report should reflect positive and negative aspects of the organization's performance to enable a reasoned assessment of overall performance.

The overall presentation of the report's content should provide an unbiased picture of the organization's performance. The report should avoid selections, omissions, or presentation formats that are reasonably likely to unduly or inappropriately influence a decision or judgement by the report reader.

Comparability

Principle: The organization should select, compile and report information consistently. The reported information should be presented in a manner that enables stakeholders to analyze changes in the organization's performance over time, and that could support analysis relative to other organizations,

Comparability is necessary for evaluating performance. Stakeholders using the report should be able to compare information reported on economic, environmental and social performance against the organization's past performance, its objectives, and to the degree possible, against the performance of other organizations.

Accuracy

Principle: The reported information should be sufficiently accurate and detailed for stakeholders to assess the organization's performance.

Responses to economic, environmental and social DMA and indicators can be expressed in many different ways, ranging from qualitative responses to detailed quantitative measurements. The characteristics that determine accuracy vary according to the nature of the information and the user of the information.

Timeliness

Principle: The organization should report on a regular schedule so that information is available in time for stakeholders to make informed decisions.

The usefulness of information is closely tied to whether the timing of its disclosure to stakeholders enables them to effectively integrate it into their decision making. The timing of release refers both to the regularity of reporting as well as its proximity to the actual events described in the report.

Clarity

Principle: The organization should make information available in a manner that is understandable and accessible to stakeholders using the report.

Information should be presented in a manner that is comprehensible to stakeholders who have a reasonable understanding of the organization and its activities.

Reliability

Principle: The organization should gather, record, compile, analyze and disclose information and processes used in the preparation of a report in a way that they can be subject to examination and that establishes the quality and materiality of the information.

Stakeholders should have confidence that a report can be checked to establish the veracity of its contents and the extent to which it has appropriately applied Reporting Principles.

II – Sustainability Reporting Guidelines (Standard Disclosures)

There are two different types of Standard Disclosure: General Standard Disclosures and Specific Standard Disclosures.

1. GENERAL STANDARD DISCLOSURES

- Strategy and Analysis
- Organizational Profile
- Identified Material Aspects and Boundaries

- Stakeholder Engagement
- Report Profile
- Governance
- Ethics and Integrity

2. SPECIFIC STANDARD DISCLOSURES

- Disclosures on Management Approach
- Indicators

The Standard Disclosures are presented in more detail in the following sections.

1. GENERAL STANDARD DISCLOSURES

The General Standard Disclosures are applicable to all organizations preparing sustainability reports. Depending on the organization's choice of 'in accordance' option the organization has to identify the required General Standard Disclosures to be reported.

The General Standard Disclosures are divided into seven parts: Strategy and Analysis, Organizational Profile, Identified Material Aspects and Boundaries, Stakeholder Engagement, Report Profile, Governance, and Ethics and Integrity.

Strategy and Analysis

These Standard Disclosures provide a general strategic view of the organization's sustainability, in order to provide context for subsequent, more detailed reporting against other sections of the Guidelines. The Strategy and Analysis may draw on information provided in other parts of the report, but is intended to give insight on strategic topics rather than simply summarize the contents of the report.

(1) Provide a statement from the most senior decision maker of the organization (such as CEO, chair, or equivalent senior position) about the relevance of sustainability to the organization and the organization's strategy for addressing sustainability

The statement should present the overall vision and strategy for the short-term, medium-term, and long-term, particularly with regard to managing the significant economic, environmental and social impacts that the organization causes and contributes to, or the impacts that can be linked to its activities as a result of relationships with others (such as suppliers, people or organizations in local communities). The statement should include:

- Strategic priorities and key topics for the short and medium term with regard to sustainability, including respect for internationally recognized standards and how such standards relate to long term organizational strategy and success.
- Broader trends (such as macroeconomic or political) affecting the organization and influencing sustainability priorities.
- Key events, achievements, and failures during the reporting period.
- Views on performance with respect to targets.

- Outlook on the organization's main challenges and targets for the next year and goals for the coming 3-5 years.
- Other items pertaining to the organization's strategic approach.

(2) Provide a description of key impacts, risks, and opportunities.

The organization should provide two concise narrative sections on key impacts, risks, and opportunities.

Section one should focus on the organization's key impacts on sustainability and effects on stakeholders, including rights as defined by national laws and relevant internationally recognized standards. This should take into account the range of reasonable expectations and interests of the organization's stakeholders. This section should include:

- A description of the significant economic, environmental and social impacts of the organization, and associated challenges and opportunities. This includes the effect on stakeholders' rights as defined by national laws and the expectations in internationally recognized standards and norms.
- An explanation of the approach to prioritizing these challenges and opportunities
- Key conclusions about progress in addressing these topics and related performance in the reporting period. This includes an assessment of reasons for underperformance or overperformance.
- A description of the main processes in place to address performance and relevant changes.

Section Two should focus on the impact of sustainability trends, risks, and opportunities on the long-term prospects and financial performance of the organization. This should concentrate specifically on information relevant to financial stakeholders or that could become so in the future. Section Two should include the following:

- A description of the most important risks and opportunities for the organization arising from sustainability trends.
- Prioritization of key sustainability topics as risks and opportunities according to their relevance for long-term organizational strategy, competitive position, qualitative, and (if possible) quantitative financial value drivers.
- Table(s) summarizing:
 - Targets, performance against targets, and lessons learned for the current reporting period
 - Targets for the next reporting period and medium-term objectives and goals (that is, 3-5 years) related to key risks and opportunities.
- Concise description of governance mechanisms in place specifically to manage these risks and opportunities, and identification of other related risks and opportunities

Organizational Profile

These Standard Disclosures provide an overview of organizational characteristics, in order to provide context for subsequent more detailed reporting against other sections of the Guidelines.

- (1) Report the name of the organization.
- (2) Report the primary brands, products, and services.
- (3) Report the location of the organization's headquarters.
- (4) Report the number of countries where the organization operates, and names of countries where either the organization has significant operations or that are specifically relevant to the sustainability topics covered in the report.
- (5) Report the nature of ownership and legal form.
- (6) Report the markets served (including geographic breakdown, sectors served, and types of customers and beneficiaries).
- (7) Report the scale of the organization, including:
 - Total number of employees
 - Total number of operations
 - Net sales (for private sector organizations) or net revenues (for public sector organizations)
 - Total capitalization broken down in terms of debt and equity (for private sector organizations)
 - Quantity of products or services provided
- (8)
 - (a) Report the total number of employees by employment contract and gender.
 - (b) Report the total number of permanent employees by employment type and gender.
 - (c) Report the total workforce by employees and supervised workers and by gender.
 - (d) Report the total workforce by region and gender.
 - (e) Report whether a substantial portion of the organization's work is performed by workers who are legally recognized as self-employed, or by individuals other than employees or supervised workers, including employees and supervised employees of contractors.
 - (f) Report any significant variations in employment numbers (such as seasonal variations in employment in the tourism or agricultural industries).
- (9) Report the percentage of total employees covered by collective bargaining agreements.
- (10) Describe the organization's supply chain.
- (11) Report any significant changes during the reporting period regarding the organization's size, structure, ownership, or its supply chain, including:
 - Changes in the location of, or changes in, operations, including facility openings, closings, and expansions
 - Changes in the share capital structure and other capital formation, maintenance, and alteration operations (for private sector organizations)
 - Changes in the location of suppliers, the structure of the supply chain, or in relationships with suppliers, including selection and termination

- Changes in the location of, or changes in, operations, including facility openings, closings, and expansions
- Changes in the share capital structure and other capital formation, maintenance, and alteration operations (for private sector organizations)
- Changes in the location of suppliers, the structure of the supply chain, or in relationships with suppliers, including selection and termination

Commitments to External Initiatives

- (1) Report whether and how the precautionary approach or principle is addressed by the organization
- (2) List externally developed economic, environmental and social charters, principles, or other initiatives to which the organization subscribes or which it endorses.
- (3) List memberships of associations (such as industry associations) and national or international advocacy organizations in which the organization:

- Holds a position or) the governance body
- Participates in projects or committees
- Provides substantive funding beyond routine membership dues
- Views membership as strategic

This refers primarily to memberships maintained at the organizational level.

Identified Material Aspects and Boundaries

These Standard Disclosures provide an overview of the process that the organization has followed to define the Report Content, the identified material Aspects and their Boundaries, and restatements.

- (1)
 - (a) List all entities included in the organization's consolidated financial statements or equivalent documents.
 - (b) Report whether any entity included in the organization's consolidated financial statements or equivalent documents is not covered by the report.

The organization can report on this Standard Disclosure by referencing the information in publicly available consolidated financial statements or equivalent documents.

- (2)
 - (a) Explain the process for defining the report content and the Aspect Boundaries.
 - (b) Explain how the organization has implemented the Reporting Principles for Defining Report Content.
- (3) List all the material Aspects identified in the process for defining report content.
- (4)
 - (a) For each material Aspect, report the Aspect Boundary within the organization, as follows:
 - Report whether the Aspect is material within the organization

- If the Aspect is not material for all entities within the organization (as described in G4), select one of the following two approaches and report either:
 - The list of entities or groups of entities included in G4 for which the Aspect is not material or
 - The list of entities or groups of entities included in G4 for which the Aspects is material
 - Report any specific limitation regarding the Aspect Boundary within the organization
- (5) (a) For each material Aspect, report the Aspect Boundary outside the organization as follows:
- Report whether the Aspect is material outside of the organization
 - If the Aspect is material outside of the organization, identify the entities, groups of entities or elements for which the Aspect is material. In addition, describe the geographical location where the Aspect is material for the entities identified
 - Report any specific limitation regarding the Aspect Boundary outside the organization
- (6) Report the effect of any restatements of information provided in previous reports, and the reasons for such restatements,
- (7) Report significant changes from previous reporting periods in the Scope and Aspect Boundaries.

Stakeholder Engagement

These Standard Disclosures provide an overview of the organization's stakeholder engagement during the reporting period. These Standard Disclosures do not have to be limited to engagement that was conducted for the purposes of preparing the report.

- (1) Provide a list of stakeholder groups engaged by the organization.
- (2) Report the basis for identification and selection of stakeholders with whom to engage.
- (3) Report the organization's approach to stakeholder engagement including frequency of engagement by type and by stakeholder group, and an indication of whether any of the engagement was undertaken specifically as part of the report preparation process.
- (4) Report key topics and concerns that have been raised through stakeholder engagement, and how the organization has responded to those key topics and concerns, including through its reporting. Report the stakeholder groups that raised each of the key topics and concerns.

Report Profile

These Standard Disclosures provide an overview of the basic information about the report, the GRI Content Index, and the approach to seeking external assurance.

- (1) Reporting period (such as fiscal or calendar year) for information provided.
- (2) Date of most recent previous report (if any).
- (3) Reporting cycle (such as annual, biennial).
- (4) Provide the contact point for questions regarding the report or its contents.

Reporting Required Standard Disclosures by Using References

Information related to Standard Disclosures required by the 'in accordance' options may already be included in other reports prepared by the organization, such as its annual report to shareholders or other regulatory or voluntary reports. In these circumstances, the organization may elect to not repeat those disclosures in its sustainability report and instead add a reference to where the relevant information can be found.

This presentation is acceptable as long as the reference is specific (for example, a general reference to the annual report to shareholders would not be acceptable, unless it includes the name of the section, table, etc.) and the information is publicly available and readily accessible. This is likely the case when the sustainability report is presented in electronic or web based format and links are provided to other electronic or web based reports.

Medium of Reporting

Electronic or web-based reporting and paper reports are appropriate Media for reporting. Organizations may choose to use a combination of web and paper-based reports or use only one medium. For example, an organization may choose to provide a detailed report on their website and provide an executive summary including their strategy and analysis and performance information in paper form. The choice will likely depend on the organization's decisions on its reporting period, its plans for updating content, the likely users of the report, and other practical factors, such as its distribution strategy.

At least one medium (web or paper) should provide users with access to the complete set of information for the reporting period.

2. SPECIFIC STANDARD DISCLOSURES

The Guidelines organize Specific Standard Disclosures into three Categories Economic, Environmental and Social. The Social Category is further divided into four sub-Categories, which are Labor Practices and Decent Work, Human Rights, Society and Product Responsibility.

The GRI Aspects are set out within each Category. Figure 22.6 gives an overview of the Categories and Aspects.

The organization's sustainability report presents information relating to material Aspects, that is, those Aspects for which impacts are identified as material by the organization, Material Aspects are those that reflect the organization's significant economic, environmental and social impacts; or that substantively influence the assessments and decisions of stakeholders,

The Reporting Principles for Defining Report Content have been designed to assist organizations in identifying material

Category	Economic	Environmental		
Aspects	• Economic Performance • Market Presence • Indirect Economic Impacts • Procurement Practices	• Materials • Energy • Water • Biodiversity • Emissions • Effluents and Waste • Products and Services • Compliance • Transport • Overall • Supplier Environmental Assessment • Environmental Grievance Mechanisms		
Category	Social			
Sub-Categories	Labor Practices and Decent Work	Human Rights	Society	Product Responsibility
Aspects	• Employment • Labor/Management Relations • Occupational Health and Safety • Training and Education • Diversity and Equal Opportunity • Equal Remuneration for Women and Men • Supplier Assessment for Labor Practices • Labor Practices Grievance Mechanisms	• Investment • Non-discrimination • Freedom of Association and Collective Bargaining • Child Labor • Forced or Compulsory Labor • Security Practices • Indigenous Rights • Assessment • Supplier Human Rights Assessment • Human Rights Grievance Mechanisms	• Local Communities • Anti corruption • Public Policy • Anti competitive Behavior • Compliance • Supplier Assessment for Impacts on Society • Grievance Mechanisms for Impacts on Society	• Customer Health and Safety • Product and Service Labeling • Marketing Communications • Customer Privacy • Compliance

Figure 22.6 : Categories and Aspects in the Guidelines

Source: Global Reporting Initiative (GRI) G4, 2016, p. 44.

Aspects and their Boundaries and to indicate where their impacts may be identified as material.

The economic dimension of sustainability concerns the organization's impacts on the economic conditions of its stakeholders and on economic systems at local, national, and global levels. It does not focus on the financial condition of the organization.

DISCLOSURES ON MANAGEMENT APPROACH (DMA)

The DMA is intended to give the organization an opportunity to explain how the economic, environmental and social impacts related to material Aspects are managed.

Material Aspects are defined by the organization using the Reporting Principles for Defining Report Content.

Material Aspects are those that reflect the organization's significant economic, environmental and social impacts; or that

substantively influence the assessments and decisions of stakeholders.

DMA provides narrative information on how an organization identifies, analyzes, and responds to its actual and potential material economic, environmental and social impacts.

DMA also provides context for the performance reported by Indicators.

Organizing The Information

DMA is provided for GRI Aspects, to report specific management practices.

If the organization's management approach or its components (such as policies or specific actions) apply in general to more than one GRI Aspect, such DMA can be provided once in a report, it does not have to be repeated throughout the report for every GRI Category, Aspect or Indicator, When DMA is combined for a

group of Aspects, the report states clearly which Aspects are covered by each disclosure.

Different Types of Disclosures on Management Approach

The Guidance for DMA is divided in two types: Generic and Aspect-specific Guidance. Generic DMA Guidance is designed to be used with any Aspect. Aspect-specific DMA Guidance is designed to give additional detail on the information to report for the Aspect.

RELATION BETWEEN INTEGRATED REPORTING AND SUSTAINABILITY REPORTING

Sustainability reporting is a process that assists organizations in setting goals, measuring performance and managing change towards a sustainable global economy – one that combines long term profitability with social responsibility and environmental care. Sustainability reporting – mainly through but not limited to a sustainability report – is the key platform for communicating the organization's economic, environmental, social and governance performance, reflecting positive and negative impacts. The Aspects that the organization deems to be material, in response to its stakeholders' expectations and interests, drive sustainability reporting. Stakeholders can include those who are invested in the organization as well as those who have other relationships with the organization.

Integrated reporting is an emerging and evolving trend in corporate reporting, which in general aims primarily to offer an organization's providers of financial capital with an integrated representation of the key factors that are material to its present and future value creation.

Integrated reporters build on sustainability reporting foundations and disclosures in preparing their integrated report. Through the integrated report, an organization provides a concise communication about how its strategy, governance, performance and prospects lead to the creation of value over time. Therefore, the integrated report is not intended to be an extract of the traditional annual report nor a combination of the annual financial statements and the sustainability report. However, the integrated report interacts with other reports and communications by making reference to additional detailed information that is provided separately.

Although the objectives of sustainability reporting and integrated reporting may be different, sustainability reporting is an intrinsic element of integrated reporting. Sustainability reporting considers the relevance of sustainability to an organization and also addresses sustainability priorities and key topics, focusing on the impact of sustainability trends, risks and opportunities on the long-term prospects and financial performance of the organization. Sustainability reporting is fundamental to an organization's integrated thinking and reporting process in providing input into the organization's identification of its material issues, its strategic objectives, and the assessment of its ability to achieve those objectives and create value over time.

REFERENCES

1. Jan Emblemsvag and Bert Bras, *Activity-based Cost and Environmental Management*, Kluwer Academic Publishers, 2001, P. 36
2. Rob Gray and Jan Bebbington, *Accounting for the Environment*, Sage Publications, London, 2001, P. 16.
3. Rupert Howes, "Corporate Environmental Accounting: Accounting for Environmentally Sustainable Profits" in Sandrine Simon and John Proops (eds.) *Greening the Accounts*, Edward Elgar, 2000, P. 224.
4. Rupert Howes, *Ibid.*, P. 226.
5. Jill Solomon and Aris Solomon, *Corporate Governance and Accountability*, John Wiley and Sons, 2006, PP. 198 200.
6. Rob Gray and Jan Bebbington, *Ibid*, P. 255.
7. Rob Gray and Jan Bebbington, *Ibid*, P. 237.
8. (a) Canadian Institute of Chartered Accountants, Environmental Costs and Liabilities, Accounting and Financial Reporting Issues, CICA, 1993.
(b) Global Environmental Management Initiative, 1997,
(c) KPMG, Environmental Reporting, 1997.
(d) C. Deegan and M. Newson, Environmental Performance Evaluation and Reporting for-Private and Public Organisations, 1997.
9. R.H, Gray, The Greening of Accountancy Certified Research Report 17, Chartered Association of Certified Accountants, London, 1990.
10. R.H. Gray, The Accountancy Profession and the Environmental Crisis, Discussion Paper ACC/9102, University of Dundee, 1991.
11. A Savitz, Sustainability Reporting: Daring to Hold Yourself Accountable, Compliance Week, Financial Media Holding Group Inc. Newton, Massachusetts, USA, April 17, 2003.
12. J. Elkington, *Cannibals with Forks*, New Society Publishers, Gabriola Island, Canada.
13. Global Reporting Initiative (GRI), Sustainability Reporting Guidelines, G4, 2016.

QUESTIONS

1. Define environmental accounting. What is its relevance to corporate managements and external users.
2. "Business firms should determine true profits which are environmentally sustainable". Comment.
3. Explain the scope of environmental accounting.
4. Discuss the benefits and costs associated with environmental reporting.
5. Explain different environmental costs.
6. Identify internal and external environmental costs.
7. Evaluate methods of environmental reporting. Which method is appropriate?
8. Do you suggest environmental reporting to be adopted as a part of company annual report? Why or why not?
9. Do you think stand-alone environmental reports would be beneficial?
10. Suggest guidelines to be followed in environmental reporting.
11. Discuss the attempts being made at the national and international level in environmental accounting and reporting.

12. Discuss the need for environmental reporting.	17. Define Sustainability Reporting. What is its importance?
13. List the benefits and disadvantages of environmental reporting.	18. Identify performance indicators for different aspects of a sustainable report prepared by a business firm.
14. Identify the users of environmental reports.	19. Discuss Reporting Principles as suggested in G4 (GRI, 2016).
15. Explain the costs and benefits associated with environmental reports.	20. Explain General Standard Disclosures as given in GRI, G4 (2016).
16. Evaluate environmental disclosure practices being followed by Indian companies.	21. Discuss Specific Standard Disclosures provided in G4 (GRI, 2016).



Financial Reporting in Not-for-profit Organizations*

NATURE

The primary goal of business enterprises is to increase monetary wealth so that over time they can return the maximum amount of cash to owners. This is not the central goal of governmental, charitable, educational, and not-for-profit organizations. Nonetheless, financial statements of not-for-profit organizations should provide information that serves users' needs.

Three major distinguishing characteristics of non-business organizations are:

1. Significant amounts of resources are received from resource providers, who do not expect to receive either repayment or economic benefits proportionate to the resources they provide.
2. The business operates primarily for purposes other than the provision of goods or services at a profit or a profit equivalent.
3. There are no defined ownership interests that can be sold, transferred, or redeemed, or that would convey entitlement to a share of residual distribution of the resources in the event of liquidation of the organization.

Some examples of non-business organizations, are private, nonprofit and philanthropic organizations such as colleges and universities; hospitals; health and welfare agencies; foundations; state and local governmental units; and such membership organizations as trade and professional associations. Examples of organizations that do not possess all of the distinguishing characteristics of non-business organizations are membership clubs in transferable entity interests; investor-owned hospitals and educational institutions; mutual insurance companies; and types of mutual and cooperative organizations that provide dividends, lower costs, or economic benefits directly to their owners, members, or participants.

SIMILARITIES AND DIFFERENCES BETWEEN BUSINESS AND NOT-FOR-PROFIT ORGANIZATIONS

FASB's, SFAC No. 4, Objectives of Financial Reporting by Non-business organizations (1980), has pointed out the following similarities and differences between the two organizations.

1. The operating environments of non-business organizations and business enterprises are similar in many ways. Both non-business organizations and business enterprises produce and distribute goods or services and use scarce resources in doing so. They sometimes provide essentially the same goods or services. Both non-business organizations and business enterprises obtain resources from external sources and are accountable to those who provide resources or their representatives. Both are integral parts of the national economy and interrelate directly or indirectly with other organizations. Both own or control supplies of resources, some of which are used in current operations and some of which are held for use in future periods. Both incur obligations. Some non-business organizations, as well as business enterprises, incur and pay taxes, and both are subject to governmental laws and regulations. Both must be financially viable: To achieve their operating objectives, they must, *in the long run*, receive at least as many resources as they need to provide goods and services at levels satisfactory to resource providers and other constituents. Both generally obtain resources from the same pool of resource providers, and the resources available for use by all organizations are limited. (Para 14)

2. Both non-business organizations and business enterprises obtain resources in exchange transactions in markets. Both obtain labor, materials, and facilities or their use by paying for them or agreeing to pay for them in the future. Both may borrow funds through bank loans, mortgages, or other direct loans or through issuing debt securities to creditors who commonly may evaluate and compare the risks and returns of securities of both non-business organizations and business enterprises. (Para 16)

3. Both non-business organizations and business enterprises may obtain resources by charging a price or fee for goods or services they provide, but the purpose of sales of goods or services is different. Some non-business organizations may sell goods or services at prices that equal or exceed costs, but many non-business organizations commonly provide goods or services at prices less than costs. Non-business organizations also commonly provide goods or services free of charge. Moreover, those that charge prices sufficient to cover costs often use resources from those sales to subsidize other activities within the organization. Although sales of goods or services may be

*The discussion in this chapter is based primarily on the following sources:

- (i) FASB, SFAC No. 6, *Elements of Financial Statements*, 1985.
- (ii) FASB, SFAC No. 4, *Objectives of Financial Reporting by Non-Business Organizations*, 1980.
- (iii) FASB, *Research Report, Financial Accounting in Non-Business Organization*, 1978.

important sources of financing for some non-business organizations, non-business organizations generally are not expected to and do not need to cover all costs, and perhaps earn profits, by sales because they rely significantly on other continuing sources of financing (paragraph 18). For example, some non-business organizations have the power to assess dues, taxes, or other compulsory contributions, and others depend significantly on voluntary contributions. In contrast, business enterprises attempt to sell goods or services at prices that enable them to repay or compensate all resource providers, including owners and others who expect a monetary return for providing resources. Profit is the basis for compensating owners and others for providing resources, and expectations of profit are necessary to attract resources. Moreover, unprofitable business enterprises find it increasingly difficult to borrow or otherwise obtain resources. Sales of goods or services are not only significant sources of resources for business enterprises but also underlie their ability to obtain resources from other sources. (Para 17)

4. Members, contributors, taxpayers, and others who provide resources to non-business organizations do so for reasons different from those of owners of business enterprises. All non-business organizations obtain significant resources from resource providers who either expect no economic benefits or expect benefits received not to be proportionate to the resources provided. Those resources are often provided for charitable, humanitarian, religious, or other noneconomic reasons. As a result, those who provide resources to a non-business organization and those who benefit from the goods or services it provides may be different individuals or groups. Owners of business enterprises, in contrast, generally expect returns through dividends or price appreciation of their securities commensurate with the perceived risk. (Para 18)

5. Non economic reasons are commonly factors in decisions to provide resources to particular non-business organizations. Rather, their reasons for voluntarily providing resources relate to their interests in furthering the purpose and goals of the organization. The goals may involve a wide range of endeavors including those of a charitable, cultural, educational, economic, religious, scientific, social, or political nature. Some kinds of membership organizations, such as professional and trade associations, assess membership dues. Persons joining these organizations often seek noneconomic benefits, such as recognition or prestige, in addition to direct service benefits. (Para 19)

6. Non-business organizations and business enterprises have different degrees of involvement with markets. Most transactions of business enterprises with other entities involve exchange prices in active markets; that market mechanism provides a measure of the utility and satisfaction of goods and services businesses buy and sell and of the overall performance of those enterprises. Non-business organizations also borrow money and buy goods and services in markets and may or may not sell goods or services in markets. However, market transactions play a more limited role in the resource allocation process of non-business organizations

because those organizations do not finance their operations through equity markets and they commonly receive resources and provide goods or services in other than market transactions. Since market controls exist to a lesser degree for non business organizations than for business enterprises, other kinds of controls are introduced to compensate for their absence. (Para 20)

7. Resource providers or governing bodies may restrict or mandate the ways a non-business organization may spend the resources provided. Spending mandates generally take one of two forms: specific budgetary appropriations or direct restrictions by donors or grantors. Those mandates give managers of non-business organizations a special responsibility to ensure compliance. Although spending mandates also may exist in business enterprises, they are less common. Their effects on the conduct and control of the activities of business enterprises are less pervasive than in non-business organizations. (Para 21)

8. Budgets are particularly significant in the non-business environment. Both business and non-business organizations use budgets to allocate and control uses of resources. However, in non-business organizations for which providing resources is compulsory (for example, many membership organizations and governmental units), budgets are significant factors not only in allocating resources within an organization but also in obtaining resources. For example, budgets in membership organizations and governmental units are often pivotal in establishing the level of dues, taxes, or fees to be imposed; the level of services to be provided; and the desired relation between the two. Members and taxpayers may have the opportunity, either by direct vote or through elected representatives, to participate in developing and approving budgets. Elections and referendums also offer opportunities to change policies and the amounts and uses of resources provided. In other kinds of non-business organizations, budgets may be important to voluntary donors in deciding whether to provide resources to non-business organizations and in establishing the level of their giving. (Para 22)

TYPES OF USERS AND THEIR NEEDS

1. Many people base economic decisions on their relationships to and knowledge about non-business organizations and, thus, are interested in the information provided by financial reporting. Among present and potential users are members, taxpayers, contributors, grantors, lenders, suppliers, creditors, employees, managers, directors and trustees, service beneficiaries, financial analysts and advisors, brokers, underwriters, lawyers, economists, taxing authorities, regulatory authorities, legislators, the financial press and reporting agencies, labor unions, trade associations, researchers, teachers, and students. The following groups are especially interested in information provided by the financial reporting of a non-business organization:

- (a) *Resource providers.* Resource providers include those who are directly compensated for providing resources —lenders, suppliers, and employees (paragraph 16) — and those who are not directly and

proportionately compensated — members, contributors, and taxpayers (paragraph 18).

- (b) *Constituents.* Constituents are those who use and benefit from the services rendered by the organization. In some non-business organizations, constituents include resource providers (for example, members who pay dues or taxpayers), and distinguishing constituents from resource providers may serve no function. However, resource providers and service beneficiaries are largely different groups or individuals in some organizations. The degree to which service beneficiaries are a distinctive part of a constituency depends largely on the extent of separation between those providing the resources and those using and receiving the service benefits.
- (c) *Governing and oversight bodies.* Governing and oversight bodies are those responsible for setting policies and for overseeing and appraising managers of non-business organizations. Governing bodies include boards of trustees, boards of overseers, legislatures, councils, and other bodies with similar responsibilities. Oversight bodies also are responsible for reviewing the organization's conformance with various laws, restrictions, guidelines, or other items of a similar nature. Oversight bodies include national headquarters of organizations with local chapters, accrediting agencies, agencies acting on behalf of contributors and constituents, oversight committees of legislatures, and governmental regulatory agencies. In some non-business organizations, governing bodies commonly are elected representatives of a constituency that is largely comprised of resource providers. In other non-business organizations, governing bodies may be self-perpetuating through election of their successors.
- (d) *Managers.* Managers of an organization are responsible for carrying out the policy mandates of governing bodies and managing the day-to-day operations of an organization. Managers include certain elected officials; managing executives appointed by elected governing bodies, such as school superintendents, agency heads, and executive directors; and staff, such as fund raising and program directors. (SFAC 4, Para 29)

2. Present and potential users of the information provided by financial reporting by a particular non-business organization share a common interest in information about the services provided by the non-business organization, its efficiency and effectiveness in providing those services, and its ability to continue to provide those services. Resource providers, such as members and contributors, may be interested in that information as a basis for assessing how well the organization has met its objectives and whether to continue support. Taxpayers may need similar information to help them assess whether governmental units and government-sponsored entities have achieved their operating objectives. In addition, they may want to know how the services

provided by the governmental unit or government-sponsored entity are likely to affect the amount of taxes and fees they will be required to pay. Resource providers, such as lenders, suppliers, and employees, view a non-business organization as a source of payment for the cash, goods, or services they supply. Their interest stems from concern about the organization's ability to generate cash flows for timely payment of the organization's obligations to them. Governing and oversight bodies also use information about services rendered to help them evaluate whether managers have carried out their policy mandates and to change or formulate new policies for the organization. That information also is important to managers in evaluating the accomplishment of the responsibilities for which they are accountable to governing bodies, resource providers, and other constituents. Constituents, including recipients and beneficiaries of services who as a group are distinct from resource providers, share a direct interest in similar information. (SFAC 4, Para 30)

3. Some users have specialized needs but also have 'the power to obtain the information they need. For example, donors and grantors who restrict the use of resources they provide often stipulate that they be apprised periodically of the organization's compliance with the terms and conditions of the gift or grant. Creditors also may be able to stipulate that certain specialized types of information be provided. (SFAC 4, Para 31)

4. Managers and, to some extent, governing bodies commonly are described as "Internal users." In addition to the information provided by financial reporting, they need a great deal of internal accounting information to carry out their responsibilities in planning and controlling activities. Much of that information relates to particular decisions or to managers' exercise of their stewardship responsibility to ensure that resources are used for their intended purposes. For example, governing bodies and managers need information to evaluate properly the competing requests for funding of capital projects. They also need information to assist them in complying or overseeing compliance with spending mandates established by budgetary appropriations or donor or grantor restrictions. They need to know how much of a budgetary appropriation or restricted grant is unspent or uncommitted. They need to know that restricted resources were expended or committed in compliance with related mandates. (SFAC 4, Para 32)

OBJECTIVES OF FINANCIAL REPORTING

FASB (SFAC No. 4) presents the following objectives of financial reporting for not-for-profit organizations.

1. Information useful in making resource allocation decisions: Financial reporting by non-business organizations should provide information that is useful to resource providers in making rational decisions about the allocation of resources in those organizations.

2. Information useful in assessing services and the ability to provide services: Financial reporting by non-business organizations should provide information that is useful to present and potential resource providers in assessing the services that a

non-business organization provides and its ability to continue to provide those services.

3. Information useful in assessing management stewardship and performance: Financial reporting by non-business organization should provide information that is useful to present and potential resource providers in assessing how managers of a non-business organization have discharged their stewardship responsibilities and other aspects of their performance. Information about an organization's performance should be the focus for assessing the stewardship, or accountability, of managers. Information about departures from such spending mandates as formal budgets and donor restrictions on the use of resources that may impinge on an organization's financial performance or on its ability to provide a satisfactory level of services is also important in assessing how well managers have discharged their stewardship responsibilities.

4. Information about economic resources, obligations, net resources, and changes on them: Financial reporting by non-business organizations about interest in those resources.

5. Organizational performance: Financial reporting by non-business organizations should provide information about the performance of an organization during a given period. Periodic measurement of the changes in the amount and nature of the net resources of a non-business organization and information about the service's efforts and accomplishments of an organization, taken together, represent the information most useful in assessing organizational performance.

6. Liquidity: Financial reporting by non-business organizations should provide information about how a non-business organization obtains and spends cash, about its borrowing and repayment of borrowing, and about other factors that may affect an organization's liquidity.

7. Managers' explanations and interpretations: Financial reporting by non-business organizations should include explanations and interpretations to help resource providers and other users understand the financial information they receive. Because managers usually know more about an organization and its affairs than resources providers or others outside the organization, managers can often increase the usefulness of financial reporting information by identifying certain transactions, events, and circumstances that affect the organization, and by explaining their financial impact.

AICPA, Report of the study group on the objectives of Financial Statements (1973, p. 51) states:

"An objective of financial statements for governmental and not-for-profit organizations is to provide information useful for evaluating the effectiveness of the management of resources in achieving the organization's goals. Performance measures should be quantified in terms of identified goals."

EQUITY (NET ASSETS) OF NOT-FOR-PROFIT ORGANIZATIONS

SFAC No. 6, Elements of Financial Statements (1985) contains the detailed provisions and guidelines on net assets of not-for-profit organizations. The discussion herein is based on SFAC No. 6 (FASB).

Characteristics of net assets of not-for-profit organizations

In a not-for-profit organization, as in a business enterprise, net assets (equity) is a residual, the difference between the entity's assets and its liabilities but, in contrast to equity of a business enterprise, it is not an ownership interest.

Net assets of not-for-profit organizations is divided 'Into three mutually exclusive classes, permanently restricted net assets, temporarily restricted net assets, and unrestricted net assets. (Para 91)

Classes of net assets

Permanently restricted net assets is the part of the net assets of a not-for-profit organization resulting (a) from contributions and other inflows of assets whose use by the organization is limited by donor-imposed stipulations that neither expire by passage of time nor can be fulfilled or otherwise removed by actions of the organization, (b) from other asset enhancements and diminishments subject to the same kinds of stipulations, and (c) from reclassifications from (or to) other classes of net assets as a consequence of donor-imposed stipulations. (Para 92)

Temporarily restricted net assets is the part of the net assets of a not-for-profit organization resulting (a) from contributions and other inflows of assets whose use by the organization is limited by donor-imposed stipulations that either expire by passage of time or can be fulfilled and removed by actions of the organization pursuant to those stipulations, (b) from other asset enhancements and diminishments subject to the same kinds of stipulations, and (c) from reclassifications to (or from) other classes of net assets as a consequence of donor-imposed stipulations, their expiration by passage of time, or their fulfillment and removal by actions of the organization pursuant to those stipulations. (Para 93)

Unrestricted net assets is the part of net assets of a not-for-profit organization that is neither permanently restricted nor temporarily restricted by donor-imposed stipulations—that is, the part of net assets resulting (a) from all revenues, expenses, gains, and losses that are not changes in permanently or temporarily restricted net assets and (b) from reclassifications from (or to) other classes of net assets as a consequence of donor-imposed stipulations, their expiration by passage of time, or their fulfillment and removal by actions of the organization pursuant to those stipulations. The only limits on unrestricted net assets are broad limits resulting from the nature of the organization and the purposes specified in its articles of incorporation (or comparable document for an unincorporated association) or bylaws and perhaps limits resulting from contractual agreements—for example, loan covenants—entered into by the organization in the course of its operations. (Para 94)

Restrictions affect net assets rather than particular assets

Restrictions impose responsibilities on management to ensure that the organization uses donated resources in the manner stipulated by resource providers. Sometimes donor-imposed restrictions limit an organization's ability to sell or exchange the particular asset received. For example, a donor may give a painting to a museum stipulating that it must be publicly displayed, properly maintained, and never sold. (Para 101)

More commonly, donors' stipulations permit the organization to pool the donated assets with other assets and to sell or exchange the donated assets for other suitable assets as long as the economic benefits of the donated assets are not consumed or used for a purpose that does not comply with the stipulation. For example, a donor may contribute 100 shares of Security A to an organization's endowment, thereby requiring that the amount of the gift be retained permanently but not requiring that the specific shares be held indefinitely. Thus, permanently restricted net assets and temporarily restricted net assets generally refer to amounts of net assets that are restricted by donor imposed limits, not to specific assets. (Para 102)

Maintenance of net assets

Although not-for-profit organizations do not have ownership interests or profit in the same sense as business enterprises, they nonetheless need a concept of capital maintenance or its equivalent to reflect "the relation between-inflows and outflows of resources during a period." The activities of an organization during a period may draw upon resources received in past periods or may add resources that can be used in future periods. (Para 103)

Unless a not-for-profit organization maintains its net assets, its ability to continue to provide services dwindles; either future

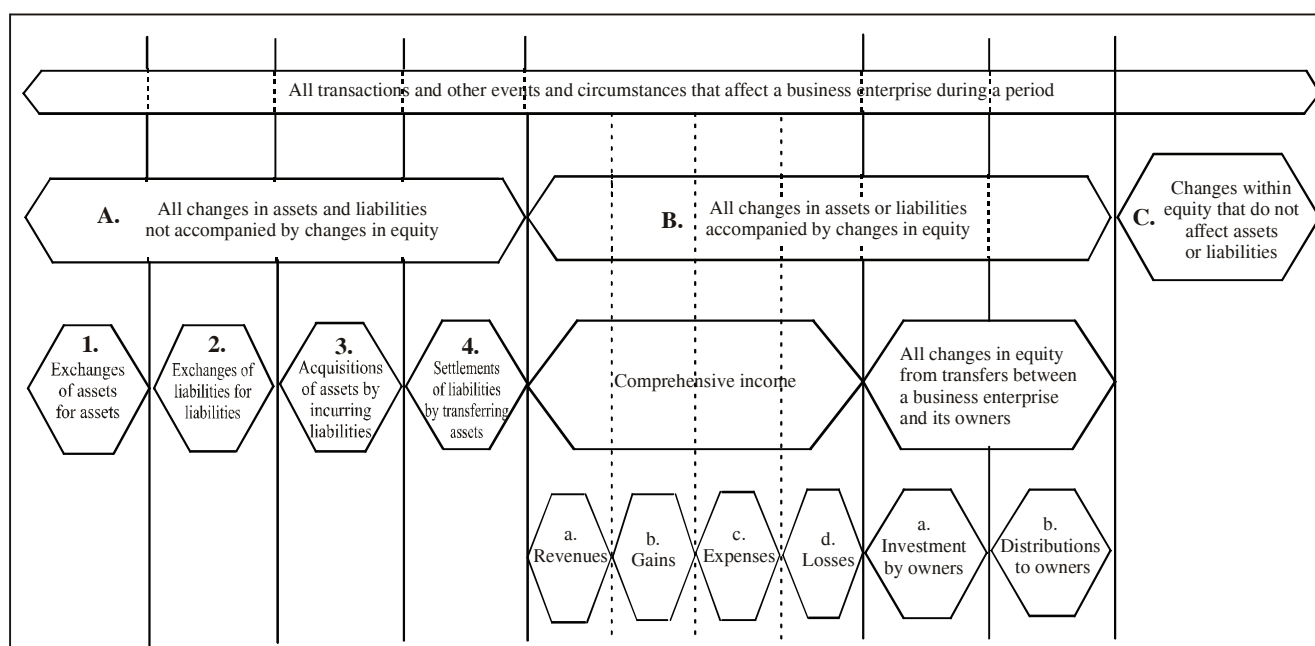
resource providers must make up the deficiency or services to future beneficiaries will decline. The organization's net assets decrease as it uses up an asset unless its revenues and gains at least equal its expenses and losses, including the cost of consuming part of the asset during the period (depreciation). Even if that organization plans to replace the asset through future contributions from donors, and probably will be able to do so, it has not maintained its net assets during the current period. (Para 104)

Maintenance of net assets in not-for-profit organizations, as in business enterprises is based on the maintenance of financial capital—that is, a not-for-profit organization's capital has been maintained if the financial (money) amount of its net assets at the end of a period equals or exceeds the financial amount of its net assets at the beginning of the period. (Para 105)

Transactions and events that change net assets of not-for-profit organizations

Figure 23.1 shows the sources of changes in the amount of or the restrictions on a not-for-profit organization's net assets and distinguishes them from each other and from other transactions, events, and circumstances affecting the organization during a period.

The full width of the Figure 23.1, represented by the two-pointed arrow labeled "All transactions and other events and circumstances that affect a not-for-profit organization during a period," encompasses all potentially recordable events and circumstances affecting a not-for-profit organization. Moving down the Figure, the next level is divided into three mutually exclusive classes that are the same as those of business enterprises (classes A, B, and C). Continuing down the Figure, however, classes B and C are divided differently from classes B and C in the

**Figure 23.1**

Source: SFAC No. 6, Elements of Financial Statements, FASB, 1985, p. 20

business-enterprise (Figure) because not-for-profit organizations have no owners or transactions with owners in the same sense as business enterprises and because restrictions on net assets and changes in the restrictions are significant in not-for-profit organizations, (Size of classes does not indicate their relative volume or significance.)

- A. All changes in assets and liabilities not accompanied by changes in net assets. This class comprises four kinds of exchange transactions that are common in most entities:
 - 1. Exchanges of assets for assets
 - 2. Exchanges of liabilities for liabilities
 - 3. Acquisitions of assets by incurring liabilities
 - 4. Settlements of liabilities by transferring assets
- B. All changes in assets or liabilities accompanied by changes in the amount of net assets. This class comprises four kinds of items that also exist for business enterprises:
 - 1. Revenues
 - 2. Gains
 - 3. Expenses
 - 4. Losses
- C. All changes within net assets that do not affect assets or liabilities.
 - 1. Reclassifications between classes of net assets from changes in donor-imposed restrictions, for example, temporarily restricted net assets become unrestricted net assets when a donor-imposed time stipulation expires. This class comprises events that increase one class of net assets while decreasing another but do not change the amount of net assets.
 - 2. Changes within a class of net assets, for example, an internal designation by trustees to establish a working capital reserve from a portion of the entity's unrestricted net assets. (Para 108)

The shaded arrow that is divided horizontally into three classes—change in permanently restricted net assets, change in temporarily restricted net assets, and change in unrestricted net assets—encompasses all transactions and other events and circumstances that change either the amount of net assets or the donor-imposed restrictions on net assets. It thus encompasses the transactions and other events and circumstances that comprise class B (revenues, expenses, gains, losses), and class C1 (reclassifications), combined. (Para 109)

In other words, the third and fourth levels of the diagram show in two different ways the same set of transactions and other events and circumstances affecting net assets of a not-for-profit organization and the composition of its three classes during a period. The third level emphasizes sources of changes in net assets—transactions or other events that result in revenues, expenses, gains, or losses or in reclassifications within net assets. The fourth level emphasizes the effects of those events on each

of the three classes of net assets—permanently restricted net assets, temporarily restricted net assets, and unrestricted net assets.

REVENUES, EXPENSES, GAINS, AND LOSSES

Revenues, expenses, gains, and losses include all transactions and other events and circumstances that change the amount of net assets of a not-for-profit organization. All resource inflows and other enhancements of assets of a not-for-profit organization or settlements of its liabilities that increase net assets are either revenues or gains and have characteristics similar to the revenues or gains of a business enterprise. (Para 111)

Net assets of a not-for-profit organization changes as a result of (a) exchange transactions, (b) contributions and other nonreciprocal transfers from or to other entities, (c) the organization's service-providing efforts, and (d) price changes, casualties, and other effects of interactions between the organization and the economic, legal, social, political, and physical environment of which it is a part. (Para 112)

Reclassifications

Reclassifications between classes of net assets result from donor-imposed stipulations, their expiration by passage of time, or their fulfillment and removal by actions of the organization pursuant to those stipulations. Reclassifications simultaneously increase one class and decrease another class of net assets; they do not involve inflows, outflows, or other changes in assets or liabilities. (Para 114)

Reclassifications include events that remove or impose restrictions on an organization's use of its existing resources. Restrictions are removed from temporarily restricted net assets when stipulated conditions expire or are fulfilled by the organization. Time-restricted net assets generally become unrestricted when the stipulated time arrives. Temporarily restricted net assets may become unrestricted when an organization incurs liabilities to vendors or employees as it undertakes the activities required by donor stipulations, rather than at the time those liabilities are paid. Restrictions occasionally may be withdrawn by the donor or removed by judicial action. (Para 115)

Changes in classes of net assets of not-for-profit organizations

Those who provide, or may provide, resources to a not-for-profit organization usually need information not only about sources of changes in its net assets—about transactions and other events that result in revenues, expenses, gains, and losses—but also about their effects, and the effects of events that change donor-imposed restrictions, on classes of net assets. Effects on classes of net assets often may be more significant to them than sources of changes because donor-imposed restrictions may significantly affect the types and levels of services that a not-for-profit organization can provide. (Para 117)

Events that result in reclassifications within net assets and revenues, expenses, gains, and losses together encompass the

transactions and other events and circumstances that comprise change in permanently restricted net assets, change in temporarily restricted net assets, and change in unrestricted net assets (paragraphs 108 110). (Para 118)

Questions

1. What is a not-for-profit organization?
2. Explain the characteristics of not-for-profit organizations.
3. Discuss the similarities and differences between business and not-for-profit organizations.
4. “Non-business organizations and business enterprises have different degrees of involvement with markets.” Explain.
5. Explain users and their informational requirements of not-for-profit organizations.
6. Discuss the objectives of financial reporting for not-for-profit organizations.
7. What is the equity of a not-for-profit organization?
8. Discuss transactions and events that change equity (net assets) of not-for-profit organizations.
9. What are revenues, expenses, gains and losses in not-for-profit organizations?



Foreign Currency Translation

An entity may carry on foreign activities in two ways. It may have transactions in foreign currencies or it may have foreign operations. In addition, an entity may present its financial statements in a foreign currency. The basic questions are how to include foreign currency transactions and foreign operations in the financial statements of an entity and how to translate financial statements into a presentation currency. Further, the issues are which exchange rate(s) to use and how to report the effects of changes in exchange rates in the financial statements. Thus, all economic entities operating internationally confront the problem of how to account for transactions and operations that occur in a different currency. The demise of the fixed exchange rate system combined with the expansion of international business activity has increased the significance of the problem so that we see firms and regulators continually grappling with accounting for transactions and financial information (*e.g.*, annual financial statements) measured in different currencies.

Accounting for foreign currency transactions and translation is fundamental to all financial information used in a multinational enterprise. In addition, foreign currency translation choices influence financial reporting practiced by a multinational enterprise, multinational enterprises having operations in a foreign country keep books and records in the currency of host country. However, they are obligated to translate their financial statements from the foreign currency to the home country currency in order to issue consolidated financial statements of their operations worldwide.

To fully appreciate the complexity of the issue and to facilitate an understanding of the practices adopted, it is useful to have a basic understanding of exchange rates, to differentiate between accounting for: individual transactions completed within an accounting cycle, individual transactions which cover more than one accounting cycle, and consolidation of financial information from foreign operating entities (branches or subsidiaries); and to consider the practices actually used in several countries.

TWO CONCEPTUAL ISSUES

In translating foreign currency financial statements into the parent company's reporting currency, two questions must be addressed:

(1) What is the appropriate exchange rate to be used in translating each financial statement item?

(2) How should the translation adjustment that inherently arises from the translation process be reflected in the consolidated financial statements?

We introduce these issues and the basic concepts underlying the translation of financial statements.

Foreign currency transactions are transactions denominated in a currency other than the reporting currency of the firm. The reporting currency is the currency in which the firm's financial statements are issued. For example, a sale by a U.S. firm to an Indian firm for which payment is to be received in Indian Rupees is considered to be a foreign currency transaction for the U.S. firm. If the payment is to be received in U.S. dollars, the transaction would not be a foreign currency transaction for the U.S. firm, even though the buyer is not a U.S. firm. Foreign currency transactions may involve the buying and selling of goods and services, the borrowing or lending of funds, or the receipt or payment of dividends, royalties, interest payments, or other financial transactions.

No accounting problem arises as long as the transactions are denominated in the firm's domestic currency. If the transaction is settled immediately, the purchase or sale is recorded at the spot rate, and the amount of cash paid or received is also recorded at the Spot Rate. However, when a transaction is denominated in a foreign currency and payment is settled at a subsequent balance sheet date, the firm needs to resolve four accounting problems:

- The initial recording of the transaction
- The recording of foreign currency balances at subsequent balance sheet dates
- The treatment of any foreign exchange gains and losses
- The recording of the settlement of foreign currency receivables and payables when they become due

Any foreign currency transaction has two components: the monetary component and the nonmonetary component. The monetary component is the cash received/paid or the accounts receivable/payable. An example of the nonmonetary component is the equipment or inventory purchased or sold.

There are many different combinations involved in the solution of these four problems, but accepting two transactions perspective herein means that foreign exchange gains and losses are recognized in income at each balance sheet date.

Using the purchase of equipment as an example, one may suggest that the equipment and accounts payable amounts be recorded at the spot rate on the transaction date. The philosophy is that the transaction is divided into two parts: (1) the purchase of the equipment and (2) the decision to finance through an accounts payable rather than by paying cash immediately. At subsequent balance sheet dates, the equipment remains at its historical cost, but the accounts payable value changes to reflect the new spot rate. Any difference between the previous and new spot rate is a gain or loss recognized in the current accounting period. The assumption under this approach is that the gain or

loss should be reflected in the period in which the exchange rate change occurs rather than be deferred to future periods. Also, a change in the liability value should be reflected as a financing decision, much like interest expense, rather than affect the value of the equipment.

TRANSLATION METHODS

Four major methods of translating foreign currency financial statements have been used worldwide: (1) the current/noncurrent method, (2) the monetary/nonmonetary method, (3) the temporal method, and (4) the current rate (or closing rate) method.

1. Current/Non-current Method

The rules for the current/non-current method are as follows: current assets and current liabilities are translated at the current exchange rate; non-current assets, non-current liabilities, and stockholders' equity accounts are translated at historical exchange rates. The current/non-current method is based on the assumption that accounts should be grouped according to maturity. Anything due to mature in one year or less or within the normal business cycle should be translated at the current rate, whereas everything else should be carried at the rate in effect when the transaction was originally recorded.

2. Monetary/Non-monetary Method

Under this method, monetary assets and liabilities are translated at the current exchange rates; non-monetary assets, non-monetary liabilities, and stockholders' equity accounts are translated at historical exchange rates. Monetary assets are those assets whose value does not fluctuate over time—primarily cash and receivables. Non-monetary assets are assets whose monetary value can fluctuate. They consist of marketable securities, inventory, prepaid expenses, investments, fixed assets, and intangible assets; that is, all assets other than cash and receivables. Monetary liabilities are those liabilities whose monetary value cannot fluctuate over time, which is true for most payables.

Under this approach, accounts were considered as either monetary or non-monetary rather than current or non-current. Monetary assets and liabilities were translated at the current rate, and non-monetary assets and liabilities and stockholders' equity were translated at historical rates. This approach was a radical departure from the current/non-current method the areas of inventory, long-term receivables, and long-term payables.

The philosophy behind this approach is that monetary or financial assets and liabilities have similar attributes in that their value represents a fixed amount of money whose reporting currency equivalent changes each time the exchange rate changes. Monetary accounts should therefore be translated at the current exchange rate. In the current/non-current method, some current assets are monetary (such as cash) and some are non-monetary (such as inventory carried at cost), and yet all are translated at the current exchange rate. The proponents of the monetary/non-monetary method consider it more meaningful to translate assets and liabilities on the basis of attributes instead of time.¹

3. Temporal Method

Under the temporal method, cash, receivables, and payables (both current and non-current) are translated at the current rate. Other assets and liabilities may be translated at current or historical rates, depending on their characteristics. Assets and liabilities carried at past exchange prices are translated at historical rates. For example, a fixed asset carried at the foreign currency price at which it was purchased would be translated into the reporting currency at the exchange rate in effect when the asset was purchased. Assets and liabilities carried at current purchase or sales exchange prices or future exchange prices would be translated at current rates. For example, inventory carried at market would be translated at the current rather than the historical rate. Under historical cost accounting, the temporal method provides essentially the same results as the monetary/non-monetary method.

The attractiveness of the temporal approach lies in its flexibility. If a country were to change from historical cost accounting to current value accounting, the temporal method would automatically translate all assets and liabilities at current rates. The theoretical attractiveness of this approach is that the branches and subsidiaries of a parent company would be translated into the parent currency in such a way that the parent currency would be the single unit of measure.²

Cash, receivables, and most liabilities are carried at current or future values under the traditional historical cost model of accounting. These balance sheet accounts are translated at the current exchange rate under the temporal method. By coincidence, the temporal method and monetary/nonmonetary method produce similar results in this situation. The two methods diverge from one another only when nonmonetary assets are carried at current value. Many national accounting standards require inventory to be carried on the balance sheet at the lower of historical cost or current market value. Although a nonmonetary asset, the temporal method requires translation of inventory at the current exchange rate when it is written down to market value. In those jurisdictions in which marketable securities are carried at current market value, such as is required by International Financial Reporting Standards (IFRSs) and U.S. GAAP, marketable securities are also translated at the current exchange rate.

The temporal method generates either a net asset or a net liability balance sheet exposure depending on whether assets carried at current value are greater than or less than liabilities carried at current value. This can be generalized as follows:

Cash + Marketable securities + Receivables + Inventory (when carried at current value) > Liabilities → Net asset exposure

Cash + Marketable securities + Receivables + Inventory (when carried at current value) < Liabilities → Net liability exposure

Because liabilities (current plus long-term) usually are greater than assets translated at current rates, *a net liability exposure generally exists when the temporal method is used.*

Under the temporal method, income statement items are translated at exchange rates that exist when the revenue is generated or the expense is incurred. For most items, an assumption can be made that the revenue or expense is incurred evenly throughout the accounting period and an average-for-the-period exchange rate can be used for translation. Some expenses—such as cost of goods sold, depreciation of fixed assets, and amortization of intangibles—are related to assets carried at historical cost. Because these assets are translated at historical exchange rates, the expenses related to them must be translated at historical exchange rates as well.

The major difference between the translation adjustment resulting from the use of the temporal method and a foreign exchange gain or loss on a foreign currency transaction is that the translation adjustment is not necessarily realized through inflows or outflows of cash. The translation adjustment *could be realized* as a gain or loss only if (1) the foreign subsidiary collects all its receivables in cash and then uses its cash to pay off liabilities to the extent possible, and (2) *if there is a net asset exposure* the excess of cash over liabilities is remitted to the parent where it is converted into parent currency, or *if there is a net liability exposure* the parent sends parent currency to its foreign subsidiary which is converted into foreign currency to pay the remaining liabilities.³

4. Current Rate Method

The current rate method (or closing rate) is the easiest to apply because it requires that all assets and liabilities be translated at the current exchange rate. Only net worth would be translated at the historical rate. This approach is easier to use than the others because a company would not have to keep track of various historical exchange rates. The current rate approach results in translated statements that retain the same ratios and relationships that exist in the local currency. For example, the ratio of net income to sales in local currency is rarely the same under other translation approaches because a variety of current, historical, and average exchange rates is used to translate the income statement. Because all account would be translated at a single exchange rate under the current rate method, the ratio of net income to sales would remain the same in the reporting currency as in the foreign currency.

Thus, in this method,

- All assets and liabilities of the foreign operation are translated using the *current exchange rate*.
- Equity accounts are translated at *historical exchange rates*.

The balance sheet exposure measured by the current rate method is equal to the foreign operation's net asset position (total assets minus total liabilities).

Total assets > Total liabilities → Net asset exposure

A positive translation adjustment results when the foreign currency appreciates, and a negative translation adjustment results when the foreign currency depreciates (assuming that assets exceed liabilities). The translation adjustment arising when

the current rate method is used also is unrealized. It can become a realized gain or loss if the foreign operation is sold (for its book value) and the foreign currency proceeds from the sale are converted into parent currency.

Under the current rate method, revenues and expenses are translated using the exchange rate in effect at the date of accounting recognition. In most cases an assumption can be made that the revenue or expense is incurred evenly throughout the year and an average-for-the-period exchange rate is used. However, when an income item, such as a gain or loss on the sale of an asset, occurs at a specific point in time, the exchange rate at that date should be used for translation. Alternatively, all income statement items may be translated at the current exchange rate.

The current rate method and the temporal method are the two methods required to be used under IAS 21, *The Effects of Changes in Foreign Exchange Rates*, and Statement of Financial Accounting Standards (SFAS) 52, *Foreign Currency Translation*. A summary of the appropriate exchange rate for selected financial statement items under these two methods is presented in Figure 24.1.

Balance Sheet		
	Exchange Rate Used under the Current Rate Method	Exchange Rate Used under the Temporal Method
Assets		
Cash and receivables	Current	Current
Marketable securities	Current	Current*
Inventory at market	Current	Current
Inventory at cost	Current	Historical
Prepaid expenses	Current	Historical
Property, plant, and equipment	Current	Historical
Intangible assets	Current	Historical
Liabilities		
Current liabilities	Current	Current
Deferred income	Current	Historical
Long-term debt	Current	Current
Stockholders' Equity		
Capital stock	Historical	Historical
Additional paid-in capital	Historical	Historical
Retained earnings	Historical	Historical
Dividends	Historical	Historical

*Under IAS 39 and SFAS 105, marketable debt securities classified as hold-to-maturity are carried at cost and therefore are translated at the historical exchange rate under the temporal method.

Income Statement		
	Exchange Rate Used under the Current Rate Method	Exchange Rate Used under the Temporal Method
Revenues	Average	Average
Most expenses	Average	Average
Cost of goods sold	Average	Historical
Depreciation of property, plant, and equipment	Average	Historical
Amortization of intangibles	Average	Historical

Figure 24.1: Exchange Rates Used under the Current Rate Method and the Temporal Method for Selected Financial Statement Items

AS 11 : The effects of changes in foreign exchange Rates

AS 11, (revised 2003), came into effect in respect of accounting periods commenced on or after 1.4.2004 and is mandatory in nature from that date. The standard deals with the issues involved in accounting for foreign currency transactions and foreign operations *i.e.*, to decide which exchange rate to use and how to recognize the financial effects of changes in exchange rates in the financial statements.

The following are the main contents of AS 11:

1. Scope

This Standard is to be applied:

- In accounting for transactions in foreign currencies.
- In translating the financial statements of foreign operations.
- This Statement also deals with accounting for foreign currency transactions in the nature of forward exchange contracts.

This Standard does not:

- Specify the currency in which an enterprise presents its financial statements. However, an enterprise normally uses the currency of the country in which it is domiciled. If it uses a different currency, the Standard requires disclosure of the reasons for using that currency. The Standard also requires disclosure of the reason for any change in the reporting currency.
- Deal with the presentation in a cash flow statement of cash flows arising from transactions in a foreign currency and the translation of cash flows of a foreign operation, which are addressed in AS 3 'Cash flow statement'.
- Deal with exchange differences arising from foreign currency borrowings to the extent that they are regarded as an adjustment to interest costs.

- Deal with the restatement of an enterprise's financial statements from its reporting currency into another currency for the convenience of users accustomed to that currency or for similar purposes.

2. Definitions of the terms used in the standard

A **foreign currency transaction** is a transaction which is denominated in or requires settlement in a foreign currency, including transactions arising when an enterprise either:

- Buys or sells goods or services whose price is denominated in a foreign currency,
- Borrows or lends funds when the amounts payable or receivable are denominated in a foreign currency.
- Becomes a party to an unperformed forward exchange contract or
- Otherwise acquires or disposes of assets, or incurs or settles liabilities, denominated in a foreign currency.

Monetary items are money held and assets and liabilities to be received or paid in fixed or determinable amounts of money. For example, cash, receivables and payables.

Non-monetary items are assets and liabilities other than monetary items. For example, fixed assets, inventories and investments in equity shares.

Foreign operation is a subsidiary, associate, joint venture or branch of the reporting enterprise, the activities of which are based or conducted in a country other than the country of the reporting enterprise.

Integral foreign operation is a foreign operation, the activities of which are an integral part of those of the reporting enterprise. A foreign operation that is integral to the operations of the reporting enterprise carries on its business as if it were an extension of the reporting enterprise's operations.

Non-integral foreign operation is a foreign operation that is not an integral foreign operation. When there is a change in the exchange rate between the reporting currency and the local currency, there is little or no direct effect on the present and future cash flows from operations of either the non-integral foreign operation or the reporting enterprise. The change in the exchange rate affects the reporting enterprise's net investment in the non-integral foreign operation rather than the individual monetary and non monetary items held by the non-integral foreign operation.

'Net investment in a non-integral foreign operation' is the reporting enterprise's share in the net assets of that operation.

Forward exchange contract means an agreement to exchange different currencies at a forward rate.

Forward rate is the specified exchange rate for exchange of two currencies at a specified future date.

'Foreign currency' is a currency other than the reporting currency of an enterprise

3. Initial recognition

A foreign currency transaction should be recorded, on initial recognition in the reporting currency, by applying to the foreign currency amount the exchange rate between the reporting currency and the foreign currency at the date of the transaction.

A rate that approximates the actual rate at the date of the transaction is often used, for example, an average rate for a week or a month might be used for all transactions in each foreign currency occurring during that period. However, if exchange rates fluctuate significantly, the use of the average rate for a period is unreliable.

4. Reporting at each balance sheet date

The treatment of foreign currency items at the balance sheet date depends on whether the item is:

- monetary or non monetary; and
 - carried at historical cost or fair value (for non-monetary items).
- (a) Foreign currency monetary items should be reported using the closing rate. However, in certain circumstances, the closing rate may not reflect with reasonable accuracy the amount in reporting currency that is likely to be realised from, or required to disburse, a foreign currency monetary item at the balance sheet date, *e.g.*, where there are restrictions on remittances or where the closing rate is unrealistic and it is not possible to effect an exchange of currencies at that rate at the balance sheet date. In such circumstances, the relevant monetary item should be reported in the reporting currency at the amount which is likely to be realised from or required to disburse, such item at the balance sheet date.
- (b) Non-monetary items which are carried in terms of historical cost denominated in a foreign currency should be reported using the exchange rate at the date of the transaction.
- (c) Non-monetary items which are carried at fair value or other similar valuation denominated in a foreign currency should be reported using the exchange rates that existed when the values were determined.
- (d) The contingent liability denominated in foreign currency at the balance sheet date is disclosed by using the closing rate.

5. Recognition of exchange differences

Exchange differences arise on:

- the settlement of monetary items at a date subsequent to initial recognition; and
- remeasuring an enterprise's monetary items at rates different from those at which they were either initially recorded (if in the period) or previously recorded (at the previous balance sheet date).

An exchange difference results when there is a change in the exchange rate between the transaction date and the date of settlement of any monetary items arising from a foreign currency transaction. When the transaction is settled within the same accounting period as that in which it occurred, all the exchange difference is recognised in that period. However, when the transaction is settled in a subsequent accounting period, the exchange difference recognised in each intervening period up to the period of settlement is determined by the change in exchange rates during that period.

Exchange differences arising on the settlement of monetary items or on reporting an enterprise's monetary items at rates different from those at which they were initially recorded during the period, or reported in previous financial statements, should be recognised as income or as expenses in the period in which they arise.

6. Classification of foreign operations as integral or non-integral

The method used to translate the financial statements of a foreign operation depends on the way in which it is financed and operates in relation to the reporting enterprise. For this purpose, foreign operations are classified as either 'integral foreign operations' or 'non-integral foreign operations'.

An integral foreign operation carries on its business as if it were an extension of the reporting enterprise's operations. For example, such an operation might only sell goods imported from the reporting enterprise and remits the proceeds to the reporting enterprise. In such cases, a change in the exchange rate between the reporting currency and the currency in the country of foreign operation has an almost immediate effect on the reporting enterprise's cash flow from operations. Therefore, the change in the exchange rate affects the individual monetary items held by the foreign operation rather than the reporting enterprise's net investment in that operation.

In contrast, a non-integral foreign operation accumulates cash and other monetary items, incurs expenses, generates income and perhaps arranges borrowings, all substantially in its local currency. It may also enter into transactions in foreign currencies, including transactions in the reporting currency. When there is a change in the exchange rate between the reporting currency and the local currency, there is little or no direct effect on the present and future cash flows from operations of either the non-integral foreign operation or the reporting enterprise. The change in the exchange rate affects the reporting enterprise's net investment in the non-integral foreign operation rather than the individual monetary and non-monetary items held by the non-integral foreign operation.

7. Tax effects of exchange differences

Gains and losses on foreign currency transactions and exchange differences arising on the translation of the financial statements of foreign operations may have associated tax effects which are accounted for in accordance with AS 22.

8. Forward exchange contract

An enterprise may enter into a forward exchange contract or another financial instrument that is in substance a forward exchange contract, which is not intended for trading or speculation purposes, to establish the amount of the reporting currency required or available at the settlement date of a transaction. The premium or discount arising at the inception of such a forward exchange contract should be amortised as expense or income over the life of the contract.

Exchange differences on such a contract should be recognised in the statement of profit and loss in the reporting period in which the exchange rates change. Any profit or loss arising on cancellation or renewal of such a forward exchange contract should be recognised as income or as expense for the period.

In recording a forward exchange contract intended for trading or speculation purposes, the premium or discount on the contract is ignored and at each balance sheet date, the value of the contract is marked to its current market value and the gain or loss on the contract is recognised.

9. Disclosure

An enterprise should disclose:

- (a) The amount of exchange differences included in the net profit or loss for the period.
- (b) Net exchange differences accumulated in foreign currency translation reserve as a separate component of shareholders' funds, and a reconciliation of the amount of such exchange differences at the beginning and end of the period.

When the reporting currency is different from the currency of the country in which the enterprise is domiciled, the reason for using a different currency should be disclosed. The reason for any change in the reporting currency should also be disclosed.

When there is a change in the classification of a significant foreign operation, an enterprise should disclose:

- (a) The nature of the change in classification;
- (b) The reason for the change;
- (c) The impact of the change in classification on shareholders' funds; and
- (d) The impact on net profit or loss for each prior period presented had the change in classification occurred at the beginning of the earliest period presented.

INTERNATIONAL FINANCIAL REPORTING STANDARDS

IAS 21, *The Effects of Changes in Foreign Exchange Rates*, contains guidance for the translation of foreign currency financial statements, to determine the appropriate translation method, IAS 21 originally required foreign subsidiaries to be classified as either (1) foreign operations that are integral to the operations of the reporting enterprise or (2) foreign entities. As part of a

comprehensive improvements project, IAS 21 was revised in 2003, adopting the functional currency approach developed years earlier by the FASB. The revised standard defines *functional currency* as the currency of the primary economic environment in which a subsidiary operates. It can be either the same as the currency in which the parent presents its financial statements or it can be a different, foreign currency. IAS 21 provides a list of factors that should be considered in determining the functional currency. While not identical, these factors are generally consistent with the guidance provided in SFAS 52 for determining the functional currency.

IAS 21 requires the financial statements of a foreign subsidiary that has a functional currency different from the reporting currency of the parent to be translated using the current rate method, with the resulting translation adjustment reported as a separate component of stockholders' equity. Upon disposal of a foreign subsidiary, the cumulative translation adjustment related to that particular foreign subsidiary is transferred to income in the same period in which the gain or loss on disposal is recognized. The financial statements of a foreign subsidiary whose functional currency is the same as the parent's reporting currency are translated using the temporal method, with the resulting translation adjustment reported currently as a gain or loss in income. The same combinations are required by SFAS 52 (USA).

For foreign subsidiaries whose functional currency is the currency of a hyperinflationary economy, IAS 21 requires the parent first to restate the foreign financial statements for inflation using rules in IAS 29, *Financial Reporting in Hyperinflationary Economies*, and then translate the statements into parent company currency using the current rate method. This approach is substantively different from the requirement of SFAS 52 that requires translation of financial statements of a foreign subsidiary operating in a highly inflationary economy using the temporal method. IAS 29 provides no specific definition for hyperinflation but suggests that a cumulative three-year inflation rate approaching or exceeding 100 per cent is evidence that an economy is hyperinflationary.

REFERENCES

1. Lee H. Radebaugh, Sidney J. Gray and Ervin L. Black, *International Accounting and Multinational Enterprises*, VIth Edition, John Wiley and Sons, 2006, p. 255.
2. Lee H. Radebaugh, Sidney J. Gray and Ervin L. Black, *Ibid*, p. 256.
3. Timothy Douplik and Hector Perera, *International Accounting*, McGraw Hill International, 2007, p. 302.

THEORY QUESTIONS

1. What are the two major conceptual issues that must be resolved in translating foreign currency financial statements?
2. What is the concept underlying the current rate method of translation? What is the concept underlying the temporal method of translation? How does balance sheet exposure differ under these two methods?

3. What are the major procedural differences in applying the current rate and temporal methods of translation?
4. How does a parent company determine the appropriate method for translating the financial statements of a foreign subsidiary?
5. What are the major differences between IAS 21 and SFAS 52?
6. Discuss the different methods for translation of foreign currency transactions.
7. "Of the different methods of translation, the current rate method is the most suitable". Comment.
8. Explain IFRS on foreign currency translation.
9. Explain the salient features of AS 11 on foreign currency translation.
10. What is functional currency as per AS 11?
11. What are monetary items?
12. How are foreign currency transactions reported in the functional currency?
13. How are exchange differences recognized in foreign currency translation?
14. Explain the guidelines on disposal or partial disposal of a foreign operation.
15. Discuss fully the disclosure rules concerning foreign currency translation.



PART FIVE

Specialised Topics

- **Chapter 25 : Cash Flow Statement**

Cash Flow Statement

CASH FLOW STATEMENT

Concept

A cash flow statement discloses net increase (or decrease) in cash during an accounting period. As per AS-3 (Revised) the objective of cash flow statement is to provide information about cash flows of an enterprise which is useful in providing the users of financial statements a basis to assess the ability of an enterprise to generate cash and cash equivalents to utilise those cash flows. The statement deals with the provisions of information about the changes in cash and cash equivalents during the accounting year. It classifies cash flows into operating, investing and financing activities.

It is significant to note that AS 3 is titled 'Cash Flow Statement' whereas Ind AS 7, issued in February 2015, is titled 'Statement of Cash Flows'. However, contents of both the standards are almost identical.

SFAC No. 5 'Recognition and Measurement in Financial Statements of Business Enterprises' issued by FASB (USA) states the following about cash flow statement.

(1) A statement of cash flows directly or indirectly reflects an entity's cash receipts classified by major sources and its cash payments classified by major uses during a period. It provides useful information about an entity's activities in generating cash through operations to repay debt, distribute dividends, or reinvest to maintain or expand operating capacity; about its financing activities, both debt and equity; and about its investing or spending of cash. Important uses of information about an entity's current cash receipts and payments include helping to assess factors such as the entity's liquidity, financial flexibility, profitability, and risk. (para 52)

(2) Since neither 'earnings nor comprehensive income measured by accrual accounting is the same as cash flow from operations, cash flow statements provide significant information about amounts, causes, and intervals of time between earnings and comprehensive income and cash receipts and outlays. Users commonly consider that information in assessing the relationship between earnings or comprehensive income and associated cash flows. (para 53)

(3) Statements of cash flows present few recognition problems because all cash receipts and payments are recognized when they occur. Reporting cash flows involves no estimates or allocations and few judgments except regarding classification in cash flow statements. (para 54)

Definitions in Ind AS 7 'Statement of Cash Flow'

The following terms are used in this Statement with the meanings specified:

Cash comprises cash on hand and demand deposits with banks.

Cash equivalents are short-term, highly liquid investments that are readily convertible into known amounts of cash and which are subject to an insignificant risk of changes in value.

Cash flows are inflows and outflows of cash and cash equivalents.

Operating activities are the principal revenue-producing activities of the enterprise and other activities that are not investing or financing activities.

Investing activities are the acquisition and disposal of long-term assets and other investments not included in cash equivalents.

Financing activities are activities that result in changes in the size and composition of the owners' capital (including preference share capital in the case of a company) and borrowings of the enterprise.

Cash and Cash Equivalents

1. Cash equivalents are held for the purpose of meeting short-term cash commitments rather than for investment or other purposes. For an investment to qualify as a cash equivalent, it must be readily convertible to a known amount of cash and be subject to an insignificant risk of changes in value. Therefore, an investment normally qualifies as a cash equivalent only when it has a short maturity of, say, three months or less from the date of acquisition. Investments in shares are excluded from cash equivalents unless they are, in substance, cash equivalents; for example, preference shares of a company acquired shortly before their specified redemption date (provided there is only an insignificant risk of failure of the company to repay the amount at maturity)
2. Cash flows exclude movements between items that constitute cash or cash equivalents because these components are part of the cash management of an enterprise rather than part of its operating, investing and financing activities. Cash management includes the investment of excess cash in cash equivalents.

CLASSIFICATION OF CASH INFLOWS AND OUTFLOWS

A cash flow statement focuses on various activities and items which bring about changes in the cash balance between two balance sheet dates. This statement covers all items which increase or decrease the cash of a business enterprise. For example, this statement includes items like receipts from debtors and payments to creditors. On the contrary, this statement will not cover items which have no immediate effect on cash increase or decrease. For instance, goods purchased on credit and goods sold on credit will not be included in this statement as these transactions have no effect on inflow and outflow of cash.

A cash flow statement aims to determine the effects on cash of different types of cash inflows and outflows. In this process, all cash flows, *i.e.*, activities resulting into cash flows are classified

into different categories. The ICAI's AS-3 'Cash Flow Statement' has classified cash flows into three categories:

- (1) Operating Activities (or Flows)
- (2) Investing Activities (or Flows)
- (3) Financial Activities (or Flows)

Figure 25.1 displays the classification of cash inflows and cash outflows relating to operating activities, investing activities and financing activities.

(1) Operating Activities: Operating activities are those transactions which are considered in the determination of net income. Examples of cash inflows in this category are cash received from debtors for goods and services, interest and dividend received on loans and investment. Examples of cash outflows in this category are cash payments for goods and services; merchandise; wages; interest; taxes; supplies and others.

Classification of Cash Inflows and Cash Outflows:

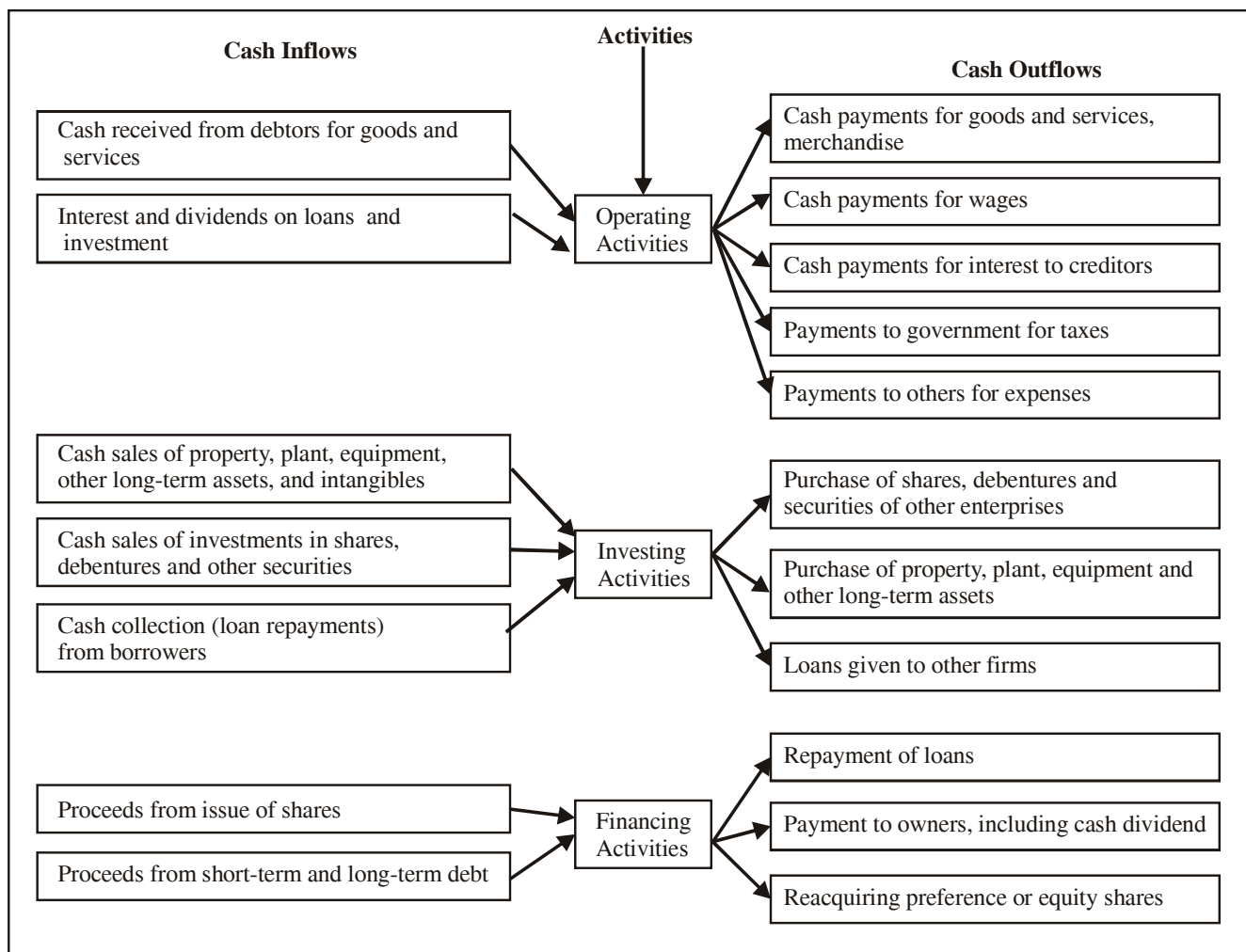


Figure 25.1: Classification of Cash Inflows and Outflows Relating to Operating Activities, Investing Activities and Financing Activities

AS-3 Cash Flow Statement states:

- (i) The amount of cash flows arising from operating activities is a key indicator of the extent to which the operations of the enterprise have generated sufficient cash flows to maintain the operating capability of the enterprise, pay dividends, repay loans and make new investments without recourse to external source of financing. Information about the specific components of historical operating cash flows is useful, in conjunction with other information, in forecasting future operating cash flows.
- (ii) Cash flows from operating activities are primarily derived from the principal revenue producing activities of the enterprise. Therefore, they generally result from the transactions and other events that enter into the determination of net profit or loss. Examples of cash flows from operating activities are:
 - (a) cash receipts from the sale of goods and the rendering of services;
 - (b) cash receipts from royalties, fees, commissions and other revenue;
 - (c) cash payments to suppliers for goods and services;
 - (d) cash payments to and on behalf of employees;
 - (e) cash receipts and cash payments of an insurance enterprise for premiums and claims, annuities and other policy benefits;
 - (f) cash payments or refunds of income taxes, unless they can be specifically identified with financing and investing activities; and
 - (g) cash receipts and payments relating to future contracts, forward contracts, option contracts and swap contracts when the contracts are held for dealing or trading purposes.
- (iii) Some transactions, such as the sale of an item of plant, may give rise to a gain or loss which is included in the determination of net profit or loss. However, the cash flows relating to such transactions are cash flows from investing activities.
- (iv) Cash flows from operating activities are determined according to the activities relating to the business in which the enterprise deals in, *e.g.*, interest and dividend received by financial institutions will be treated as operating cash flow.

Similarly, an enterprise may hold securities and loans for dealing or trading purposes, in which case they are similar to inventory acquired specifically for resale. Therefore, cash flows arising from the purchase and sale of dealing or trading securities are classified as operating activities. In the same manner, cash advances and loans made by finance enterprises are usually classified as operating activities since they relate to the main revenue-producing activity of that enterprise.

Ind AS 7 provides the following on reporting cash flows from operating activities

(1) An entity shall report cash flows from operating activities using either:

- (a) **the direct method, whereby major classes of gross cash receipts and gross cash payments are disclosed; or**
- (b) **the indirect method, whereby profit or loss is adjusted for the effects of transactions of a non-cash nature, any deferrals or accruals of past or future operating cash receipts or payments, and items of income or expense associated with investing or financing cash flows.**

(2) Entities are encouraged to report cash flows from operating activities using the direct method. The direct method provides information which may be useful in estimating future cash flows and which is not available under the indirect method. Under the direct method, information about major classes of gross cash receipts and gross cash payments may be obtained either:

- (a) from the accounting records of the entity; or
- (b) by adjusting sales, cost of sales (interest and similar income and interest expense and similar charges for a financial institution) and other items in the statement of profit and loss for:
 - (i) changes during the period in inventories and operating receivables and payables;
 - (ii) other non-cash items; and
 - (iii) other items for which the cash effects are investing or financing cash flows.

(3) Under the indirect method, the net cash flow from operating activities is determined by adjusting profit or loss for the effects of:

- (a) changes during the period in inventories and operating receivables and payables;
- (b) non-cash items such as depreciation, provisions, deferred taxes, unrealised foreign currency gains and losses, and undistributed profits of associates; and
- (c) all other items for which the cash effects are investing or financing cash flows.

Alternatively, the net cash flow from operating activities may be presented under the indirect method by showing the revenues and expenses disclosed in the statement of profit and loss and the changes during the period in inventories and operating receivables and payables.

(2) *Investing Activities:* Investing activities include acquisition of long-term or fixed assets; disposal of long-term or fixed assets; acquisition and disposal of intangible assets; purchase and sale of shares, debentures and other securities; lending of money and its subsequent collection. Cash inflows from investing activities generally include cash sales of property, plant,

equipment and intangible assets, cash sales of investments in shares, debentures and other securities, cash collection (loan repayments) from borrowers. Cash outflows are purchase of shares, debentures and securities of other enterprises, purchase of property, plant, equipment and other long-term assets, loan given to other firms.

According to AS-3 Cash Flow Statement:

- (i) The separate disclosure of cash flows arising from investing activities is important because the cash flows represent the extent to which expenditures have been made for resources intended to generate future income and cash flows. Examples of cash flows arising from investing activities are:
 - (a) Cash payments to acquire fixed assets (including intangibles). These payments include those relating to capitalised research and development costs and self constructed fixed assets;
 - (b) Cash receipts from disposal of fixed assets (including intangibles);
 - (c) Cash payments to acquire shares warrants or debt instruments of other enterprises and interests in joint ventures (other than payments for those instruments considered to be cash equivalents and those held for dealing or trading purposes);
 - (d) Cash receipts from disposal of shares, warrants or debt instruments of other enterprises and interests in joint ventures (other than receipts from those instruments considered to be cash equivalents and those held for dealing or trading purposes);
 - (e) Cash advances and loans made to third parties (other than advances and loans made by a financial enterprise);
 - (f) Cash receipts from the repayment of advances and loans made to third parties (other than advances and loans of a financial enterprise);
 - (g) Cash payments from future contracts, forward contracts, option contracts and swap contracts except when the contracts are held for dealing or trading purposes, or the payments are classified as financing activities; and
 - (h) Cash receipts from future contracts, forward contracts, option contracts and swap contracts except when the contracts are held for dealing or trading purposes, or the receipts are classified as financing activities.
- (ii) When a contract is accounted for as a hedge of an identifiable position, the cash flows of the contract are classified in the same manner as the cash flow of the position being hedged.

(3) *Financing Activities:* Financing activities relate to longterm liability and equity capital. A firm engages in financing activities when it obtains resources from owners, returns resources

to owners, borrows resources from creditors and repays amounts borrowed. Cash inflows include proceeds from issue of shares and shortterm and longterm borrowings. Cash outflows include repayment of loans and payments to owners, including cash dividends. Repayments of accounts payable or accrued liabilities are not considered repayment of loans under financing activities but are classified as cash outflows under operating activities.

AS-3 Cash Flow Statement observes:

The separate disclosure of cash flows arising from financing activities is important because it is useful in predicting claims on future cash flows by providers of funds (both capital and borrowings) to the enterprise. Examples of cash flows arising from financing activities are:

- (a) cash proceeds from issuing shares or other similar instruments;
- (b) cash proceeds from issuing debentures, loans, notes, bonds, and other short or long-term borrowings; and
- (c) cash repayments of amounts borrowed.

Provisions of AS-3 on Treatment of Certain Items

1. Interest and Dividend

Cash flows from interest and dividends received and paid should be disclosed separately and classified on the basis of nature of the enterprise as shown below:

For Financial enterprises

- interest paid and received, dividend received as operating activities.
- dividend paid as financing activities.

For Other enterprises

- interest and dividend received as investing activities.
- interest and dividend paid as financing activities.

2. Extraordinary items

The cash flows associated with extraordinary items should be classified as arising from operating, investing or financing activities as appropriate. It should be disclosed separately. Few examples of such items are:

- (i) Claim for loss of Stock — Operating activity
- (ii) Claims for loss of assets — Investing activity
- (iii) Recovery of bad debts — Operating activity
- (iv) Damages paid/received for breach of contract — Operating activity
- (v) Winnings from lotteries — Investing activity
- (vi) Cost of legal action to protect property title — Investing activity.

3. Taxes on Income

Cash flows arising from taxes on income should be separately disclosed and should be classified as cash flows from operating

activities unless they can be specifically identified with financing and investing activities. For instance:

- (i) Provision for taxation for the current year — Non-cash charge under operating activity
- (ii) Tax paid — Operating cash outflow
- (iii) Income tax refund — Cash inflow from operating activity
- (iv) Capital gains tax — Cash outflow from investing activity
- (v) Corporate dividend tax — Cash outflow from financing activity.

4. Foreign Currency Cash Flows

Foreign currency cash flows should be converted at the exchange rate of the date of cash flow. Exchange gain/loss on cash and cash equivalents held in foreign currency will be reported as part of reconciliation of change in cash and cash equivalents for the period and hence, not reported in cash flow statement.

5. Non-cash Transactions

Investing and financing transactions that do not require the use of cash or cash equivalents are not shown in the cash flow statement. Examples of such non cash transactions are:

- (i) Issue of shares or debentures for a consideration other than cash, *i.e.*, against building, machinery, etc.
- (ii) Conversion of debentures into equity shares.
- (iii) Purchase of business by issue of shares.

AS 3 (Revised) recommends that such transactions may be disclosed under footnote to cash flow statement.

6. Investments in Subsidiaries, Associates and Joint Venture

Acquisition of interest in any subsidiary, associates or in any joint venture is treated as ‘Investing Activity’. Similarly, sale or

disposal of such interest and receipt of interest or dividends on such investments is treated as ‘Investing Activity’.

DIFFERENCES BETWEEN IFRS AND U.S. GAAP ON CASH FLOW STATEMENT

There are some differences in cash flow statements prepared under IFRS and U.S. GAAP that the analyst should be aware of when comparing the cash flow statements of companies prepared in accordance with different sets of standards. The key differences are summarized in Figure 25.2. Most significantly, IFRS allow more flexibility in the reporting of such items as interest paid or received and dividends paid or received and in how income tax expense is classified.

U.S. GAAP classify interest and dividends received from investments as operating activities, whereas IFRS allow companies to classify those items as either operating or investing cash flows. Likewise, U.S. GAAP classify interest expense as an operating activity, even though the principal amount of the debt issued is classified as a financing activity. IFRS allow companies to classify interest expense as either an operating activity or a financing activity. U.S. GAAP classify dividends paid to stockholders as a financing activity, whereas IFRS allow companies to classify dividends paid as either an operating activity or a financing activity.

U.S. GAAP classify all income tax expenses as an operating activity. IFRS also classify income tax expense as an operating activity, unless the tax expense can be specifically identified with an investing or financing activity (e.g., the tax effect of the sale of a discontinued operation could be classified under investing activities).

Under either set of standards, companies currently have a choice of formats for presenting cash flow statements.

Topic	IFRS	U.S. GAAP
Classification of cash flows:		
● Interest received	Operating or investing	Operating
● Interest paid	Operating or financing	Operating
● Dividends received	Operating or investing	Operating
● Dividends paid	Operating or financing	Financing
● Bank overdrafts	Considered part of cash equivalents	Not considered part of cash and cash equivalents and classified as financing
● Taxes paid	Generally operating, but a portion can be allocated to investing or financing if it can be specifically identified with these categories	Operating
Format of statement	Direct or indirect; direct is encouraged	Direct or indirect; direct is encouraged. A reconciliation of net income to cash flow from operating activities must be provided regardless of method used

Figure 25.2 : Cash Flow Statements: Differences between IFRS and U.S. GAAP

CASH FLOW STATEMENT AND CASH RECEIPTS AND DISBURSEMENTS

A cash flow statement differs from the summary of cash receipts and disbursements. A cash flow statement is prepared by rearrangement of items on the income statement and balance sheet, rather than from entries made to the cash account. Cash flow statement may also highlight the amount of cash generated by the firm's operations. This is not reported in statement of cash receipts and disbursements.

CASH FLOW AND INCOME STATEMENTS

Cash flow statement apparently differs from income statement. An income statement includes adjustments in respect of expenses accrued in the calculation of periodic income, whereas cash flow statement excludes such adjustments. The largest item of difference between them is the allocation of fixed assets costs as depreciation. Also, the procedures adopted in the two statements are reflected in changes in balance sheet items. These would include changes in balances of trade debtors and trade creditors.

CASH PROFIT (CASH NET INCOME)

Accrual-based profit and loss account reveals accrual net income. By adjusting the items on the profit and loss account, one can arrive at cash profit or cash net income. It should be noted that cash profit relates to operating activities in the same way as profit and loss account focuses on net income determination from operating activities. But profit and loss account does not show cash inflow and outflow relating to operating activities because profit and loss account is prepared on accrual basis.

Cash profit and cash flow is not the same thing. Cash profit is confined to indicating cash flow relating to operating activities. But cash flow is a total concept indicating total inflows and outflows. For example, issue of equity shares is a source of cash inflow but will not be used for determining cash profit. Similarly, plant purchased will be cash outflow for its full value, but will not be used for determining cash profit.

PRESENTATION OF CASH FLOW STATEMENT

A cash flow statement can be presented in either the direct or indirect format. The investing and financing sections will be the same under either format. However, the operating section will be different.

Direct Method

Direct method is that method whereby major class of gross cash receipts and gross cash payment are disclosed.

Enterprises that utilize the direct method should report separately the following classes of operating cash receipts and payments:

1. Cash collected from customers, including lessees, licensee, and other similar items
2. Interest and dividends received
3. Other operating cash receipts, if any
4. Cash paid to employees and other suppliers of goods or services, including supplies of insurance, advertising, and other similar expenses.
5. Interest paid
6. Income taxes paid
7. Other operating cash payments, if any

Companies that use the direct method must provide a reconciliation of net income to net cash flow from operating activities in a separate schedule in the financial statements.

According to AS-3 Cash Flow Statement:—

The direct method provides information which may be useful in estimating future cash flows and which is not available under the indirect method and is, therefore, considered more appropriate than the indirect method. Under the direct method, information about major classes of gross cash receipts and gross cash payments may be obtained either:

- (a) from the accounting records of the enterprise; or
- (b) by adjusting sales, cost of sales (interest and similar income and interest expense and similar charges for a financial enterprise) and other items in the statement of profit and loss for:
 - (i) changes during the period in inventories and operating receivables and payables;
 - (ii) other non-cash items; and
 - (iii) other items for which the cash effects are investing or financing cash flows.

Indirect Method

Under the indirect method, the net cash flow from operating activities is determined by adjusting net profit or loss for the effects of:

- (a) changes during the period in inventories and operating receivables and payables;
- (b) noncash items such as depreciation, provisions, deferred taxes, and unrealised foreign exchange gains and losses; and
- (c) all other items for which the cash effects are investing or financing cash flows.

Alternatively, the net cash flow from operating activities may be presented under the indirect method by showing the operating revenues and expenses excluding non cash items disclosed in the statement of profit and loss and the changes during the period in inventories and operating receivables and payables.

The indirect method starts with net income and reconciles it to net cash flow from operating activities. The cash flow from operating activities is found by adjusting net income for (i)

changes in current assets and current liabilities and (ii) depreciation expense. Depreciation expense is not a cash flow. Because it decreases net income, it is added back to net income, in order to arrive at the operating cash flow. The following summarizes the process:

<i>Change</i>	<i>Adjustment to Net Income</i>
Decrease in a current asset	Add
Increase in a current asset	Subtract
Decrease in a current liability	Subtract
Increase in a current liability	Add

The indirect method is more widely used, since it shows the relationship between the income statement and the balance sheet and therefore aids in the analysis of these statements.

Reporting Cash Flows from Investing and Financing Activities

An enterprise should report separately major classes of gross cash receipts and gross cash payments arising from investing and financing activities.

Comparison Between Direct and Indirect Method

Both the approaches, direct and indirect result in the same amount for cash flow from operations after making necessary adjustments. However, both the approaches have the arguments, pros and cons.

The arguments in favour of direct approach are that it identifies the major categories of cash receipts and cash payments arising from operating activities; it provides a more useful basis for estimating future cash flows; and it provides information that is not otherwise available in the balance sheet and profit and loss

account. The direct method is a better indicator of company solvency, has a sounder conceptual framework and reflects accepted business practice. It permits an evaluation of cash flow relating to specific line items of income statement such as sales and cost of goods sold. The empirical evidence indicates that the direct method is superior over the indirect method in predicting future operating cash flows and future net operating cash flows.

On the other hand, followers of the indirect approach argue that indirect method is less costly and more convenient to use by firms. It is argued that the direct approach would require information that is hard to collect and sensitive. One difficulty with the direct approach is that some of the cash flows may have characteristics of more than one category of cash flow.

However, the indirect method has also been criticised on two grounds. First, it contains unnecessary detail and may confuse the users. Another limitation of the indirect method is that the adding of expenses such as depreciation suggests that expenses are a source of cash. The conceptual and practical problems which underlie the indirect method are as follows:

- (i) Ambiguity in the definition of "operations."
- (ii) Diversity in reporting practices.
- (iii) Impact of changes in the reporting entity on the noncash current accounts.
- (iv) Use of absorption costing in accounting for manufactured inventory.
- (v) Measurement of current portion of longterm leases.
- (vi) Reclassifications between current and noncurrent accounts.

Figure 25.3 and 25.4 show respectively direct and indirect method of preparing cash flow statement.

ABC Company
For the Year Ended December 31, 2016

	₹	₹
(A) Cash Flow from Operating Activities		
Cash Receipts from:		
Sales		
Interest Received		
Cash Payments for:		
Purchases		
Operating Expenses		
Interest Payments		
Income Taxes		
Net Cash Flow from Operating Activities		
(B) Cash Flows from Investing Activities:		
Sale of Plant Assets		
Sale of Investments		
Purchase of Plant Assets		
Purchase of Investments		
Net Cash Flows Used by Investing Activities		
(C) Cash Flows from Financing Activities:		
Repayment of Bonds and Debentures		
Issue of Common Shares		
Dividends Paid		
Net Cash Flows from Financing Activities		
Net Increase (Decrease) in Cash		

Figure 25.3: Cash Flow Statement (Direct Method)

ABC Company
For the Year Ended December 31, 2016

	₹	₹
(A) Cash Flow from Operating Activities		
Net Income		
Adjustments to Reconcile Net Income to Net		
Cash provided by Operating Activities:		
Depreciation		
Gain on Sale of Investments		
Loss on Sale of Plant Asset		
Decrease in Accounts Receivable		
Increase in Inventory		
Decrease in Prepaid Expenses		
Increase in Accounts Payable		
Increase in Accrued Liabilities		
Decrease in Income Taxes Payable		
Net Cash Flow from Operating Activities		
(B) Cash Flows from Investing Activities:		
Sale of Plant Assets		
Sale of Investments		
Purchase of Plant Assets		
Purchase of Investments		
Net Cash Flows Used by Investing Activities		
(C) Cash Flows from Financing Activities:		
Repayment of Bonds and Debentures		
Issue of Common Shares		
Dividends Paid		
Net Cash Flows from Financing Activities		
Net Increase (Decrease) in Cash		

Figure 25.4: Cash Flow Statement (Indirect Method)

CASH FLOW STATEMENT: LINKAGES AND PREPARATION

The indirect format of the cash flow statement demonstrates that changes in balance sheet accounts are an important factor in determining cash flows. The next section addresses the linkages between the cash flow statement and other financial statements.

Linkages of the Cash Flow Statement with the Income Statement and Balance Sheet

Recall the accounting equation that summarizes the balance sheet:

Assets = Liabilities + Equity

Cash is an asset. The statement of cash flows ultimately shows the change in cash during an accounting period. The beginning and ending balances of cash are shown on the company’s balance sheets for the previous and current years, and the bottom of the cash flow statement reconciles beginning cash with ending cash. The relationship, stated in general terms, is as shown below in Figure 25.5.

The current assets and current liabilities sections of the balance sheet typically reflect a company’s operating decisions and activities. Because a company’s operating activities are reported on an accrual basis in the income statement, any differences between the accrual basis and the cash basis of

accounting for an operating transaction result in an increase or decrease in some (usually) short-term asset or liability on the balance sheet. For example, if revenue reported using accrual accounting is higher than the cash actually collected, the result will typically be an increase in accounts receivable. If expenses reported using accrual accounting are lower than cash actually paid, the result will typically be a decrease in accounts payable or another accrued liability account. As an example of how items on the balance sheet are related to the income statement and/or cash flow statement through the change in the beginning and ending balances, consider accounts receivable (Fig. 25.6):

Knowing any three of these four items makes it easy to compute the fourth. For example, if you know beginning accounts receivable, revenues, and cash collected from customers, you can easily compute ending accounts receivable. Understanding the interrelationships between the balance sheet, income statement, and cash flow statement is useful in not only understanding the company’s financial health but also in detecting accounting irregularities.

A company’s investing activities typically relate to the long-term asset section of the balance sheet, and its financing activities typically relate to the equity and long-term debt sections of the balance sheet. The next section demonstrates the preparation of

Linkages of the Cash Flow Statement with the Income Statement and Balance Sheet

Beginning Balance Sheet at 31 December 2014	Statement of Cash Flows for Year Ended 31 December 2015		Ending Balance Sheet at 31 December 2016
Beginning cash	Plus: Cash receipts (from operating, investing, and financing activities)	Less: Cash payments (for operating, investing, and financing activities)	Ending cash

Figure 25.5

Beginning Balance Sheet At 31 December 2014	Income Statement For Year Ended 31 December 2015	Statement of Cash Flow For Year Ended 31 December 2016	Ending Balance Sheet At 31 December 2016
Beginning accounts receivable	Plus: Revenues	Minus: Cash collected from customers	Equals: Ending accounts receivable

Figure 25.6

cash flow information based on income statement and balance sheet information.

Steps in Preparing the Cash Flow Statement

The preparation of the cash flow statement uses data from both the income statement and the comparative balance sheets.

As noted earlier, companies often only disclose indirect operating cash flow information, whereas analysts prefer direct—format information. Understanding how cash flow information

is put together will enable you to take an indirect statement apart and reconfigure it in a more useful manner. The result is an approximation of a direct cash flow statement, which—while not perfectly accurate—can be helpful to an analyst. The following demonstrates how direct cash flow statement is prepared using the income statement and the comparative balance sheets for ABC Company, a fictitious company, shown here in Fig. 25.7 and Fig. 25.8.

**ABC Company Income Statement Year Ended
31 December 2016**

Revenue		₹ 23,598
Cost of goods sold		11,456
Gross profit		12,142
Salary and wage expense	₹ 4,123	
Depreciation expense	1,052	
Other operating expenses	3,577	
Total operating expenses		8,752
Operating profit		3,390
Other revenues (expenses):		
Gain on sale of equipment	205	
Interest expense	(246)	(41)
Income before tax		3,349
Income tax expense		1,139
Net income		₹ 2,210

Figure 25.7

**ABC Company Comparative Balance Sheets
31 December 2016 and 2015**

	2016	2015	Net Change
Cash	₹ 1,011	₹ 1,163	₹ (152)
Accounts receivable	1,012	957	55
Inventory	3,984	3,277	707
Prepaid expenses	155	178	(23)
Total current assets	6,162	5,575	587
Land	510	510	–
Buildings	3,680	3,680	–
Equipment*	8,798	8,555	243
Less: accumulated depreciation	(3,443)	(2,891)	(552)
Total long-term assets	9,545	9,854	(309)
Total assets	₹ 15,707	₹ 15,429	₹ 278
Accounts payable	₹ 3,588	₹ 3,325	₹ 263
Salary and wage payable	85	75	10
Interest payable	62	74	(12)
Income tax payable	55	50	5
Other accrued liabilities	1,126	1,104	22
Total current liabilities	4,916	4,628	288
Long-term debt	3,075	3,575	(500)
Common equity	3,750	4,350	(600)
Retained earnings	3,966	2,876	1,090
Total liabilities and equity	₹ 15,707	₹ 15,429	₹ 278

Figure 25.8

*During 2016 the company purchased new equipment for a total cost of ₹ 1,300. No items impacted retained earnings other than net income and dividends.

Solution

The first step in preparing the cash flow statement is to determine the total cash flows from operating activities. The direct method of presenting cash from operating activities is illustrated below. Further is given the indirect method of presenting cash flows from operating activities. Cash flows from investing activities and from financing activities are identical under either method.

Operating Activities : Direct Method

We first determine how much cash ABC received from its customers, followed by how much cash was paid to suppliers and to employees as well as how much cash was paid for other operating expenses, interest, and income taxes.

Cash Received from Customers : The income statement reported revenue of ₹ 23,598 for the year ended 31 December 2016. To determine the approximate cash receipts from its customers, it is necessary to adjust this revenue amount by the net change in accounts receivable for the year. If accounts receivable increase during the year, revenue on an accrual basis is higher than cash receipts from customers, and *vice versa*. For ABC Company, accounts receivable increased by ₹ 55, so cash received from customers was ₹ 23,543, as follows:

Revenue	₹ 23,598
Less: Increase in accounts receivable	(55)
Cash received from customers	₹ 23,543
Cash received from customers affects the accounts receivable account as follows:	
Beginning accounts receivable	₹ 957
Plus revenue	23,598
Minus cash collected from customers	(23,543)
Ending accounts receivable	₹ 1,012
The accounts receivable account information can also be presented as follows:	
Beginning accounts receivable	₹ 957
Plus revenue	23,598
Minus ending accounts receivable	(1,012)
Cash collected from customers	₹ 23,543

Cash received from customers” is sometimes referred to as “cash collections from customers” or “cash collections.”

Cash Paid to Suppliers : For ABC Co., the cash paid to suppliers was ₹ 11,900, determined as follows:

Cost of goods sold	₹ 11,456
Plus: Increase in inventory	707
Equals purchases from suppliers	₹ 12,163
Less: Increase in accounts payable	(263)
Cash paid to suppliers	₹ 11,900

There are two pieces to this calculation: the amount of inventory purchased and the amount paid for it. To determine purchases from suppliers, cost of goods sold is adjusted for the change in inventory. If inventory increased during the year, then purchases during the year exceeded cost of goods sold, and *vice versa*. The company reported cost of goods sold of ₹ 11,456 for the year ended 31 December 2016. Inventory increased by ₹ 707, so purchases from suppliers was ₹ 12,163. Purchases from suppliers affect the inventory account, as shown below:

Beginning inventory	₹ 3,277
Plus purchases	12,163
Minus cost of goods sold	(11,456)
Ending inventory	<u>₹ 3,984</u>

The company purchased ₹ 12,163 of inventory from suppliers in 2016 but is this the amount of cash that was paid to its suppliers during the year? Not necessarily. The company may not have yet paid for all of these purchases and may yet owe for some of the purchases made this year. In other words, the company may have paid less cash to its suppliers than the amount of this year's purchases, in which case liability (accounts payable) will have increased by the difference. Alternatively, the company may have paid even more to its suppliers than the amount of this year's purchases, in which case accounts payable will have decreased.

Therefore, once purchases have been determined, cash paid to suppliers can be calculated by adjusting purchases for the change in accounts payable. If the company made all purchases with cash, then accounts payable would not change and cash outflows would equal purchases. If accounts payable increased during the year, then purchases on an accrual basis would be higher than they would be on a cash basis, and *vice versa*. In this example, The company made more purchases than it paid in cash, so the balance in accounts payable increased. The cash paid to suppliers was ₹ 11,900, determined as follows:

Purchases from suppliers	₹ 12,163
Less: Increase in accounts payable	(263)
Cash paid to suppliers	<u>₹ 11,900</u>

The amount of cash paid to suppliers is reflected in the accounts payable account, as shown below:

Beginning accounts payable	₹ 3,325
Plus purchases	12,163
Minus cash paid to suppliers	(11,900)
Ending accounts payable	<u>₹ 3,588</u>

Cash Paid to Employees : To determine the cash paid to employees, it is necessary to adjust salary and wages expense by the net change in salary and wages payable for the year. If salary and wages payable increased during the year, then salary and

wages expense on an accrual basis would be higher than the amount of cash paid for this expense, and *vice versa*. Salary and wages payable increased by ₹ 10, so cash paid for salary and wages was ₹ 4,113, as follows:

Salary and wage expense	₹ 4,123
Less: Increase, in salary and wage payable	(10)
Cash paid to employees	<u>₹ 4,113</u>

The amount of cash paid to employees is reflected in the salary and wages payable account, as shown below:

Beginning salary and wages payable	₹ 75
Plus salary and wage expense	4,123
Minus cash paid to employees	(4,113)
Ending salary and wages payable	<u>₹ 85</u>

Cash Paid for Other Operating Expenses : To determine the cash paid for other operating expenses, it is necessary to adjust the other operating expenses amount on the income statement by the net changes in prepaid expenses and accrued expense liabilities for the year. If prepaid expenses increased during the year, other operating expenses on a cash basis would be higher than on an accrual basis, and *vice versa*. Likewise, if accrued expense liabilities increased during the year, other operating expenses on a cash basis would be lower than on an accrual basis, and *vice versa*. For ABC Co., the amount of cash paid for operating expenses in 2016 was ₹ 3,532, as follows:

Other operating expenses	₹ 3,577
Less: Decrease in prepaid expenses	(23)
Less: Increase in other accrued liabilities	(22)
Cash paid for other operating expenses	<u>₹ 3,532</u>

Cash Paid for Interest : To determine the cash paid for interest, it is necessary to adjust interest expense by the net change in interest payable for the year. If interest payable increases during the year, then interest expense on an accrual basis will be higher than the amount of cash paid for interest, and *vice versa*. For ABC Co., interest payable decreased by ₹ 12, and cash paid for interest was ₹ 258, as follows:

Interest expense	₹ 246
Plus: Decrease in interest payable	12
Cash paid for interest	<u>₹ 258</u>

Alternatively, cash paid for interest may also be determined by an analysis of the interest payable account, as shown below:

Beginning interest payable	₹ 74
Plus interest expense	246
Minus cash paid for interest	(258)
Ending interest payable	<u>₹ 62</u>

Cash Paid for Income Taxes : To determine the cash paid for income taxes, it is necessary to adjust the income tax expense amount on the income statement by the net changes in taxes receivable, taxes payable, and deferred income taxes for the year. If taxes receivable or deferred tax assets increase during the year, income taxes on a cash basis will be higher than on an accrual basis, and *vice versa*. Likewise, if taxes payable or deferred tax liabilities increase during the year, income tax expense on a cash basis will be lower than on an accrual basis, and *vice versa*. For ABC Co., the amount of cash paid for income taxes in 2016 was ₹ 1,134, as follows:

Income tax expense	₹ 1,139
Less: Increase in income tax payable	(5)
Cash paid for income taxes	<u>₹ 1,134</u>

Investing Activities

The second and third steps in preparing the cash flow statement are to determine the total cash flows from investing activities and from financing activities. The presentation of this information is identical, regardless of whether the direct or indirect method is used for operating cash flows.

Purchases and sales of equipment were the only investing activities undertaken by ABC Co. in 2016, as evidenced by the fact that the amounts reported for land and buildings were unchanged during the year. An informational note tells us that ABC Co. *purchased* new equipment in 2016 for a total cost of ₹ 1,300. However, the amount of equipment shown on balance sheet increased by only ₹ 243 (ending balance of ₹ 8,798 minus beginning balance of ₹ 8,555); therefore, ABC Co. must have also *sold or otherwise disposed* of some equipment during the year. To determine the cash inflow from the sale of equipment, we analyze the equipment and accumulated depreciation accounts as well as the gain on the sale of equipment. Assuming that the entire accumulated depreciation is related to equipment, the cash received from sale of equipment is determined as follows.

The historical cost of the equipment sold was ₹ 1,057. This amount is determined as follows:

Beginning balance equipment (from balance sheet)	₹ 8,555
Plus equipment purchased (from informational note)	1,300
Minus ending balance equipment (from balance sheet)	(8,798)
Equals historical cost of equipment sold	<u>₹ 1,057</u>

The accumulated depreciation on the equipment sold was ₹ 500, determined as follows:

Beginning balance accumulated depreciation (from balance sheet)	₹ 2,891
Plus depreciation expense (from income statement)	1,052
Minus ending balance accumulated depreciation (from balance sheet)	(3,443)
Equals accumulated depreciation on equipment sold	<u>₹ 500</u>

The historical cost information, accumulated depreciation information, and information from the income statement about the gain on the sale of equipment can be used to determine the cash received from the sale.

Historical cost of equipment sold (calculated above)	₹ 1,057
Less accumulated depreciation on equipment sold (calculated above)	(500)
Equals book value of equipment sold	<u>₹ 557</u>
Plus gain on sale of equipment (from the income statement)	205
Equals cash received from sale of equipment	<u>₹ 762</u>

Financing Activities

As with investing activities, the presentation of financing activities is identical, regardless of whether the direct or indirect method is used for operating cash flows.

Long-term Debt and Common Equity : The change in long-term debt, based on the beginning 2016 (ending 2015) and ending 2016 balances was a decrease of ₹ 500. Absent other information, this indicates that the Company retired ₹ 500 of long-term debt. Retiring long-term debt is a cash outflow relating to financing activities.

Similarly, the change in common stock during 2016 was a decrease of ₹ 600. Absent other information, this indicates that the Company repurchased ₹ 600 of its common stock. Repurchase of common stock is also a cash outflow related to financing activity.

Dividends Recall the following relationship:

$$\text{Beginning retained earnings} + \text{Net income} - \text{Dividends} = \text{Ending retained earnings}$$

Based on this relationship, the amount of cash dividends paid in 2016 can be determined from an analysis of retained earnings, as follows:

Beginning balance of retained earnings (from the balance sheet)	₹ 2,876
Plus net income (from the income statement)	2,210
Minus ending balance of retained earnings (from the balance sheet)	(3,966)
Equals dividends paid	<u>₹ 1,120</u>

Note that dividends paid are presented in the statement of changes in equity.

Overall Statement of Cash Flows Direct Method

Figure 25.9 summarizes the information about ABC Co.'s operating, investing, and financing cash flows in the statement of cash flows. At the bottom of the statement, the total net change in cash is shown to be a decrease of ₹ 152 (from ₹ 1,163 to ₹ 1,011). This decrease can also be seen on the comparative balance sheet in Figure 25.8. The cash provided by operating activities of ₹ 2,606 was adequate to cover the net cash used in investing activities of ₹ 538; however, the company's debt repayments, cash payments for dividends, and repurchase of common stock (i.e., its financing activities) of ₹ 2,220 resulted in an overall decrease in cash of ₹ 152.

Cash flow from operating activities:	
Cash received from customers	₹ 23,543
Cash paid to suppliers	(11,900)
Cash paid to employees	(4,113)
Cash paid for other operating expenses	(3,532)
Cash paid for interest	(258)
Cash paid for income tax	(1,134)
Net cash provided by operating activities	2,606
Cash flow from investing activities:	
Cash received from sale of equipment	762
Cash paid for purchase of equipment	(1,300)
Net cash used for investing activities	(538)
Cash flow from financing activities:	
Cash paid to retire long-term debt	(500)
Cash paid to retire common stock	(600)
Cash paid for dividends	(1,120)
Net cash used for financing activities	(2,220)
Net increase (decrease) in cash	(152)
Cash balance, 31 December 2015	1,163
Cash balance, 31 December 2016	₹ 1,011

Figure 25.9 : ABC Co. Cash Flow Statement (Direct Method) for Year Ended 31 December 2016

Overall Statement of Cash Flows: Indirect Method

Using the alternative approach to reporting cash from operating activities, the indirect method, we will present the same amount of cash provided by operating activities. Under this approach, we reconcile ABC Company's net income of ₹ 2,210 to its operating cash flow of ₹ 2606.

To perform this reconciliation, net income is adjusted for the following: (a) any non-operating activities, (b) any non-cash expenses, and (c) changes in operating working capital items.

The only non-operating activity in ABC Co.'s income statement, the sale of equipment, resulted in a gain of ₹ 205. This amount is removed from the operating cash flow section; the cash effects of the sale are shown in the investing section.

The Company's only non-cash expense was depreciation expense of ₹ 1,052. Under the indirect method, depreciation expense must be added back to net income because it was a non-cash deduction in the calculation of net income.

Changes in working capital accounts include increases and decreases in the current operating asset and liability accounts. The changes in these accounts arise from applying accrual accounting; that is, recognizing revenues when they are earned and expenses when they are incurred instead of when the cash is received or paid. To make the working capital adjustments under the indirect method, any increase in a current operating asset account is subtracted from net income and a net decrease is added to net income. As described above, the increase in accounts receivable, for example, resulted from recording income statement revenue higher than the amount of cash received from customers; therefore, to reconcile back to operating cash flow, that increase in accounts receivable must be deducted from net income. For current operating liabilities, a net increase is added to net income and a net decrease is subtracted from net income. As described above, the increase in wages payable, for example, resulted from recording income statement expenses higher than the amount of cash paid to employees.

Figure 25.10 presents a tabulation of the most common types of adjustments that are made to net income when using the indirect method to determine net cash flow from operating activities.

Additions	● Non-cash items ● Depreciation expense of tangible assets ● Amortisation expense of intangible assets ● Depletion expense of natural resources ● Amortisation of bond discount ● Non-operating losses ● Loss on sale or write-down of assets ● Loss on retirement of debt ● Loss on investments accounted for under the equity method ● Increase in deferred income tax liability ● Changes in working capital resulting from accruing higher amounts for expenses than the amounts of cash payments or lower amounts for revenues than the amounts of cash receipts ● Decrease in current operating assets (e.g., accounts receivable, inventory, and prepaid expenses) ● Increase in current operating liabilities (e.g., accounts payable and accrued expense liabilities)
Subtractions	● Non-cash items (e.g., amortisation of bond premium) ● Non-operating items ● Gain on sale of assets ● Gain on retirement of debt ● Income on investments accounted for under the equity method

- Decrease in deferred income tax liability
- Changes in working capital resulting from accruing lower amounts for expenses than for cash payments or higher amounts for revenues than for cash receipts
 - Increase in current operating assets (*e.g.*, accounts receivable, inventory, and prepaid expenses)
 - Decrease in current operating liabilities (*e.g.*, accounts payable and accrued expense liabilities)

Figure 25.10 : Adjustments to Net Income Using the Indirect Method

Accordingly, the ₹ 55 increase in accounts receivable and the ₹ 707 increase in inventory are subtracted from net income and the ₹ 23 decrease in prepaid expenses is added to net income. For current liabilities, the increases in accounts payable, salary and wage payable, income tax payable, and other accrued liabilities ₹ 263, ₹ 10, ₹ 5, and ₹ 22, respectively) are added to net income and the ₹ 12 decrease in interest payable is subtracted from net income. Figure 25.11 presents the cash flow statement for under the indirect method by using the information that we have determined from our analysis of the income statement and the comparative balance sheets. Note that the investing and financing sections are identical to the statement of cash flows prepared using the direct method.

Cash flow from operating activities:	
Net income	₹ 2,210
Depreciation expense	1,052
Gain on sale of equipment	(205)
Increase in accounts receivable	(55)
Increase in inventory	(707)
Decrease in prepaid expenses	23
Increase in accounts payable	263
Increase in salary and wage payable	10
Decrease in interest payable	(12)
Increase in income tax payable	5
Increase in other accrued liabilities	22
Net cash provided by operating activities	2,606
Cash flow from investing activities:	
Cash received from sale of equipment	762
Cash paid for purchase of equipment	(1,300)
Net cash used for investing activities	(538)
Cash flow from financing activities:	
Cash paid to retire long-term debt	(500)
Cash paid to retire common stock	(600)
Cash paid for dividends	(1,120)
Net cash used for financing activities	(2,220)
Net decrease in cash	(152)
Cash balance, 31st December 2015	1,163
Cash balance, 31st December 2016	₹ 1,011

Figure 25.11 : ABC Company Cash Flow Statement (Indirect Method) Year Ended 31 December 2016

CONVERSION OF CASH FLOWS FROM THE INDIRECT TO THE DIRECT METHOD

An analyst may desire to review direct-format operating cash flow to review trends in cash receipts and payments (such as cash received from customers or cash paid to suppliers). If a direct-format statement is not available, cash flows from operating activities reported under the indirect method can be converted to the direct method. Accuracy of conversion depends on adjustments using data available in published financial reports. The method described here is sufficiently accurate for most analytical purposes.

The three-step conversion process is demonstrated for ABC Company in Figure 25.12. Referring again the Company's income statement and balance sheet information, begin by disaggregating net income of ₹ 2,210 into total revenues and total expenses (Step 1). Next, remove any non-operating and non-cash items (Step 2). For ABC Co., therefore we remove the non-operating gain on the sale of equipment of ₹ 205 and the non-cash depreciation expense of ₹ 1,052. Then, convert accrual amounts of revenues and expenses to cash flow amounts of receipts and payments by adjusting for changes in working capital accounts (Step 3). The results of these adjustments are the items of information for the direct format of operating cash flows. These line items are shown as the results of Step 3.

CASH FLOW STATEMENT ANALYSIS

The analysis of a company's cash flows can provide useful information for understanding a company's business and earnings and for predicting its future cash flows. This section describes tools and techniques for analyzing the statement of cash flows, including the analysis of sources and uses of cash and cash flow and cash flow ratios.

Evaluation of the Sources and Uses of Cash

Evaluation of the cash flow statement should involve an overall assessment of the sources and uses of cash between the three main categories as well as an assessment of the main drivers of cash flow within each category, as follows:

1. Evaluate where the major sources and uses of cash flow are between operating, investing, and financing activities.
2. Evaluate the primary determinants of operating cash flow.
3. Evaluate the primary determinants of investing cash flow.
4. Evaluate the primary determinants of financing cash flow.

Step 1 : The major sources of cash for a company can vary with its stage of growth. For a mature company, it is expected and desirable that operating activities are the primary source of cash flows. Over the long-term, a company must generate cash from its operating activities. If operating cash flow were consistently negative, a company would need to borrow money or issue stock (financing activities) to fund the shortfall. Eventually, these providers of capital need to be repaid from operations or they will no longer be willing to provide capital. Cash generated from operating activities can be used in either

<i>Step 1</i>	Total revenues	₹ 23,803
Aggregate all revenue and all expenses	Total expenses	21,593
	Net income	₹ 2,210
<i>Step 2</i>	Total revenue less non cash item revenues:	
Remove all noncash items from aggregated revenues and expenses and break out remaining items into relevant cash flow items		(₹ 23,803 – ₹ 205) = ₹ 23,598
	Revenue	₹ 23,598
	Total expenses less noncash item expenses:	
		(₹ 21,593 – ₹ 1,052) = ₹ 20,541
	Cost of goods sold	₹ 11,456
	Salary and wage expenses	4,123
	Other operating expenses	3,577
	Interest expense	246
	Income tax expense	1,139
	Total	₹ 20,541
<i>Step 3</i>	Cash received from customers ^a	₹ 23,543
Convert accrual amounts to cash flow amounts by adjusting for working capital changes	Cash paid to suppliers ^b	(11,900)
	Cash paid to employees ^c	(4,113)
	Cash paid for other operating expenses ^d	(3,532)
	Cash paid for interest ^e	(258)
	Cash paid for income tax ^f	(1,134)
	Net cash provided by operating activities	₹ 2,606

Figure 25.12 : Conversion from the Indirect to the Direct Method

Calculations for Step 3.

^aRevenue of ₹ 23,598 less increase in accounts receivable of ₹ 55.

^bCost of goods sold of ₹ 11,456 plus increase in inventory of ₹ 707 less increase in accounts payable of ₹ 263.

^cSalary and wage expense of ₹ 4,123 less increase in salary and wage payable of ₹ 10.

^dOther operating expenses of ₹ 3,577 less decrease in prepaid expenses of ₹ 23 less increase in other accrued liabilities of ₹ 22.

^eInterest expense of ₹ 246 plus decrease in interest payable of ₹ 12.

^fIncome tax expense of ₹ 1,139 less increase in income tax payable of ₹ 5.

investing or financing activities. If the company has good opportunities to grow the business or other investment opportunities, it is desirable to use the cash in investing activities. If the company does not have profitable investment opportunities, the cash should be returned to capital providers, a financing activity. For a new or growth stage company, operating cash flow may be negative for some period of time as it invests in such assets as inventory and receivables (extending credit to new customers) in order to grow the business. This situation is not sustainable over the long term, so eventually the cash must start to come primarily from operating activities so that capital can be returned to the providers of capital. Lastly, it is desirable that operating cash flows are sufficient to cover capital expenditures (in other words, the company has free cash flow). In summary, major points to consider at this step are:

- What are the major sources and uses of cash flow?
- Is operating cash flow positive and sufficient to cover capital expenditures?

Step 2 : Turning to the operating section, the analysts should examine the most significant determinants of operating cash flow.

Companies need cash for use in operations (for example, to hold receivables and inventory and to pay employees and suppliers) and receive cash from operating activities (for example, payments from customers). Under the indirect method, the increases and decreases in receivables, inventory, payables, and so on can be examined to determine whether the company is using or generating cash in operations and why. It is also useful to compare operating cash flow with net income. For a mature company, because net income includes non-cash expenses (depreciation and amortisation), it is expected and desirable that operating cash flow exceeds net income. The relationship between net income and operating cash flow is also an indicator of earnings quality. If a company has large net income but poor operating cash flow, it may be a sign of poor earnings quality. The company may be making aggressive accounting choices to increase net income but not be generating cash for its business. You should also examine the variability of both earnings and cash flow and consider the impact of this variability on the company's risk as well as the ability to forecast future cash flows for valuation purposes. In summary:

- What are the major determinants of operating cash flow?
- Is operating cash flow higher or lower than net income? Why?
- How consistent are operating cash flows?

Step 3 : Within the investing section, you should evaluate each line item. Each line item represents either a source or use of cash. This enables you to understand where the cash is being spent (or received). This section will tell you how much cash is being invested for the future in property, plant, and equipment; how much is used to acquire entire companies; and how much is put aside in liquid investments, such as stocks and bonds. It will also tell you how much cash is being raised by selling these types of assets. If the company is making major capital investments, you should consider where the cash is coming from to cover these investments (*e.g.*, is the cash coming from excess operating cash flow or from the financing activities described in Step 4). If assets are being sold, it is important to determine why and to assess the effects on the company.

Step 4 : Within the financing section, you should examine each line item to understand whether the company is raising capital or repaying capital and what the nature of its capital sources are. If the company is borrowing each year, you should consider when repayment may be required. This section will also present dividend payments and repurchases of stock that are alternative means of returning capital to owners. It is important to assess why capital is being raised or repaid.

CASH FLOW RATIOS

The statement of cash flows provides information that can be analyzed over time to obtain a better understanding of the past performance of a company and its future prospects. This information can also be effectively used to compare the performance and prospects of different companies in an industry and of different industries. There are several ratios based on cash flow from operating activities that are useful in this analysis. These ratios generally fall into cash flow performance (profitability) ratios and cash flow coverage (solvency) ratios. Figure 25.13 summarizes the calculation and interpretation of some of these ratios.

Performance Ratios	Calculation	What It Measures
Cash flow to revenue	$\text{CFO} \div \text{Net revenue}$	Operating cash generated per Rupee of revenue
Cash return on assets	$\text{CFO} \div \text{Average total assets}$	Operating cash generated per Rupee of asset investment
Cash return on equity,	$\text{CFO} \div \text{Average shareholders' equity}$	Operating cash generated per Rupee of owner investment
Cash to income	$\text{CFO} \div \text{Operating income}$	Cash generating ability of operations
Cash flow per share ^a	$(\text{CFO} - \text{Preferred dividends}) \div \text{Number of common shares outstanding}$	Operating cash flow on a per-share basis
Coverage Ratios	Calculation	What It Measures
Debt coverage	$\text{CFO} \div \text{Total debt}$	Financial risk and financial leverage
Interest coverage ^b	$(\text{CFO} + \text{Interest paid} + \text{Taxes paid}) \div \text{Interest paid}$	Ability to meet interest obligations
Reinvestment	$\text{CFO} \div \text{Cash paid for long-term assets}$	Ability to acquire assets with operating cash flows
Debt payment	$\text{CFO} \div \text{Cash paid for long-term debt repayment}$	Ability to pay debts with operating cash flows
Dividend payment	$\text{CFO} \div \text{Dividends paid}$	Ability to pay dividends with operating cash flows
Investing and financing	$\text{CFO} \div \text{Cash outflows for investing and financing activities}$	Ability to acquire assets, pay debts, and make distributions to owners

Figure 25.13 : Cash Flow Ratios

Notes:

- ^a If the company reports under IFRS and includes total dividends paid as a use of cash in the operating section, total dividends should be added back to CFO as reported and then preferred dividends should be subtracted. Recall that CFO reported under U.S. GAAP and IFRS may differ depending on the treatment of interest and dividends, received and paid.
- ^b If the company reports under IFRS and included interest paid as a use of cash in the financing section, then interest paid should not be added back to the numerator.

Illustrative Problem 1. From the following Profit and Loss Account of ABC Ltd. for the year ended 31st March 2017 calculate Cash generated from “Operating Activities” by Direct Method.

Profit and Loss Account
for the Year Ended 31st March 2017

₹	₹		₹
To Opening Stock	1,60,000	By Sale (Cash)	42,50,000
To Purchases (Cash)	31,00,000	By Commission accrued	40,000
To Wages 4,40,000		By Dividend received	60,000
Add: Outstanding 60,000	5,00,000	By Profit on sale of Plant	2,40,000
To Salaries 2,20,000		(Sale proceeds 22,40,000	
Add: Outstanding 20,000		— book value ₹ 20,00,000)	
	2,40,000	By Closing Stock	2,20,000
Less: Prepaid 10,000	2,30,000		
To Office Expenses	80,000		
To Selling Expenses	1,20,000		
To Depreciation	1,10,000		
To Income Tax paid	20,000		
To Goodwill written off	44,000		
To Preliminary Expenses written off	20,000		
To Net profit	4,26,000		
	48,10,000		48,10,000

SOLUTION**Cash Flow from Operations**

	₹	₹
(A) Cash Receipts from Operating Activities:		
Cash Sales		42,50,000
Less:		
(B) Cash payments due to operating activities:		
Purchases	31,00,000	
Wages	4,40,000	
Salaries	2,20,000	
Office Expenses	80,000	
Selling Expenses	1,20,000	39,60,000
Cash Flow from operations before Tax		2,90,000
Less: Income Tax paid		20,000
Net Cash inflow from Operations		2,70,000

Notes:

- (1) Non-cash charges such as depreciations, Goodwill written off, Preliminary expenses written off have been ignored as these do not involve any outflow of cash.
- (2) Dividend received and profit on Sale of Plant are to be treated under cash flow from ‘Investing activities’.
- (3) Commission Accrued does not involve any cash inflow, hence ignored.
- (4) Changes in current assets and current liabilities are ignored.

Illustrative Problem 2. From the following Profit and Loss A/c and additional information of M/s Anurag Enterprises, compute cash flow from operations.

Profit and Loss Account
for the Year Ended 31st March 2017

₹	₹		₹
To Opening Stock	1,60,000	By Sale	
To Purchases		Cash	6,00,000
Cash	2,00,000	Credit	10,00,000
Credit	6,00,000	By Closing Stock	2,08,000
To Wages	48,000	By Commission	1,12,000
To Office Expenses	1,76,000	By Royalties	80,000
To Selling Expenses	96,000	By Discount Received	40,000
To Bad debts	16,000		
To Discount Allowed	32,000		
To Depreciation	1,20,000		
To Provision for Tax	2,40,000		
To Net Profit	3,52,000		
	20,40,000		20,40,000

Additional Information	March 31, 2016 ₹	March 31, 2017 ₹
Debtors	1,20,000	1,44,000
Creditors	1,12,000	80,000
O/s Selling Expenses	24,000	32,000
Prepaid Office Expenses	16,000	24,000
Accrued Royalties	96,000	88,000
Advance Commission	72,000	64,000
Provision for Tax	3,20,000	4,80,000

SOLUTION

Cash Flow from Operations

	₹	₹
(A) Receipts from Operations:		
Cash Sales		6,00,000
Cash Received from Debtors* ¹		9,76,000
Cash from Royalties* ²		88,000
Cash from Commission* ³		1,04,000
		17,68,000
Less:		
(B) Operating Cash Payments		
Cash Purchases	2,00,000	
Cash paid to Creditors* ⁴	6,32,000	
Cash Selling Expenses	88,000	
Cash Office Expenses	1,92,000	11,12,000
Cash inflow from operations before tax		6,56,000
Less: Income Tax paid (on operating incomes)		80,000
Net Cash flow from operations		5,76,000
*1. Cash Received from debtors ? prepare debtors A/c		

Debtors A/c

	₹		₹
To Balance b/d	1,20,000	By Cash Received (Bal. (Fig.))	9,76,000
To Sales (Credit)	10,00,000	By Balance c/d	1,44,000
	11,20,000		11,20,000

***2 Cash from Royalties**

Opening Bal. + Royalties as per P & L A/c — Closing Bal. = Cash from Royalties

$$96,000 + 80,000 - 88,000 = ₹ 88,000$$

***3 Cash from Commission**

Closing bal. + Commission as per P & L A/c — Opening Bal. = Cash from Commission

$$64,000 + 1,12,000 - 72,000 = ₹ 1,04,000$$

***4 Cash**

Op. bal. + Purchases — Cl. Bal. = Cash paid to creditors

$$80,000 + 6,00,000 - 1,12,000 = ₹ 6,32,000$$

Illustrative Problem 3. The net income reported on the income statement for the year was ₹ 1,10,000 and depreciation of fixed assets for the year was ₹ 44,000. The balances of the current asset and current liability accounts at the beginning and end of the year are as follows:

	End of the Year ₹	Beginning of the year ₹
Cash	1,30,000	1,40,000
Debtors	2,00,000	1,80,000
Inventories	2,90,000	3,00,000
Prepaid Expenses	15,000	16,000
Accounts Payable	1,02,000	1,16,000
Calculate total cash from operating activities		

SOLUTION

Cash from Operating Activities

	₹	₹
Net Income		1,10,000
Add: Depreciation		44,000
Operating profit before working capital changes		1,54,000
Add: Decrease in Inventories	10,000	
decrease in prepaid expenses	1,000	
		1,65,000
Deduct: Increase in Debtors	20,000	
Decrease in Accounts Payable	14,000	
		34,000
Net Cash Flow from Operating Activities		1,31,000

Illustrative Problem 4. From the following, calculate cash from operation by Indirect Method.

Profit and Loss Account
for the Year Ended 31st March 2016

	₹	₹		₹
To Opening Stock		2,00,000	By Sales	45,00,000
To Purchases		36,40,000	By Closing Stock	2,40,000
To Wages	2,25,000			
To Outstanding	25,000	2,50,000		
To Manufacturing Expenses		75,000		
To Gross Profit c/d		5,75,000		
		47,40,000		47,40,000
To Salaries	1,37,500		By Gross Profit b/d	5,75,000
Add: Outstanding	62,500	2,00,000	By Rent Received	37,500
To Insurance	30,000		By Commission Accrued	17,500
Less: Prepaid	7,500	22,500	By Net Loss	55,000
To Office Expenses		1,17,500		
To Selling Expenses		1,45,000		
To Depreciation		1,25,000		
To Share Issue Expenses w/o		75,000		
		6,85,000		6,85,000

SOLUTION

Calculation of Cash From Operating Activities
(Indirect Method)

	₹	₹
Net Loss as per Profit and Loss A/c (Before tax and extraordinary item)		(55,000)
Adjustments for Non-cash charges and Non-operating items		
Add: Depreciation	1,25,000	
Add: Share Issue Expenses w/o	75,000	2,00,000
		1,45,000
Less: Rent Received (Non-operating)		(37,500)
Operating profit before Working Capital Charges		1,07,500
Adjustment for current assets/liabilities:		
Add: Increase in Current liabilities		
Wages O/s	25,000	
Salaries	62,500	87,500
		1,95,000
Less: Increase in Current Assets		
Stock	40,000	
Prepaid Insurance	7,500	
Accrued Commission	17,500	(65,000)
Net Cash from operating Activities		1,30,000

Illustrative Problem 5. X Ltd. has the following balance on 01.01.2016:

	₹	₹
Fixed Assets	15,00,000	
Less: Depreciation	(5,00,000)	10,00,000
Bank		87,500
Other Current Assets		6,25,000
Current Liabilities		2,50,000

Net year's estimate are:

(i) The company will acquire fixed assets costing ₹ 2,50,000 after selling one machine for ₹ 70,000, costing ₹ 1,50,000 on which depreciation provided will amount to ₹ 90,000.

(ii) The net profits will be ₹ 1,75,000 after providing for depreciation of ₹ 1,50,000.

(iii) Current assets and current liabilities (other than bank balance) at 31.12.2016 are estimated to be ₹ 7,50,000 and ₹ 4,00,000 respectively.

At the end of the accounting year, the company deposits all the cash into the bank. Calculate the cash flows from operations and investing activities for the year 2016.

SOLUTION**Cash Flow from Operating Activities**

	₹	₹
Net Profit after depreciation	1,75,000	
Add: Depreciation provided	1,50,000	
Less: Profit on sale of machinery	(10,000)	
Operating profit before working capital changes	3,15,000	
Less: Increase in assets	(1,25,000)	
Add: Increase in current liabilities	1,50,000	
Net cash from operating activities		3,40,000

Cash Flow from Investing Activities

	₹	₹
Purchase of Machine	70,000	
Purchase of Machine	(2,50,000)	
Net cash used in investing activities		(1,80,000)

Working Note:

Calculation of Profit on sale of machinery: $70,000 - (1,50,000 - 90,000) = ₹ 10,000$.

Illustrative Problem 6. From the following information calculate cash from operations.

Profit and Loss Account
for the year ended 31st March 2016

	₹		₹
To Opening Stock	1,50,000	By Sales	32,75,000
To Purchases	14,50,000	By Closing Stock	3,25,000
To Wages	70,000		
To Gross Profit c/d	19,30,000		
	36,00,000		36,00,000
To Operating Expenses	11,10,000	By Gross Profit b/d	19,30,000
To Interest on debentures	18,000	By Interest on Investments	15,000
To Depreciation	1,20,000	By Dividend Received	18,000
To Loss on Sale on Plant	40,000	By Profit on Sale of Land	20,000
To Discount on Issue of shares	10,000	By Rent Received	12,000
To Goodwill w/o	15,000	By Refund of Tax	8,000
To Provision for Tax	30,000	By Insurance claims for	
To General reserve	25,000	Loss of Stock	1,25,000
To Proposed, Dividend	1,80,000		
To Interim Dividend	70,000		
To Net Profit	5,10,000		
	21,28,000		21,28,000

Additional Information:

	31.03.15 ₹	31.03.16 ₹
Stock	1,40,000	1,00,000
Debtors	25,000	1,00,000
Creditors	15,000	50,000
Provision for Tax	50,000	60,000
Outstanding Salaries	20,000	25,000
Accrued Commission	15,000	15,000
Prepaid Expenses	18,000	20,000

SOLUTION

Cash Flow From Operating Activities

	₹	₹
Net Profit before Tax and Extraordinary items (1)		6,82,000
Adjustment for: Non-cash Charges and Non-operating items		
Add: Depreciation	1,20,000	
Goodwill	15,000	
Discount on issue of shares	10,000	
Loss on sale of plant	40,000	
Interest on Debentures (2)	18,000	2,03,000
Less: Profit on Sale of Land (3)	20,000	8,85,000
Interest Received (3)	15,000	
Dividend Received (3)	18,000	(53,000)
Operating profit before working Capital Changes		8,32,000

Adjustment for Working Capital:*Add:* Decrease in Current Assets and Increase in current liabilities:

Stock	40,000	
Debtors	35,000	
O/s Salaries	5,000	80,000
		<u>9,12,000</u>

Less: Increase in current assets and decrease in current liabilities:

Debtors	75,000	
Accrued Commission	15,000	
Prepaid Expenses	2,000	(92,000)
		<u>8,20,000</u>

Less: Tax Paid(12,000)

Cash flow before Extraordinary items

8,08,000

Add: Cash from Extra ordinary items

(Insurance claims for loss of Stock (4)

1,25,000

Net Cash Flow from Operations

9,33,000**Working Notes:**

₹ ₹

(1) Net Profit as per P and L A/c

5,10,000

Add: Tax and Appropriations:

Provision for Tax	30,000	
Proposed Dividend	1,80,000	
Interim Dividend	70,000	
General Reserve	25,000	3,05,000
		<u>8,15,000</u>

Less: Tax Refund and Extra Ordinary Receipts1,33,000

(8,000 + 1,25,000)

6,82,000

(2) Interest on Debentures to be adjusted against Financing Activities.

(3) Interest Received, Dividend Received, Profit on sale of Fixed Assets are covered by Investing Activities,

(4) Insurance claims for loss of Stock is treated under Operating Activities while loss of assets under "Investing Activities".

Illustrative Problem 7. The following data are provided for ABC Ltd.:**Income Statement Data for 2016**

	₹
Revenues	84,000
Cost of goods sold	(48,000)
Depreciation expense	(4,000)
Interest expense	(6,000)
Other expenses	(22,000)
Net Income	<u>4,000</u>

Comparative Balance Sheets Data

	2016 ₹	2015 ₹
<i>Current Assets</i>		
Cash	20,000	16,000
Debtors (net)	12,000	7,000
Stock in hand	16,000	14,000
<i>Non Current Assets</i>		
Plant and Machinery	24,000	20,000
Less: Accumulated Depreciation	(8,000)	(4,000)
Total Assets	64,000	63,000
<i>Liabilities</i>		
Creditors	12,000	14,000
Non-current Note Payable	20,000	20,000
Less: Discount on Note	(1,600)	(2,000)
	30,400	32,000
<i>Owner's Equity</i>		
Equity Share Capital	24,000	14,000
Retained Earnings	9,600	7,000
	33,600	21,000

Required: Prepare statement of cash flows using the Indirect Method as per [AS-3 (Revised)]

SOLUTION**ABC Ltd.****Cash Flow Statement For the year Ended 31 December 2016**

[AS-3 (Revised)] (Indirect Method)

	₹	₹
(A) Cash Flows from Operating Activities		
Net Income before tax	4,000	
Adjustments for:		
Depreciation	4,000	
Amortization of discount on note payable	400	
Interest expenses	6,000	
Operating Profit before working capital changes	14,400	
Increase in Debtors	(5,000)	
Increase in Inventories	(2,000)	
Decrease in Creditors	(2,000)	
Net cash provided by operating activities		5,400
(B) Cash Flows from Investing Activities		
Purchase of Plant and Machinery	(4,000)	
Net cash used in investing activities		(4,000)
(C) Cash Flows from Financing Activities		
Issues of Share Capital	10,000	
Interest Paid	(6,000)	
Dividends Paid	(1,400)	
Net cash from financing activities		2,600
Net increase in cash and cash equivalent (A + B + C)		4,000
Cash and cash equivalents at the beginning of the period		16,000
Cash and cash equivalents at the end of the period		20,000

Note:

Dividends paid have been calculated as under:

	₹
Retained earnings at the beginning	7,000
Add: Net Income	4,000
	<u>11,000</u>
Less: Retained earnings at the end	9,600
Dividend paid	<u>1,400</u>

Illustrative Problem 8. From the following particulars, prepare Cash Flow Statement for the year ended 31st March, 2016 using.

- (a) Direct Method
(b) Indirect Method

(A) Income Statement For the year ended 31st March, 2016

	₹	₹
Turnover		12,80,000
Less: Cost of Goods sold		8,00,000
Add: Other Receipts:		4,80,000
Insurance Claims for loss of Stock due to fire		20,000
		<u>5,00,000</u>
Less: Operating Expenses	3,16,000	
Interest on Debentures	6,000	
Depreciation	84,000	
Discount on Debentures w/o	400	
		<u>4,06,400</u>
Profit before Tax		93,600
Less: Provision for Tax		36,800
profit after Tax		<u>56,800</u>

(b) The Assets and Liabilities as on 31.3.2015 and 31st March 2016 were as under:

	31.03.2015 ₹	31.03.2016 ₹
Stock	72,000	88,000
Debtors	16,000	15,200
Bills Receivable	12,000	22,000
Cash and Bank Balance	44,800	99,200
Creditors	31,200	38,000
Bills Payable	8,000	6,000
O/s Expenses	12,400	17,600

(C) Additional Information:

- Fully paid Equity shares of the face value of ₹ 80,000 were allotted at a premium of @ 20%.
- Fired assets were acquired for ₹ 60,000 and the payment was made in 6% convertible debentures at par.
- Income Tax paid during the year amounted to ₹ 38,000.
- Company paid a dividend and corporate dividend tax thereon for the year ended 31st March 2006 amounting to ₹ 44,000.
- 9% Debentures for ₹ 1,20,000 were redeemed at a premium of 2%.

SOLUTION**(a) Cash Flow Statement (Direct Method)**

	₹	₹
Cash Flow from Operating Activities:		
(a) Operating Cash Receipts:		
Cash from customers (1)	12,70,800	
(b) Operating cash Payments (2)	11,22,000	
Cash Flow from Operations (a– b)	1,48,800	
Income tax Paid	(38,000)	
	1,10,800	
Cash Flow from Extra Ordinary items:		
Add: Claims Received	20,000	
Net Cash Flow from operating activities:		1,30,800
Cash Flow from Financing Activities:		
Issue of shares at premium (3)	96,000	
• Redemption of Debentures	(1,22,400)	
• Interest on Debentures	(6,000)	
• Dividend and Corporate dividend Tax	(44,000)	
Net cash used in financing Activities		(76,400)
Net increase in cash and cash equivalents		54,400
Cash and cash equivalents in the beginning		44,800
Cash and cash equivalents at the end		99,200

Financing and Investing Activities not affecting

Cash flow—Issue of debentures against acquisition of land

60,000

Working Notes:**(1) Receivables A/c (Debtors + Bills Receivables)**

	₹		₹
To Balance b/d	28,000	By Cash Received (B.F.)	12,70,800
To Sales (credit)	12,80,000	By Balance c/d	37,200
	13,08,000		13,08,000

(2) Payables A/c (Creditors + Bills Payable)

	₹		₹
To Cash Paid	8,11,200	By Balance b/d	39,200
To Balance c/d	44,000	By Purchases*	8,16,000
	8,55,200		8,55,000

Operating Expenses A/c

	₹		₹
To Cash Paid (Bal. Figure)	3,10,800	By Balance b/d	12,400
To Balance c/d	17,600	By Profit and Loss A/c	3,16,000
	3,28,400		3,28,400

*Purchases = Closing Stock + Cost of Goods Sold – Opening Stock

Purchases = 88,000 + 8,00,000 – 72,000 = 8,16,000

This operating cash payment = 8,11,200 (To creditors)
and operating Expenses paid 3,10,800

11,22,000

₹

(3) Face Value of Shares issued 80,000

Add: Premium @ 20% 16,000

96,000

**(3) Cash Flow Statement as per AS-3 (Revised)
(Indirect Method)**

	₹	₹
I. Cash Flow from Operating Activities:		
Net Profit before Tax and Extraordinary Item	73,600	
Adjustment for Non-cash and Non-operating items: Depreciation	84,000	
Discount on Issue of Debentures	400	
Interest on Debentures	6,000	
Operating profit before Working Capital Changes	1,64,000	
Adjustment for current items.		
– Increase in Stock	(16,000)	
– Increase in Bills Receivable	(10,000)	
– Decrease in Bills Payable	(2,000)	
+ Decrease in Debtors	800	
+ Increase in Creditors	6,800	
+ Increase in o/s Expenses	5,200	
Cash generated from operation	1,48,800	
Less: Income Tax paid	38,000	
Cash flow from operation before Extraordinary item	1,10,800	
Add: Insurance Claim for Loss of Stock	20,000	
Net cash generated from Operation		1,30,800
II. Cash Flow from Investing Activities		—
III. Cash flow from Financing Activities		—
Issue of shares at premium	96,000	
Redemption of Debentures	(1,22,400)	
Interest on Debentures	(6,000)	
Dividend and corporate dividend Tax	(44,000)	
Net cash used in Financing Activities		(76,400)
Net Increase in Cash and Cash Equivalents		54,400
Cash and cash Equivalents in the beginning		44,800
Cash and Cash Equivalents at the end		99,200

Illustrative Problem 9. From the following details relating to the accounts of Grow More Ltd., prepare Cash Flow Statement:

	31.03.2016 ₹	31.03.2015 ₹
<i>Liabilities</i>		
Share Capital	10,00,000	8,00,000
Reserve	2,00,000	1,50,000
Profit and Loss Account	1,00,000	60,000
Debentures	2,00,000	—
Provision for taxation	1,00,000	70,000
Proposed dividend	2,00,000	1,00,000
Sundry Creditors	7,00,000	8,20,000
	25,00,000	20,00,000
<i>Assets</i>		
Plant and Machinery	7,00,000	5,00,000
Land and Building	6,00,000	4,00,000
Investments	1,00,000	—
Sundry Debtors	5,00,000	7,00,000
Stock	4,00,000	2,00,000
Cash on hand/Bank	2,00,000	2,00,000
	25,00,000	20,00,000

- (i) Depreciation @ 25% was charged on the opening value of Plant and Machinery.
- (ii) During the year one old machine costing ₹ 50,000 (WDV ₹ 20,000) was sold for ₹ 35,000.
- (iii) ₹ 50,000 was paid towards income tax during the year.
- (iv) Building under construction was not subject to any depreciation.

Prepare Cash flow Statement.

SOLUTION

Grow More Ltd.
Cash Flow Statement
For the year Ended 31st March, 2016

	₹	₹
(A) Cash Flows from Operating activities		
Net Profit before Tax and Extra-ordinary, items*	3,20,000	
Adjustment for:		
Transfer to General Reserve	50,000	
Depreciation	1,25,000	
Profit on sale of Plant and Machinery	(15,000)	
Operating Profit before Working Capital changes	4,80,000	
Increase in Stock	(2,00,000)	
Decrease in debtors	2,00,000	
Decrease in creditors	(1,20,000)	
Cash generated from operations	3,60,000	
Income tax paid	(50,000)	
Net cash provided by operating activities		3,10,000

(B) Cash Flows from Investing Activities		
Purchase of fixed assets	(3,45,000)	
Expenses on building	(2,00,000)	
Increase in investments	(1,00,000)	
Sale of old machine	35,000	
<i>Net cash used in investing activities</i>		(6,10,000)
(C) Cash Flows from Financing Activities		
Proceeds from issue of shares	2,00,000	
Proceeds from issue of debentures	2,00,000	
Dividend paid	(1,00,000)	
<i>Net cash provided by financing activities</i>		3,00,000
Net increase in cash and cash equivalent (A + B + C)		Nil
Cash and Cash equivalent at the beginning of the year		2,00,000
Cash and Cash equivalents at the end of the year		2,00,000

Working Notes:**Provision for Taxation Account**

	₹		₹
Bank (Paid)	50,000	Balance b/d	70,000
Balance c/d	1,00,000	Profit and Loss Account	
		(Balancing Figure)	80,000
	1,50,000		1,50,000

* ₹ 40,000 + ₹ 2,00,000 (Provision for dividend) + ₹ 80,000 (Provision for Tax).

Plant and Machinery Account

	₹		₹
Balance b/d	5,00,000	Depreciation	1,25,000
Bank (Balance Fig.)	3,45,000	Bank (Sale)	20,000
		Balance c/d	7,00,000
	8,45,000	Total	8,45,000

Illustrative Problem 10. Following are the Balance Sheets of Suhani Ltd. as on 31st March, 2015 and 2016.

	31.03.2016 ₹	31.05.2015 ₹
<i>Liabilities</i>		
Share Capital	4,00,000	3,00,000
General Reserve	1,00,000	3,00,000
Profit & Loss A/c	50,000	30,000
Debentures	1,00,000	1,50,000
Provision for Taxation	40,000	50,000
Proposed Dividend	40,000	30,000
Trade Creditors	70,000	90,000
	8,00,000	7,30,000
<i>Assets</i>		
Goodwill	90,000	1,00,000
Plant and Machinery	4,29,250	2,98,000
Investment	60,000	1,00,000
S, Debtors	1,10,000	1,60,000
Stock	80,000	50,000
Prepaid Expenses	5,750	4,000
Cash and Bank balance	20,000	10,000
Discount on Debentures	5,000	8,000
	8,00,000	7,30,000

Additional Information:

- Depreciation on Plant and Machinery has been charged @ 15%.
- A machine costing ₹ 10,000 (W.D.V. ₹ 3,000) has been discarded. An old machine costing ₹ 50,000 (W.D.V. ₹ 20,000) has been sold for ₹ 35,000.
- A profit of ₹ 10,000 has been earned by sale of investments.
- Debentures have been redeemed at 5% premium.
- ₹ 45,000 income tax has been paid and adjusted against provision for taxation.

Prepare Statement of Changes in Financial Position on cash basis.

SOLUTION

Statement of Changes in Financial Position (Cash Basis)
for the year ended 31st March, 2016

	₹	₹
Cash Flow from operating Activities		
Net Profit before tax and extraordinary items	1,75,000	
Adjustment for Non-cash and Non-operating Items:		
Depreciation	75,750	
Goodwill w/o	10,000	
Loss on machine discarded	3,000	
Profit on sale of Investment	(10,000)	
Profit on Sale of Machine	(15,000)	
Loss (premium) on Redemption of Debentures	2,500	
Discount on Issue of Debentures	3,000	
Cash generated from operation before Tax	1,84,250	
Less: Tax Paid	45,000	
Cash generated from Operating activities before Working Capital	1,39,250	
Adjustments for Working Capital		
Decrease in Debtors	50,000	
Increase in Stock	(30,000)	
Increase in Prepaid Expenses	(1,750)	
Decrease in Trade Creditors	(20,000)	
Net cash flow from Operating Activities		1,37,500
II. Cash Flow from Investing Activities:		
Sale of Investments	50,000	
Sale of Machinery	35,000	
Purchase of Machinery	(2,30,000)	
Net cash used in Investing Activities		(1,45,000)
III. Cash Flow from Financing Activities:		
Issue of Shares	1,00,000	
Redemption of Debentures	(52,500)	
Payment of Dividend	(30,000)	
Net Cash generated from Financing Activities		17,500
Net Increase in Cash and Cash Equivalents		10,000
Cash and Cash equivalents at the beginning		10,000
Cash and cash equivalents at the end		20,000

Working Notes:**(1) Profit and Loss A/c (Adjusted)**

	₹		₹
To Provision for Tax	35,000	By Balance b/d	30,000
To General Reserve	20,000	By Net Profit before Tax and	1,15,000
To Proposed dividend	40,000	Extraordinary items	
To Balance c/d	50,000		
	1,45,000		1,45,000

(2) Plant and Machinery A/c

	₹		₹
To Balance b/d	2,98,000	By Depreciation*	75,750
To Profit on sale (Tr. to P & L A/c)	15,000	By Bank (sale)	35,000
To Bank (Purchased) (Bal. figure)	2,30,000	By Loss on sale (Tr. to P and L A/c)	3,000
		By Balance c/d	4,29,250
	5,43,000		5,43,000

	₹
*W.D.V. as on 1.4.2007	2,98,000
Less: W.D.V. of machine sold (20,000 + 3,000)	23,000
	2,75,000
*Depreciation @ 15%	41,250
W.D.V. after Depreciation	2,33,750
Cost of Machinery acquired	2,30,000**
* Depreciation on Machinery Purchased	34,500
W.D.V.	1,95,500
*Thus total Depreciation charged ₹ (41,250 + 34,500) =	75,750
** ₹ *4,29,250 – 2,33,750) = $\left(1,95,500 \times \frac{100}{85}\right) =$	2,30,000

(3) Provision for Tax A/c

	₹		₹
To Bank	45,000	By Balance b/d	50,000
To Balance c/d	40,000	By P and L A/c (B.F.)	35,000
	85,000		85,000

Illustrative Problem 11. Presented below is the comparative balance sheets for Jyoti Ltd. at 31 March:

	2016 ₹	2015 ₹
Cash	40,000	57,000
Accounts Receivable	77,000	64,000
Inventory	1,32,000	1,40,000
Prepaid expenses	12,140	16,540
Land	1,25,000	1,50,000
Equipment	2,00,000	1,75,000
Accumulated Depreciation-Equipment	(60,000)	(42,000)
Building	2,50,000	2,50,000
Accumulated Depreciation-Building	(75,000)	(50,000)
	7,01,140	7,60,540
Accounts Payable	33,000	45,000
Bonds Payable	2,35,000	2,65,000
Equity Share Capital (₹ 10 per share)	2,80,000	2,50,000
Retained Earnings	1,53,140	2,00,540
	7,01,140	7,60,540

Additional information:

- (i) Operating expenses include depreciation expense of ₹ 70,000 and amortization of prepaid expenses of ₹ 4,400.
 - (ii) Land was sold for cash at book value.
 - (iii) Cash dividends of ₹ 74,290 were paid.
 - (iv) Net income for 2007 was ₹ 26,890.
 - (v) Equipment was purchased for ₹ 65,000 cash. In addition equipment costing ₹ 40,000 with a book value of ₹ 13,000 was sold for ₹ 15,000 cash.
 - (vi) Bonds were redeemed at face value by issuing 3,000 equity shares of ₹ 10 at par. Instructions:
- Prepare a statement of cash flow for 2016 using the indirect method [AS-3 (Revised)].

SOLUTION**Jyoti Ltd.****Cash Flows Statement For the year Ended 31st December 2016****[AS-3 (Revised)] (Indirect Method)**

	₹	₹
(A) Cash Flows from Operating Activities		
Net Income	26,890	
Adjustments for: Depreciation	70,000	
Amortization of prepaid expenses	4,400	
Gain on sale of equipment	(2,000)	
Operating profit before working capital changes	99,290	
Increase in Accounts Receivable	(13,000)	
Decrease in Inventories	8,000	
Decrease in Accounts Payable	(12,000)	
Net cash from operating activities		82,290
(B) Cash Flow from Investing Activities:		
Sale of Land	25,000	
Sale of Equipment	15,000	
Purchase of Equipment	(65,000)	
Net cash used in Investing activities		(25,000)
(C) Cash Flows from Financing Activities		
Dividends Paid	(74,290)	
Net cash used in financing activities		(74,290)
Net decrease in cash and cash equivalents (A + B + C)		(17,000)
Cash and cash equivalents at the beginning of the period		57,000
Cash and cash equivalents at the end of the period		40,000
Significant Non-cash Transaction		
Redemption of Bonds in exchange for Equity Share Capital ₹ 30,000		

Working Notes:**Equity Share Capital Account**

	₹		₹
Balance c/d	2,80,000	By Balance b/d	2,50,000
		By Bond Payable Account	30,000
	2,80,000		2,80,000

Bonds Payable Account

	₹		₹
Equity Share Capital Account	2,35,000	By Balance b/d	2,65,000
To Balance c/d	30,000		
	2,65,000		2,65,000

Illustrative Problem 12. From the following, prepare a cash flow statement for XYZ Ltd. for the year 2016.

XYZ Ltd.**Balance Sheet as at March 31, 2015 (₹ '000)**

<i>Liabilities & Equity</i>	₹	<i>Assets</i>	₹
Paid up capital	50	Gross Fixed Assets	1,000
Retained earnings	350	Less: Accum. Deprn.	100
Long-term debt	500	Inventory	100
Notes payable	80	Account receivables	50
Accounts payable	80	Cash	10
	1,060		1,060

Balance Sheet as at March 31, 2016 (₹ '000)

<i>Liabilities & Equity</i>	₹	<i>Assets</i>	₹
Paid up capital	50	Gross Fixed Assets	1,125
Retained earnings	415	Less: Accum. Deprn.	175
Long-term debt	550	Inventory	110
Notes payable	100	Account receivables	60
Accounts payable	90	Cash	85
	1,205		1,205

Income Statement, March 31, 2016

₹('000)

Sales	1,200
(-) Cost of goods sold	- 800
Gross Profit	400
(-) Selling, general, administration, expenses	- 150
EBIT	250
(-) Interest expenses	- 50
EBT	200
(-) Taxes (50)	- 100
Net Income	100

Additional information:

(i) Dividend paid	:	35
(ii) Additions to retained earnings	:	65
(iii) Depreciation	:	75

SOLUTION**XYZ Ltd.**

- I. Change in Balance Sheet : (₹ '000)
- (a) Change in receivables : 10 (use)
- (b) Change in inventory : 10 (use)
- (c) Change in Gross fixed assets : 125 (use)
- (d) Change in A/c payables : 10 (source)
- (e) Change in notes payable : 20 (source)
- (f) Change in long-term debt : 50 (source)
- II. Operating cash flow (₹ '000): $100 + 75 - (10 + 10 - 10) = ₹ 165$.

XYZ Limited**III. Cash Flow Statement for the year 2015-16**

Cash Inflows	₹ '000	Cash Outflows	₹ '000
Opening Balance	10		
Operating Cash flows	165	Purchase of Fixed Assets	125
Increase in notes payable	20	Dividends	35
Increase in long-term debt	50	Closing balance	85
	245		245

Illustrative Problem 13. ABC Limited has collected the following information for the preparation of cash flow statement for the year ended 31st March, 2016.

	(₹ in lakhs)
Net Profit	25,000
Dividend (including dividend tax) paid	8,535
Provision for Income tax	5,000
Income tax paid during the year	4,248
Loss on sale of assets (net)	40
Book value of the assets sold	185
Depreciation charged to Profit & Loss Account	20,000
Amortisation of Capital grant	6
Profit on sale of Investments	100
Carrying amount of Investment sold	27,765
Interest income received on investments	2,506
Interest expenses	10,000
Interest paid during the year	10,520
Increase in Working Capital (excluding Cash & Bank Balance)	56,075
Purchase of fixed assets	14,560
Investment in joint venture	3,850
Expenditure on construction work in progress	34,740
Proceeds from calls in arrear	2
Receipt of grant for capital projects	12
Proceeds from long-term borrowings	25,980
Proceeds from short-term borrowings	20,575
Opening cash and Bank balance	5,003
Closing cash and Bank balance	6,988

Prepare the Cash Flow Statement for the year ended 31st March, 2016 in accordance with AS 3 'Cash Flow Statements'.

Solution

ABC Limited
Cash Flow Statement for the year ended 31st March, 2016

	(₹ in lakhs)
Cash flows from operating activities	
Net profit before taxation (25,000 + 5,000)	30,000
Adjustments for :	
Depreciation	20,000
Loss on sale of assets (Net)	40
Amortisation of capital grant	(6)
Profit on sale of investments	(100)
Interest income on investments	(2,506)
Interest expenses	10,000
Operating profit before working capital changes	57,428
Changes in working capital (Excluding cash and bank balance)	(56,075)
Cash generated from operations	1,353
Income taxes paid	(4,248)
Net cash used in operating activities	(2,895)
Cash flows from investing activities	
Sale of assets (185 – 40)	145
Sale of investments (27,765 + 100)	27,865
Interest income on investments	2,506
Purchase of fixed assets	(14,560)
Investment in joint venture	(3,850)
Expenditure on construction work-in progress	(34,740)
Net cash used in investing activities	(22,634)
Cash flows from financing activities	
Proceeds from calls in arrear	2
Receipts of grant for capital projects	12
Proceeds from long-term borrowings	25,980
Proceed from short-term borrowings	20,575
Interest paid	(10,520)
Dividend (including dividend tax) paid	(8,535)
	27,514
Net increase in cash and cash equivalents (27,514 – 22,634 – 2,895)	1,985
Cash and cash equivalents at the beginning of the period	5,003
Cash and cash equivalents at the end of the period	6,988

Illustrative Problem 14. The summarized Balance Sheet of XYZ Ltd. for the years ended 31st March, 2015 and 2016 are as follows:

Liabilities	31 st March 2015 (₹)	31 st March 2016 (₹)	Assets	31 st March 2015 (₹)	31 st March 2016 (₹)
Equity share capital	11,20,000	15,60,000	Fixed Assets	32,00,000	38,00,000
10% Preference			Less: Depreciation	9,20,000	11,60,000
Share capital	4,00,000	2,80,000		22,80,000	26,40,000
Capital Reserve	—	40,000	Investment	4,00,000	3,20,000
General Reserve	6,80,000	8,00,000	Cash	10,000	10,000
Profit and Loss A/c	2,40,000	3,00,000	Other current assets	11,10,000	13,10,000
9% Debentures	4,00,000	2,80,000			
Current liabilities	4,80,000	5,36,000			
Proposed dividend	1,20,000	1,44,000			
Provision for Tax	3,60,000	3,40,000			
	38,00,000	42,80,000		38,00,000	42,80,000

Additional information:

- The company sold one fixed asset for ₹ 1,00,000, the cost of which was ₹ 2,00,000 and the depreciation provided on it was ₹ 80,000.
 - The company also decided to write off another fixed asset costing ₹ 56,000 on which depreciation amounting to ₹ 40,000 has been provided.
 - Depreciation on fixed assets provided ₹ 3,60,000.
 - Company sold some investment at a profit of ₹ 40,000, which was credited to capital reserve.
 - Debentures and preference share capital redeemed at 5% premium.
 - Company decided to value inventory at cost, whereas previously the practice was to value inventory at cost less 10%. The inventory according to books on 31.3.2015 was ₹ 2,16,000. The inventory on 31.3.2016 was correctly valued at ₹ 3,00,000.
- Prepare Cash Flow Statement as per revised AS 3 by indirect method.

Solution

Cash Flow Statement for the year ended 31st March, 2016

		₹	₹
A.	Cash Flow from operating activities		
	Profit after appropriation		
	Increase in profit and loss A/c after inventory adjustment [₹ 3,00,000 – (₹ 2,40,000 + ₹ 24,000)]	36,000	
	Transfer to general reserve	1,20,000	
	Proposed dividend	1,44,000	
	Provision for tax	3,40,000	
	Net profit before taxation and extraordinary item	6,40,000	
	Adjustments for:		
	Depreciation	3,60,000	
	Loss on sale of fixed assets	20,000	
	Decrease in value of fixed assets	16,000	
	Premium on redemption of preference share capital	6,000	
	Premium on redemption of debentures	6,000	

	Operating profit before working capital changes	10,48,000	
	Increase in current liabilities (₹ 5,36,000 – ₹ 4,80,000)	56,000	
	Increase in other current assets [₹ 13,10,000 – (₹ 11,10,000 + ₹ 24,000)] (W.N.1)	(1,76,000)	
	Cash generated from operations	9,28,000	
	Income taxes paid	(3,60,000)	
	Net Cash from operating activities		5,68,000
B.	Cash Flow from investing activities		
	Purchase of fixed assets (W.N.3)	(8,56,000)	
	Proceeds from sale of fixed assets	1,00,000	
	Proceeds from sale of investments (W.N.2)	1,20,000	
	Net Cash from investing activities		(6,36,000)
C.	Cash Flow from financing activities		
	Proceeds from issuance of share capital	4,40,000	
	Redemption of preference share capital (₹ 1,20,000 + ₹ 6,000)	(1,26,000)	
	Redemption of debentures (₹ 1,20,000 + ₹ 6,000)	(1,26,000)	
	Dividend paid	(1,20,000)	
	Net Cash from financing activities		68,000
	Net increase/decrease in cash and cash equivalent during the year		Nil
	Cash and cash equivalent at the beginning of the year		10,000
	Cash and cash equivalent at the end of the year		10,000

Working Notes:

1. Revaluation of inventory will increase opening inventory by $\frac{2,16,000}{90} = ₹ 24,000$

Therefore, opening balance of other current assets would be as follows:

$$₹ 11,10,000 + ₹ 24,000 = ₹ 11,34,000$$

Due to under valuation of inventory, the opening balance of profit and loss account be increased by ₹ 24,000.

The opening balance of profit and loss account after revaluation of inventory will be

$$₹ 2,40,000 + ₹ 24,000 = ₹ 2,64,000.$$

2. Investment Account

	₹		₹
To Balance b/d	4,00,000	By Bank A/C	1,20,000
To Capital reserve A/c (Profit on sale of investment)	40,000	(balancing figure being investment sold)	
	4,40,000	By Balance c/d	3,20,000
			4,40,000

3. Fixed Assets Account

	₹		₹	
To Balance b/d	32,00,000	By Bank A/c (sale of assets)	1,00,000	
To Bank A/c	8,56,000	By Accumulated depreciation A/c	80,000	
(balancing figure being assets purchased)		By Profit and loss A/c (loss on sale of assets)	20,000	2,00,000
		By Accumulated depreciation A/c	40,000	
		By Profit and loss A/c (assets written off)	16,000	56,000
		By Balance c/d		38,00,000
	40,56,000			40,56,000

4. Accumulated Depreciation Account

	₹		₹
To Fixed assets A/c	80,000	By Balance b/d	9,20,000
To Fixed assets A/c	40,000	By Profit and loss A/c (depreciation for the period)	3,60,000
To Balance c/d	11,60,000		12,80,000
	12,80,000		

Illustrative Problem 15. Financial information of ABC Ltd. for the year ended 31st March, 2015 and 2016 are as follows:

Summarised Balance Sheet
As on 31st March, 2016 and 2015

	2016 ₹	2015 ₹
Assets		
Cash and cash equivalents	4,500	1,500
Trade receivables	7,500	3,750
Inventory	3,000	2,250
Intangible asset (net)	1,500	2,250
Due from associates	28,500	28,500
Property, plant and equipment at cost	18,000	33,750
Accumulated depreciation	(7,500)	(9,000)
Property, plant and equipment (net)	10,500	24,750
Total assets	55,500	63,000
Liabilities		
Accounts payable	7,500	18,750
Provision for taxation	7,500	4,500
Total liabilities	15,000	23,250
Shareholders' equity		
Share capital	9,750	9,750
Retained earnings	30,750	30,000
Total shareholders' equity	40,500	39,750
Total liabilities and shareholders' equity	55,500	63,000

Summarised Statement of Profit and Loss For the year ended 31st March, 2016

	₹
Sales	45,000
Cost of sales	(15,000)
Gross operating profit	30,000
Administrative and selling expenses	(3,000)
Interest expenses	(3,000)
Depreciation of property, plant and equipment	(3,000)
Amortization of intangible asset	(750)
Investment income	4,500
Net profit before taxation	24,750
Taxes on profit	(6,000)
Net profit	18,750

Additional information:

1. All sales made are credit sales. All purchases are also credit purchases.
2. Interest expense for the year 2015-2016 was ₹ 3,000 which was fully paid during the year.
3. The company pays salaries and other employee dues before the end of each month. All administration and selling expenses incurred were paid before 31st March, 2016.
4. Investment income comprised dividend income from investments in shares of blue chip companies. This was received before 31st March, 2016.
5. Equipment with a net book value of ₹ 11,250 and original cost of ₹ 15,750 was sold for ₹ 11,250.
6. The company declared and paid dividends of ₹ 18,000 to its shareholders during 2015-2016.
7. Income tax expense for the year 2015-2016 was ₹ 6,000, against which the company paid ₹ 3,000 during 2015-2016 as an estimate.

Using all the given financial information of ABC Ltd., prepare the cash flows statement as per AS 3 under indirect method.

SolutionCash Flow Statement For the year ended 31st March, 2016

	2016 ₹	2015 ₹
Cash flow from operating activities		
Net profit before taxation	24,750	
Adjustments for:		
Depreciation of property, plant, and equipment	3,000	
Amortization of intangible assets	750	
Investment income	(4,500)	
Interest expense	3,000	
Operating profit before working capital changes	27,000	
Increase in accounts receivable	(3,750)	
Increase in inventories	(750)	
Decrease in accounts payable	(11,250)	
Cash provided by operations	11,250	
Income taxes paid	(3,000)	
Net cash from operating activities		8,250
Cash flows from investing activities		
Proceeds from sale of equipment	11,250	
Dividends received	4,500	
Net cash from investing activities		15,750
Cash flows from financing activities		
Dividends paid	(18,000)	
Interest paid	(3,000)	
Net cash used in financing activities		(21,000)
Net increase in cash and cash equivalents		3,000
Cash and cash equivalents at the beginning of the year		1,500
Cash and cash equivalents at the end of the year		4,500

SIGNIFICANCE OF CASH FLOW STATEMENT

Cash basis funds flow statement is important for a number of reasons.

- (1) First, by focusing on cash flows, it explains the nature of the financial events which have affected the cash positions. This statement explains the reasons for the difference between opening and closing cash balance.
- (2) The statement is important for financial planning purposes. For example, budgeted cash statements are crucial element in the process of budget plans. These surpluses and shortfalls are expressed sequentially over the planning period and require management to deal with the forecasted cash surplus or deficit, the former involving a short-term investment of surplus cash, the latter a short-term borrowing arrangement.
- (3) This statement brings into sharp focus the enterprise's earning capacity with its spending and operating activity. Accounting principles restrict the income statement to matching periodic revenues with the cost of earning those revenues. Statement of changes in cash is not restricted in this way; hence, it provides an extended view of the financial inflows and outflows by including both capital and revenue flows.
- (4) Cash flow statement provides an insight into the critical areas of financial management by identifying two important classes of cash flows, namely, operating cash flows and financing cash flows. This distinction draws attention to the net cash flows from operations and the net financing cash flows. The net operating cash flows classify the capability of the firm to support dividend payments to shareholders. It is these net cash flows which are of critical importance to investors and shareholders in predicting the amount of cash likely to be distributed in the future in the form of liquidation distributions or repayment of principal and in the evaluation of risk.
- (5) The significance of cash flow statement lies in the increased complexity of business activity. This complexity results in a greater disparity between the time when income and expense items are reported and the time when the related cash flows occur. It may also result in a greater variability of cash flows.

ICAI's Ind AS 7 'Statement of Cash Flow' contains the following explanations on the utility of cash flow statement:

1. Information about the cash flows of an enterprise is useful in providing users of financial statements with a basis to assess the ability of the enterprise to generate cash and cash equivalents and the needs of the enterprise to utilise those cash flows. The economic decisions that are taken by users require an evaluation of the ability of an enterprise to generate cash and cash equivalents and the timing and certainty of their generation.

2. Users of an enterprise's financial statements are interested in how the enterprise generates and uses cash and cash equivalents. This is the case regardless of the nature of the enterprise's activities and irrespective of whether cash can be viewed as the product of the enterprise, as may be the case with a financial enterprise. Enterprises need cash for essentially the same reasons, however different their principal revenue-producing activities might be. They need cash to conduct their operations, to pay their obligation, and to provide returns to their investors.
3. A statement cash flows, when used in conjunction with the other financial statements, provides information that enables users to evaluate the changes in net assets of an enterprise, its financial structure (including its liquidity and solvency) and its ability to affect the amounts and timing of cash flows in order to adapt to changing circumstances and opportunities. Cash flow information is useful in assessing the ability of the enterprise to generate cash and cash equivalents and enables users to develop models to assess and compare the present value of the future cash flows of different enterprises. It also enhances the comparability of the reporting of operating performance by different enterprises because it eliminates the effects of using different accounting treatments for the same transactions and events. (para 4)
4. Historical cash flow information is often used as an indicator of the amount, timing and certainty of future cash flows. It is also useful in checking the accuracy of past assessments of future cash flows and in examining the relationship between profitability and net cash flow and the impact of charging prices. (para 5)

LIMITATIONS OF CASH FLOW STATEMENT

Cash flow can be more precisely measured than can other concepts of funds because the valuation problem of cash are not as great as for other financial resources. However, movement of cash may be easily influenced. For example, payment of liabilities, may be temporarily delayed or marketable securities may be sold, increasing cash flow for a given period. This statement, since it does not cover non-cash items, is not useful in analysing changes in financial position of an enterprise. Cash and changes in cash are not adequate to measure change in financial position. For instance, an enterprise may possess very satisfactory financial (cash) position during a particular month. But if the firm has to pay creditors next month, or make payments for the plant purchased in the near future, the cash position of the firm will be adversely affected. In this way statement of changes in financial position measured through cash only has drawbacks and does not indicate accurately the changes in financial position. The statement has utility for making short-term financial planning but for long-term planning this statement would not be useful. Because of the limited usefulness of statement of changes in cash,

the preparation of statement of changes in working capital (popularly known as funds flow statement) has been suggested.

- (i) Gross increase in fixed assets has been shown as uses of funds.
- (ii) Depreciation for the year 2008 is shown as source of funds.

QUESTIONS

- Why is cash flow statement a useful statement?
- Identify the three major types of activities classified on a cash flow statement and gives examples of cash inflows and cash outflows in each classification.
- What limitations of funds flow statement are overcome by a cash flow statement?
- What are the purposes of cash flow statement?
- Discuss the procedures in preparing a cash flow statement.
- What are the two methods of determining cash flows from operations? Generally which of these methods is preferable?
- "A cash flow statement is required to explain changes in cash account balances between balance sheet dates." Explain this statement.
- List the common sources and uses of cash in each activity area: operating, investing and financing.
- Discuss the guidelines as contained as AS-3 on cash flow statement.
- Discuss the main features of AS-3. What changes have been made in this standard?
- Distinguish between cash and 'cash equivalent'.
- Distinguish among cash flows from operating, investing and financing activities. Provide examples of each type of activity as per AS-3. Show a proforma statement of cash flows.
- Discuss the Direct Method and Indirect Method of preparing Cash Flow Statement.
- Retirement of long-term debt by issue of preferred capital.
- A transaction which would appear as an application of funds on a conventional funds statement using the total financial resources concept, but not on a statement using the traditional working capital concept would be—
 - (a) acquisition of property, plant and equipment for cash.
 - (b) requisition of bonds issued by the reporting entity.
 - (c) acquisition of property, plant and equipment with an issue of equity capital.
 - (d) declaration and payments of dividends.
- A statement of changes in financial position typically would not disclose the effects of:
 - (a) share capital issued to acquire productive facilities.
 - (b) dividends on shares declared.
 - (c) cash dividends declared but not yet paid.
 - (d) a purchase and immediate retirement of government securities.
- Which of the following is not disclosed in cash flow statement?
 - (a) Amount of cash on hand at year-end.
 - (b) Cash outflows from investing activities during the period.
 - (c) Cash inflows from financing activities during the period.
 - (d) Cash provided by operations during the period.
- Which of the following events will appear in the cash flows from financing activities section of cash flow statement?
 - (a) Cash purchase of equipment.
 - (b) Cash purchase of bonds issued by another company.
 - (c) Cash received as repayment for funds loaned.
 - (d) Cash purchase of government securities.
- Which of the following statements is true?
 - (a) The direct method of calculating cash flows from operations starts with net income and adjusts for non cash revenues and expenses and changes in current assets and current liabilities.
 - (b) The indirect method of calculating cash flows from operations adjusts each item in the income statement to a cash basis.
 - (c) The description in (a) and (b) should be reversed.
 - (d) The direct method is easier to use than the indirect method.
- Investing activities include all of the following except:
 - (a) Payment of debt.
 - (b) Collection of loans.
 - (c) Making of loans.
 - (d) Sale of available-for-sale and held-to-maturity securities.
- If sale on an accrual basis are ₹ 5,00,000 and accounts receivable increased by ₹ 30,000, the cash received from customers would be:
 - (a) ₹ 5,00,000.
 - (b) ₹ 4,70,000.
 - (c) ₹ 5,30,000.
 - (d) Cannot be determined.

MULTIPLE CHOICE QUESTIONS

Select the correct answer for the following multiple choice questions:

- On a statement of changes in financial position, depreciation is treated as an adjustment to reported net earnings because depreciation—
 - (a) is a direct source of funds.
 - (b) reduces reported net earnings but does not involve an outflow of funds.
 - (c) reduces reported net earnings and involves an inflow of funds.
 - (d) is an inflow of funds to a reserve account for replacement of assets.
- Which of the following items is included on a statement of changes in financial position only because of the total financial resources concept?
 - (a) Depreciation
 - (b) Issuance of equity capital
 - (c) Purchase of government securities

10. Assume cost of goods sold on an accrual basis is ₹ 3,00,000, accounts payable increased by ₹ 20,000, and inventory increased by ₹ 50,000. Cash paid for merchandise is:
- (a) ₹ 3,70,000. (b) ₹ 2,30,000.
(c) ₹ 2,70,000. (d) ₹ 3,30,000.
11. Assume net income was ₹ 2,00,000, depreciation expense was ₹ 10,000, accounts receivable increased by ₹ 15,000, and accounts payable increased by ₹ 5,000. The amount of cash flows from operating activities is:
- (a) ₹ 2,00,000. (b) ₹ 1,80,000.
(c) ₹ 2,10,000. (d) ₹ 1,90,000.

PROBLEMS

1. From the following particulars, calculate Cash from operating activities by applying:
- (a) Direct Method
(b) Indirect Method.

Profit and Loss A/c
for the year ended 31st March, 2016

	₹		₹
To Opening Stock	60,000	By Sales	6,00,000
To Purchases	3,00,000	By Stock (Closing	85,000
To Wages	75,000		
To Gross Profit c/d	2,50,000		
	6,85,000		6,85,000
To Salaries	50,000	By Gross Profit b/d	2,50,000
To General Expenses	15,000		
To Insurance	10,000		
To Depreciation	75,000		
To Provision for Tax	30,000		
To Net Profit	70,000		
	2,50,000		2,50,000

Additional Information:

	31.03.15 ₹	31.03.16 ₹
Salaries o/s	5,000	7,500
Prepaid Insurance	5,000	5,000
Debtors	50,000	70,000
Bills Receivable	25,000	15,000
Creditors	35,000	25,000
Income Tax paid during the year amounted to ₹ 25,000.		

Ans. ₹ 97,500

2. (Investment and Financing activities not affecting Cash) The following are the Balance Sheets of Huda Ltd. as on 31st March, 2015 and 31st March, 2016.

Liabilities	31.03.15 ₹	31.03.16 ₹	Assets	31.03.15 ₹	31.03.16 ₹
Share Capital	4,00,000	5,20,000	Goodwill	—	40,000
General Reserve	1,00,000	1,00,000	Land & Building	2,97,000	2,88,500
Profit & Loss Account	79,380	82,440	Plant and Machinery	2,25,900	2,32,400
S. Creditors	79,000	82,270	Stock	2,22,080	1,94,740
Bills Payable	67,560	23,050	Advances	4,630	1,470
Bank Overdraft	1,19,020	—	Debtors	1,70,350	1,45,250
Provision for Tax	80,000	1,00,000	Cash at Bank	5,000	5,400
	9,24,960	9,07,760		9,24,960	9,07,760

Additional Information:

- (i) During the year ended 31st March, 2016, an additional dividend of ₹ 52,000 was paid.
- (ii) The assets of another company were purchased for ₹ 1,20,000 payable in fully paid shares of the company. The assets consisted of Stock ₹ 43,280, Machinery ₹ 36,720 and goodwill ₹ 40,000. In addition plant was purchased amounting to ₹ 11,300.
- (iii) Income tax paid during the year was ₹ 50,000.
- (iv) The net profit for the year before tax amounted to ₹ 1,25,060.

Prepare Cash Flow Statement as per AS-3 (Revised)

[Ans. Cash from Operating activities: ₹ 1,82,720; Cash from investing activities: ₹ (11,300) Net increase in cash and cash equivalent ₹ 400.]

3. From the following Profit and Loss A/c Calculate Cash from operating activities.

	₹		₹
To Salaries	1,80,000	By Gross Profit b/d	5,40,000
To Rent	90,000	By Profit on Sale of Land	28,000
To Office Expenses	30,000	By Income Tax Refund	8,000
To Depreciation	24,000	By Rent Received	40,000
To Loss on Sale of Plant	12,000	By Dividend	20,000
To Goodwill w/o	30,000		
To Discount on Issue of Debentures w/o	10,000		
To Preliminary Expenses w/o	8,000		
To Proposed Dividend	60,000		
To Provision for Tax	60,000		
To Net Profit c/d	1,32,000		
	6,36,000		6,36,000

Income Tax paid during the year amounted to ₹ 50,000.

[Ans. Cash generated from operating activities ₹ 1,98,000]

4. Following are the Balance Sheet of Vrinda Ltd. as on 31st March, 2015 and 2016

<i>Liabilities</i>	<i>31.03.15</i> ₹	<i>31.03.16</i> ₹	<i>Assets</i>	<i>31.03.15</i> ₹	<i>31.03.16</i> ₹
Equity Share Capital	12,00,000	12,75,000	Fixed Assets	11,10,000	12,60,000
Profit and Loss Appropriation A/c	2,17,500	3,67,500	Stock	1,35,000	1,05,000
Mortgaged Loans	—	75,000	Debtors	2,47,500	2,92,500
S. Creditors	1,35,000	75,000	Cash and Bank Balance	60,000	1,35,000
	15,52,500	17,92,500		12,52,500	17,92,500

Prepare Cash Flow Statement as per AS-3 (Revised).

[Ans. Cash From Operating activities — ₹ 75,000
 Cash used in Investing activities — ₹ (1,50,000)
 Cash flow from Financing Activities — ₹ 1,50,000]

5. (From Trial Balance: Indirect Method) Usha Ltd. had the following condensed Trial Balance at the end of 31 march, 2016:

	₹		₹
Cash	7,500	Current Liabilities	15,000
Accounts Receivable	30,000	Long-term Notes Payable	25,500
Investments	20,000	Bonds Payable	25,000
Plant assets	67,500	Capital Stock	75,000
Land	40,000	Retained Earnings	24,500
	1,65,000		1,65,000

During 2016-17 the followings occurred:

- (i) A tract of land was purchased for ₹ 7,750 cash.
- (ii) Bonds payable in the amount of ₹ 6,000 were retired for cash at face and book value.
- (iii) An additional ₹ 20,000 equity shares were issued at par for cash.
- (iv) Dividends totaling ₹ 9,375 were paid.
- (v) Net income for 2016-17 was ₹ 28,450 after allowing for depreciation of ₹ 9,500.
- (vi) Land was purchased through the issuance of ₹ 22,500 in bonds.
- (vii) Usha Ltd. sold part of its investments portfolio for ₹ 12,875 cash. This transaction resulted in a gain of ₹ 1,375 for the firm.
- (viii) Current liabilities increased to ₹ 18,000 at 31.03.2017.
- (ix) Accounts receivable at 31st March 2017 total ₹ 38,000.
- (x) The cash balance at 31st March 2017 is ₹ 48,825.

Instructions:

Prepare statement of cash flow for 2016-17 with the indirect method [AS-3] (Revised)]

[Ans. Net-cash from operating activities	—	₹ 31,575
Net-cash from investing activities	—	₹ 5,125
Net-increase in cash and cash equivalent	—	₹ 41,325]

6. From the following Balance Sheets of Twenty First Century Ltd. and additional information prepare a Cash Flow Statement as per AS-3 (Revised)

<i>Liabilities</i>	<i>31.03.15</i> ₹	<i>31.03.16</i> ₹	<i>Assets</i>	<i>31.03.15</i> ₹	<i>31.03.16</i> ₹
Equity Share Capital	12,00,000	15,00,000	Building	8,00,000	7,60,000
General Reserve	3,00,000	3,50,000	Machinery	5,00,000	7,20,000
Profit and Loss A/c	1,00,000	1,50,000	Short-Term Investments	3,00,000	4,50,000
9% Debentures	6,00,000	4,00,000	Inventories	4,00,000	4,70,000
Creditors	4,90,000	5,60,000	Debtors	6,70,000	5,30,000
Proposed Dividends	1,20,000	1,80,000	Cash at Bank	2,20,000	3,30,000
Provision for Taxation	1,00,000	1,30,000	Prepaid Expenses	20,000	10,000
	29,10,000	32,70,000		29,10,000	32,70,000

Additional Information:

- (i) Debentures were redeemed at a premium of 10% on 1st April, 2015.
- (ii) Income tax paid during the year amounted to ₹ 1,40,000.
- (iii) A machine which appeared at a W.D.V. of ₹ 80,000 was sold for ₹ 1,30,000 and a new machine costing ₹ 3,60,000 was acquired during the year.

[Ans. Net Cash flow from operating activities: ₹ 5,66,000
Net cash used in investing activities: ₹ 3,80,000]

7. From the following Balance Sheets of Diana and Daisy Ltd. prepare a Cash Flow Statement for the year end 31st March, 2016.

<i>Liabilities</i>	<i>31.03.15</i> ₹	<i>31.03.16</i> ₹	<i>Assets</i>	<i>31.03.15</i> ₹	<i>31.03.16</i> ₹
8% Preference Share Capital	1,50,000	1,00,000	Goodwill	1,15,000	90,000
Equity Share Capital	3,00,000	4,00,000	Land and Building	2,00,000	1,70,000
General Reserve	40,000	70,000	Plant and Machinery	80,000	2,00,000
Profit and Loss A/c	30,000	48,000	Stock	77,000	1,09,000
Proposed Dividend	42,000	50,000	Debtors	1,60,000	2,00,000
Creditors	55,000	83,000	Bills Receivable	20,000	30,000
Bills Payable	20,000	16,000	Cash at Bank	15,000	10,000
Provision for Taxation	40,000	50,000	Cash in hand	16,000	8,000
	6,77,000	8,17,000		6,77,000	8,17,000

Additional Information:

- (i) Depreciation of ₹ 20,000 and ₹ 10,000 have been charged on Plant and Machinery and on Building respectively.
(ii) An interim dividend of ₹ 20,000 has been paid during the year.
(iii) Income Tax ₹ 35,000 was paid during the year,

[Ans. Cash from Operating activities	—	₹ 1,25,000
Cash used in Investing activities	—	₹ (1,20,000)
Cash used in Financing activities	—	₹ (12,000)
Net decrease in Cash and Cash equivalent	—	₹ (7,000)]

8. From the summary cash account of X Ltd., prepare Cash Flow Statement for the year ended 31st March, 2016 in accordance with AS-3 (Revised) using the direct method and indirect method. The company does not have any equivalents.

Summary Cash Account
For the Year Ended 31.03.2016

(₹ '000)

	₹		₹
Balance on 01.04.2000	50	Payment to Suppliers	2,000
Issue of Equity Shares	300	Purchase of Fixed Assets	200
Receipts from Customers	2,800	Overhead Expenses	200
Sales of Fixed Assets	100	Wages and Salaries	100
		Taxation	250
		Dividend	50
		Repayment of Bank Loan	300
		Balance on 31.03.2001	150
	3,250		3,250

[Ans. Net Cash from operating activities (₹ '000)	—	₹ 250
Net Cash used in investing activities	—	₹ (100)
Net increase in cash	—	₹ 100]

9. From the following Balance Sheets of Ahmed Ltd. prepare a Cash Flow statement.

<i>Liabilities</i>	<i>31.03.15</i> ₹	<i>31.03.16</i> ₹	<i>Assets</i>	<i>31.03.15</i> ₹	<i>31.03.16</i> ₹
12% Preference Share Capital	—	90,000	Fixed Assets	7,38,000	7,20,000
Equity Share Capital	7,20,000	8,10,000	Less: Provision for Depreciation	(1,98,000)	(2,70,000)
General Reserve	36,000	45,000	Stock	5,40,000	6,30,000
Profit and Loss Account	18,000	21,600	Prepaid Expenses	5,400	9,000
15% Debentures	1,08,000	1,17,000	Cash and Bank	21,600	63,000
S. Creditors	2,16,000	1,98,000	Debtors	3,60,000	4,32,000
Bank overdraft	2,25,000	1,22,400			
Provision for Taxation	54,000	75,600			
Proposed Dividend	90,000	1,04,400			
	14,67,000	15,84,000		14,67,000	15,84,000

Interest paid on debentures— ₹ 16,200

Prepare Cash Flow statement

[Ans. Cash from Operating activities	—	₹ 43,200
Cash from Investing activities	—	₹ 18,000
Cash used in Financing Activities	—	₹ 82,800
Net Increase in Cash and Cash equivalent	—	₹ 1,44,000]

10. From the following condensed comparative Balance Sheets of Bangalore Mills Ltd. and additional information, prepare a Cash Flow Statement for the year 2016.

<i>Liabilities</i>	<i>2015</i> ₹	<i>2016</i> ₹	<i>Assets</i>	<i>2015</i> ₹	<i>2016</i> ₹
Share Capital	70,000	80,000	Plant & Machinery	62,000	66,000
Security Premium	9,000	11,000	Accumulated		
Retained earnings	23,820	30,820	Depreciation on		
7% Mortgage loan	—	20,000	Plant and Machinery	(37,000)	26,200)
Creditors	6,900	6,000	Building	95,000	1,16,000
Outstanding salaries	2,000	1,400	Accumulated depreciation on building	(43,000)	(45,000)
Provision for taxation	1,000	1,400	Land	10,000	12,000
			Stock	10,220	9,620
			Debtors	8,600	7,600
			Prepaid expenses	720	800
			Cash	6,180	9,800
	1,12,720	1,50,620		1,12,720	1,50,620

Additional Information:

- (i) Plant costing ₹16,000 (accumulated depreciation ₹ 14,800) was sold during the year for ₹ 1,200.
- (ii) Building was acquired during the year at a cost of ₹ 21,000. In addition to cash payment of ₹ 1,000, a 7% mortgage loan was raised for the balance.
- (iii) Dividend of ₹ 8,000 was paid during the year.
- (iv) A sum of ₹ 13,900 was transferred to provision for taxation account in 2016.

[Ans. Net cash generated from operations — ₹ 21,420
 Net cash used in investing activities — ₹ (21,800)
 Net cash from financing activities — ₹ 4,000
 Net increase in cash — ₹ 3,600]

11. Balance sheets of M/s. Ram and Shyam as on January 1, 2016 and 31 December 2016, were as follows:

<i>Liabilities</i>	<i>Jan. 1, 2016</i> ₹	<i>Dec. 31, 2016</i> ₹	<i>Assets</i>	<i>Jan. 1, 2016</i> ₹	<i>Dec. 31, 2016</i> ₹
Creditors	40,000	44,000	Cash	10,000	7,000
Mrs. Ram's Loan	25,000	—	Debtors	30,000	50,000
Loan from Bank	40,000	50,000	Stock	35,000	25,000
Capital	1,25,000	1,53,000	Machinery	80,000	55,000
		Land	40,000	50,000	
		Building	35,000	60,000	
	2,30,000	2,47,000		2,30,000	2,47,000

During the year, a machine costing ₹ 10,000 (Accumulated depreciation ₹ 3,000) was sold for ₹ 5,000. The balance of provision for depreciation against machinery as on 1st January, 2016 was ₹ 25,000 and on 31st December, 2016 ₹ 40,000. Net profit for the year amounted to ₹ 45,000.

Required: Prepare a Cash Flow Statement [AS-3 (Revised)]

[Ans. Net cash generated from operations: — ₹ 59,000
 Net cash used in investing activities: — ₹ (30,000)
 Net cash used in Financing activities: — ₹ (32,000)
 Net decrease in cash: — ₹ (3,000)]

