

EIGHTH EDITION

Survey of Economics

PRINCIPLES, APPLICATIONS, AND TOOLS

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PREFACE

ONE-SEMESTER BOOK

This book is a one-semester version of our full-length introductory text, *Economics: Principles, Applications, and Tools*, now in its tenth edition. This text has been a success in classrooms around the country, but many colleges and universities teach a one-semester economics course that covers both microeconomics and macroeconomics. This book preserves the key features of *Economics: Principles, Applications, and Tools*, including its organization around the five key principles of economics to explain the most important concepts of economics, and the extensive use of practical applications to reinforce the learning process.

In designing a one-semester book, we knew that we had to focus on the essential concepts of economics. We start with the five key principles of economics and move quickly into the heart of microeconomics: demand and supply. We then turn to production and cost, competition and market structure, market failure from imperfect information and externalities, and the labor market. Macroeconomics begins with chapters that introduce national income, unemployment, and inflation. We then explore the issues of economic growth and economic fluctuations. We cover monetary and fiscal policy, in both the short run and long run. The book concludes with international trade and finance. We've strived to make all explanations of key ideas and key concepts as simple as possible. In a one-semester book, the student will be introduced to a wide range of ideas. It is important that these ideas be as straightforward and transparent as possible.

In preparing this eighth edition, we had three primary goals. First, we wanted to incorporate the sweeping changes in the U.S. and world economies we have all witnessed in the last several years, and the difficulties that the world economies have experienced in recovering from the severe economic downturn. Second, we strived to update this edition to reflect the latest exciting developments in economic thinking and make these accessible to new students of economics. Finally, we wanted to stay true to the philosophy of the textbook—using basic concepts of economics to explain a wide-variety of timely and interesting economic applications.

What's New to This Edition

In addition to updating all the figures and data, we made a number of other key changes in this edition. They include the following:

- At the end of each chapter, we introduce new Critical Thinking exercises that challenge students to explore and apply the economic concepts in each chapter.

- In Chapter 1, we highlight some of the trade-offs associated with international trade.
- We discuss in Chapter 11 the difficulties we face in measuring output in the economy in the face of increasing use of intellectual property and the expansion of the digital economy.
- We highlight in Chapter 12 the ongoing decline in labor force participation and the role that disability insurance plays in this decline.
- We revised and updated our discussion of fiscal policy in Chapter 15 to the tax cuts enacted under President Trump and to update the ongoing debates about long run fiscal policy.
- We revised and updated our discussion of the monetary system in Chapter 17, as the Federal Reserve has adopted new tools to manage monetary policy.
- We also introduce the new Chairman of the Federal Reserve, Jerome Powell, and discuss the challenges that the Federal Reserve now faces in normalizing monetary policy.
- We provide in Chapter 18 a revised and updated discussion of protectionist policies and their consequences in the trading system.
- We developed a new series of *Applications and chapter-opening stories* throughout the book. These fresh applications and chapter openers show the widespread relevance of economic analysis. The new applications include solar tax credits (Chapter 1), repaying college loans (Chapter 2), craft beer and hop prices (Chapter 3), the elasticity of demand for public transit (Chapter 4), the prospects for an electric freight truck (Chapter 5), closing a coal mine (Chapter 6), refillable soda bottles for price discrimination (Chapter 7), the maple syrup cartel (Chapter 8), monitoring the oceans (Chapter 9), the rainy-day taxi puzzle (Chapter 10), measuring the effects of infrastructure investment (Chapter 13), and dynamic scoring in fiscal policy (Chapter 15).

Solving Teaching and Learning Challenges

Many students who take the principles of economics class have difficulty seeing the relevance of the key concepts of economics, including the role of opportunity costs, thinking on the margin, the benefits of voluntary exchange, the idea of diminishing returns, and the distinction between real and nominal magnitudes. This reduces student preparedness and engagement. We explore the five key principles of

economics we think are most important to students and use the following resources to engage students with the content and to highlight not only how economics is relevant to their lives, but also their future careers.


Make Economics Relevant through Real-World Application

Real-world application is crucial to helping students find the relevance in economics. As such, our applications-driven text includes over 130 real-world Applications to help students master essential economics concepts. Here is an example of our approach from Chapter 3, “Demand, Supply, and Market Equilibrium.”

APPLICATION 1

THE LAW OF DEMAND FOR YOUNG SMOKERS

APPLYING THE CONCEPTS #1: What is the law of demand?



As price decreases and we move downward along the market demand for cigarettes, the quantity of cigarettes demanded increases for two reasons. First, people who smoked cigarettes at the original price respond to the lower price by smoking more. Second, some people start smoking.

In the United States, cigarette taxes vary across states, and studies of cigarette consumption patterns show that higher taxes mean less cigarette consumption by youths. Using data from the Youth Risk Behavior Surveys (YRBS), one study shows that increases in state cigarette taxes between 1990 and 2005 resulted in less participation (fewer smokers) and lower frequency (fewer cigarettes per smoker).

A change in cigarette taxes in Canada illustrates the second effect, the new-smoker effect. In 1994, several provinces in eastern Canada cut their cigarette taxes in response to the smuggling of cigarettes from the United States (where taxes are lower), and the price of cigarettes in the provinces decreased by roughly 50 percent. Researchers tracked the choices of 591 youths from the Waterloo Smoking Prevention Program and concluded that the lower price increased the smoking rate by roughly 17 percent. **Related to Exercises 1.6 and 1.8.**

SOURCES: (1) Anindya Sen and Tony Wirjanto, “Estimating the Impacts of Cigarette Taxes on Youth Smoking Participation, Initiation, and Persistence: Empirical Evidence from Canada,” *Health Economics* 19 (2010), pp. 1264–1280. (2) Christopher Carpenter and Philip J. Cook, “Cigarette Taxes and Youth Smoking: New Evidence from National, State, and Local Youth Risk Behavior Surveys,” *Journal of Health Economics* 27 (2008), pp. 287–299.

Each Application has at least one related exercise available in MyLab Economics. These exercises can be found in the Application boxes in the eText with an opportunity for additional practice in the Study Plan, and in the end-of-chapter section. The **Study Plan** gives students personalized recommendations, practice opportunities, and learning aids to help them stay on track.

Text Exercise 1.6

Related to Application: Law of Demand for Young Smokers

When several provinces in eastern Canada cut their cigarette taxes, the price of cigarettes decreased by roughly 50 percent, and the youth smoking rate increased by roughly percent.

LAW OF DEMAND FOR YOUNG SMOKERS


APPLYING THE CONCEPTS: What is the law of demand?

As price decreases and we move downward along the market demand for cigarettes, the quantity of cigarettes demanded increases for two reasons. First, people who smoked cigarettes at the original price responded to the lower price by smoking more. Second, some people start smoking.

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Our macroeconomic world is rich with data. We help students understand the importance of real and current data through the incorporation of Real-Time-Data Analysis Exercises in the Macroeconomics volume. The **Real-Time-Data Analysis Exercises**, marked with , allow students and instructors to use the very latest data from FRED. By completing the exercises, students become familiar with a key data source, learn how to locate data, and develop important employability skills in interpreting data.

Students are often best motivated when they see the relevance of what they’re learning to the world they live

in. The **Current News Exercises** available to students in MyLab Economics help demonstrate the real world relevance of these important concepts. Every week, microeconomic and macroeconomic news stories and accompanying exercises are posted to MyLab Economics. Assignable and auto-graded, these multi-part exercises ask students to recognize and apply economic concepts to current events.

8/17/18: Economic models Ex1

Most Economic Forecasts Have a Big Blind Spot: Climate Change

Source: DePillis, Lydia “Most Economic Forecasts Have a Big Blind Spot: Climate Change” *CNN.com*, posted 8/17/2018.

Carefully watch the video, read the article and then answer the following questions.

An economic model is a simplified version of reality used to analyze real-world situations about individual and firm choices made given the constraint of scarce resources.

_____ economic analysis is concerned with what is and not what should be.

A. Micro

B. Positive

C. Normative

D. Macro

The statement, “Minimum wage should be increased,” is an example of positive economic analysis.

A. False

B. True

Click to select your answer and then click Check Answer.

All parts showing Clear All Final Check

Stimulate Active Learning with Experiments

Economics Experiment sections are available throughout the text, engaging students with the opportunity to perform their own economic analysis.

Economic Experiment

PRODUCING FOLD-ITS

Here is a simple economic experiment that takes about 15 minutes to run. The instructor places a stapler and a stack of paper on a table. Students produce “fold-its” by folding a page of paper in thirds and stapling both ends of the folded page. One student is assigned to inspect each fold-it to be sure that it is produced correctly. The experiment starts with a single student, or worker, who has 1 minute to produce as many fold-its as possible. After the instructor records the number of fold-its produced, the process is repeated with two students, three students, four students, and so on. How does the number of fold-its change as the number of workers increases?

MyLab Economics

For additional economic experiments, please visit www.pearson.com/mylab/economics

Single Player Experiments are also available in MyLab Economics to engage students in economic decision-making. **Experiments** are an easy-to-use, fun, and engaging way to promote active learning and mastery of important economic concepts. Single-player experiments allow your students to play against virtual players from anywhere at any time so long as they have an Internet connection. Pre- and post-questions for each experiment are available for assignment.

PAUSE ROUND 1 4 Free Market

Market for Cranberries

→ You are a Buyer and your WTP is: \$16.50

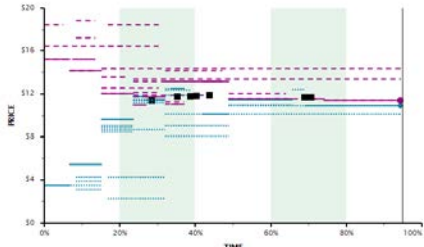
→ CURRENT BIDS AND ASKS

- Lowest Ask: \$11.50
- ◆ Highest Bid: \$11.00

→ Your Bid

- \$ 0.00 +

SUBMIT



Show the Big Picture with Five Key Principles

In Chapter 2, “The Key Principles of Economics,” we introduce the following five key principles and then apply them throughout the book:

1. **The Principle of Opportunity Cost.** The opportunity cost of something is what you sacrifice to get it.
2. **The Marginal Principle.** Increase the level of an activity as long as its marginal benefit exceeds its marginal cost. Choose the level at which the marginal benefit equals the marginal cost.
3. **The Principle of Voluntary Exchange.** A voluntary exchange between two people makes both people better off.
4. **The Principle of Diminishing Returns.** If we increase one input while holding the other inputs fixed, output will increase, but at a decreasing rate.
5. **The Real-Nominal Principle.** What matters to people is the real value of money or income—its purchasing power—not the face value of money or income.

This approach of repeating five key principles gives students the big picture—the framework of economic reasoning. We make the key concepts unforgettable by using them repeatedly, illustrating them with intriguing examples, and giving students many opportunities to practice what they’ve learned, such as the **Concept Checks** available in MyLab Economics.

Practicing the Principles

Each section of each learning objective concludes with an online Concept Check that contains one or two multiple choice, true/false, or fill-in questions. These checks act as “speed bumps” that encourage students to stop and check their understanding of fundamental terms and concepts before moving on to the next section. The goal of this digital resource is to help students assess their progress on a section-by-section basis, so they can be better prepared for homework, quizzes, and exams.

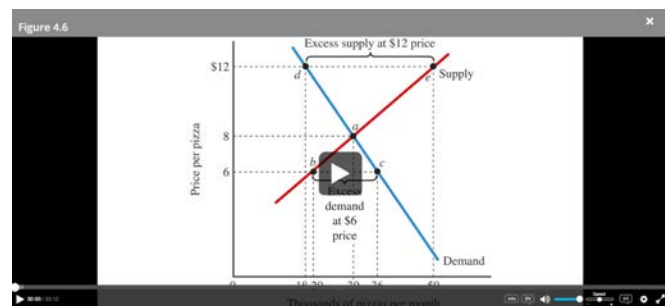
The end-of-chapter exercises then test student understanding of the concepts presented in each chapter. These exercises are available in MyLab Economics and include multiple-choice, graph drawing, and free-response items, many of which are generated algorithmically so that each time a student works them, a different variation is presented. New to this edition are accessible versions of exercises in MyLab Economics that ask students to draw a graph. These accessible versions present the same question in a different form, which will allow every student the same opportunity to practice their knowledge of the key principles explored in the text.

New to this edition are the Critical Thinking exercises included in the end-of-chapter section. Every Critical

Thinking exercise will be available in MyLab Economics as an essay question. These open-ended, thought-provoking questions challenge students to think more deeply about and apply the key concepts presented within the chapters.

Illustrating the Key Principles of Economics

These big picture concepts are also well-illustrated in the figures and tables included in the text. **Animated graphs** in MyLab Economics help students understand shifts in curves, movements along curves, and changes in equilibrium values. For every figure in the book, there is also an exercise directly related to that figure in MyLab Economics.



Developing Employability Skills

For students to succeed in a rapidly changing job market, they need thinking and communication skills. In addition, they need to be informed about career options and the pathway from college student to productive employee. This book—along with the MyLab—promotes skill development and career awareness.

We added a new section to Chapter 1 on page 10, “Employability: Economic Logic on the Job,” where we discuss how economics promotes the sort of critical thinking and communication skills that employers value in their workers. Additionally, we discuss the role of economics in a liberal-arts education in building thinking skills that make a worker responsive to changes in the workplace. We also point readers to the U.S. Bureau of Labor Statistics as a good source of information about career paths that start with course work in economics.

Economics is the science of choice, and the book clearly illustrates the widespread application of economics. Throughout the book we use examples from business, government, and other organizations to show the practical deployment of economics to all sorts of decisions. This approach applies economic concepts with real-world situations, and thus imparts critical thinking skills to workers in all sorts of organizations. We deliver these practical applications in the text itself, as well as in chapter openers and 3 to 5 applications per chapter.

APPLICATION 1

DON'T FORGET THE COSTS OF TIME AND INVESTED FUNDS

APPLYING THE CONCEPTS #1: What is the opportunity cost of running a business?



Suppose you have the opportunity to develop a software application (an app). It would take you 1,000 hours (half a year of work time) to design and test the app. To develop the app, you need a high-powered computer that has a purchase price of \$5,000 and can be resold at any time for the same price. What is the cost of developing the app?

We can use the principle of opportunity cost to compute the development cost. If you could earn \$14 per hour as a janitor, the opportunity cost of your time is the \$14,000 you could earn instead as a janitor. If you have a savings account that earns 6 percent per year, the opportunity cost of investing \$5,000 in the computer for half a year instead of the savings account is \$150. Adding the opportunity cost of your time to the opportunity cost of your funds, the cost of developing the app is \$14,150. **Related to Exercise 1.7.**

How Is the Market Equilibrium Chapter Organized

Students need to have a solid understanding of demand and supply to be successful in the course. Many students have difficulty understanding movement along a curve versus shifts of a curve. To address this difficulty, we developed an innovative way to organize topics in Chapter 3, “Demand, Supply, and Market Equilibrium.” We examine the law of demand and changes in quantity demanded, the law of supply and changes in quantity supplied, and then the notion of market equilibrium. After students have a firm grasp of equilibrium concepts, we explore the effects of changes in demand and supply on equilibrium prices and quantities.

Instructor Teaching Resources

This program comes with the following teaching resources.

Supplements available to instructors at www.pearsonhighered.com	Features of the Supplement
Instructor’s Manual Authored by Jeff Phillips of Colby-Sawyer College	<ul style="list-style-type: none"> • Chapter Summary: a bulleted list of key topics in the chapter • Learning Objectives • Approaching the Material; student-friendly examples to introduce the chapter • Chapter Outline: summary of definitions and concepts • Teaching Tips on how to encourage class participation • Summary and discussion points for the Applications in the main text • New Applications and discussion questions • Solutions to all end-of-chapter exercises.
Test Bank Authored by Brian Rosario of American River College	6,000 multiple-choice, true/false, short-answer, and graphing questions. Test questions are annotated with the following information: <ul style="list-style-type: none"> • Difficulty: 1 for straight recall, 2 for some analysis, 3 for complex analysis • Type: multiple-choice, true/false, short-answer, essay • Topic: the term or concept the question supports • Learning outcome • AACSB learning standard • Page number in the text.
Computerized TestGen	TestGen allows instructors to: <ul style="list-style-type: none"> • Customize, save, and generate classroom tests • Edit, add, or delete questions from the Test Bank • Analyze test results • Organize a database of tests and student results.
PowerPoints Authored by Paul Holmes of Ashland University	Slides include all the graphs, tables, and equations in the textbook. PowerPoints meet accessibility standards for students with disabilities. Features include, but not limited to: <ul style="list-style-type: none"> • Keyboard and Screen Reader access • Alternative text for images • High color contrast between background and foreground colors

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