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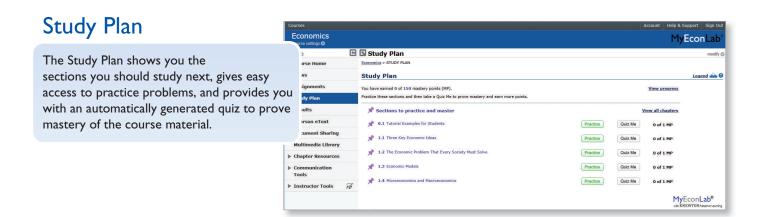
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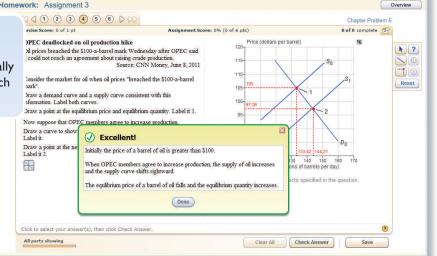
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Karl E. Case

Wellesley College

Ray C. Fair

Yale University

Sharon M. Oster

Yale University

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Ray C. Fair is Professor of Economics at Yale University. He is a member of the Cowles Foundation at Yale and a Fellow of the Econometric Society. He received a B.A. in Economics from Fresno State College in 1964 and a Ph.D. in Economics from MIT in 1968. He taught at Princeton University from 1968 to 1974 and has been at Yale since 1974.

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Sharon M. Oster is the Frederic Wolfe Professor of Economics and Management and former Dean of the Yale School of Management. Professor Oster joined Case and Fair as a coauthor in the ninth edition of this book. Professor Oster has a B.A. in Economics from Hofstra University and a Ph.D. in Economics from Harvard University.

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Preface

Our goal in the 11th edition, as it was in the first edition, is to instill in students a fascination with both the functioning of the economy and the power and breadth of economics. The first line of every edition of our book has been "The study of economics should begin with a sense of wonder." We hope that readers come away from our book with a basic understanding of how market economies function, an appreciation for the things they do well, and a sense of the things they do poorly. We also hope that readers begin to learn the art and science of economic thinking and begin to look at some policy and even personal decisions in a different way.

What's New in This Edition?

- The 11th edition has continued the changes in the *Economics in Practice* boxes that we began several editions ago. In these boxes, we try to bring economic thinking to the concerns of the typical student. In many cases, we do this by spotlighting recent research, much of it by young scholars. Chapter 3 looks at the demand response of students to textbook price rises, a topic of real concern to students. Chapter 4 looks at why there may be more "foodies" in New York City than in many other parts of the country using recent research on urban amenities. How has an app on the iPhone affected the truthfulness of snow resort forecasts? We discuss research on this topic in Chapter 17.
- For each box, we have also added questions to take students back from the box to the analytics of the textbook to reinforce the underlying economic principles of the illustrations.
- As in the previous edition, we have reworked some of the chapters to streamline them and to improve readability. In this edition, Chapters 2 and 3, as well as Chapters 8 and 9, have been substantially reworked, while many of the other chapters have been tightened and made more current.
- Many new questions and problems at the end of the chapters have been added.
- Many graphs and tables have been heavily revised and updated to include the most recent data available from 2010 through 2012. The inclusion of up-to-date studies and data is essential to promoting a better understanding of recent microeconomic developments.

The Foundation

The themes of *Principles of Microeconomics*, 11th edition, are the same themes of the first ten editions. The purposes of this book are to introduce the discipline of economics and to provide a basic understanding of how economies function. This requires a blend of economic theory, institutional material, and real-world applications. We have maintained a balance between these ingredients in every chapter. The hallmark features of our book are as follows:

- 1. Three-tiered explanations of key concepts (stories-graphs-equations)
- 2. Intuitive and accessible structure
- 3. International coverage

Three-Tiered Explanations: Stories-Graphs-Equations

Professors who teach principles of economics are faced with a classroom of students with different abilities, backgrounds, and learning styles. For some students, analytical material is difficult no matter how it is presented; for others, graphs and equations seem to come naturally. The problem facing instructors and textbook authors is how to convey the core principles of

the discipline to as many students as possible without selling the better students short. Our approach to this problem is to present most core concepts in the following three ways.

First, we present each concept in the context of a simple intuitive *story* or example in words often followed by a table. Second, we use a *graph* in most cases to illustrate the story or example. And finally, in many cases where appropriate, we use an *equation* to present the concept with a mathematical formula.

Microeconomic Structure

The organization of the microeconomic chapters continues to reflect our belief that the best way to understand how market economies operate—and the best way to understand basic economic theory—is to work through the perfectly competitive model first, including discussions of output markets (goods and services) and input markets (land, labor, and capital), and the connections between them before turning to noncompetitive market structures such as monopoly and oligopoly. When students understand how a simple, perfectly competitive system works, they can start thinking about how the pieces of the economy "fit together." We think this is a better approach to teaching economics than some of the more traditional approaches, which encourage students to think of economics as a series of disconnected alternative market models.

Learning perfect competition first also enables students to see the power of the market system. It is impossible for students to discuss the efficiency of markets as well as the problems that arise from markets until they have seen how a simple, perfectly competitive market system produces and distributes goods and services. This is our purpose in Chapters 6 through 11.

Chapter 12, "General Equilibrium and the Efficiency of Perfect Competition," is a pivotal chapter that links simple, perfectly competitive markets with a discussion of market imperfections and the role of government. Chapters 13 through 15 cover three noncompetitive market structures—monopoly, monopolistic competition, and oligopoly. Chapter 16 covers externalities, public goods, and social choice. Chapter 17, which is new to this edition, covers uncertainty and asymmetric information. Chapters 18 and 19 cover income distribution as well as taxation and government finance. The visual at the top of the next page (Figure II.2 from page 150), gives you an overview of our structure.

International Coverage

As in previous editions, we continue to integrate international examples and applications throughout the text. This probably goes without saying: The days in which an introductory economics text could be written with a closed economy in mind have long since gone.

Tools for Learning

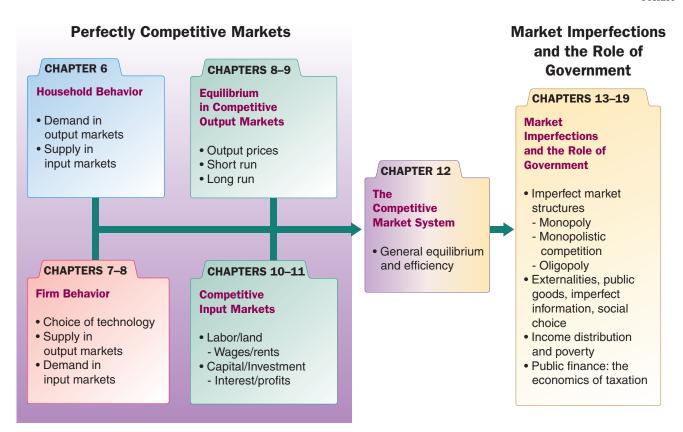
As authors and teachers, we understand the challenges of the principles of economics course. Our pedagogical features are designed to illustrate and reinforce key economic concepts through real-world examples and applications.

Economics in Practice

As described earlier, the *Economics in Practice* feature focuses on recent research or events that support a key concept in the chapter and help students think about the broad and exciting applications of economics to their lives and the world around them. Each box contains a question or two to further connect the material they are learning with their lives.

Graphs

Reading and interpreting graphs is a key part of understanding economic concepts. The Chapter 1 Appendix, "How to Read and Understand Graphs," shows readers how to interpret the 200-plus graphs featured in this book. We use red curves to illustrate the behavior

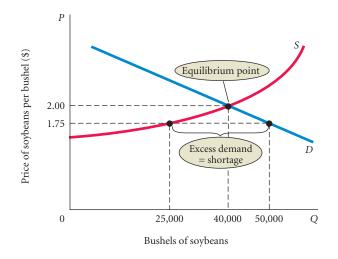


▲ FIGURE II.2 Understanding the Microeconomy and the Role of Government

of firms and blue curves to show the behavior of households. We use a different shade of red and blue to signify a shift in a curve.

Problems and Solutions

Each chapter and appendix ends with a problem set that asks students to think about and apply what they've learned in the chapter. These problems are not simple memorization questions. Rather, they ask students to perform graphical analysis or to apply economics to a real-world situation or policy decision. More challenging problems are indicated by an asterisk. Many problems have been updated. The solutions to all of the problems are available in the *Instructor's Manuals*. Instructors can provide the solutions to their students so they can check their understanding and progress.



◆ FIGURE 3.9 Excess Demand, or Shortage

At a price of \$1.75 per bushel, quantity demanded exceeds quantity supplied. When excess demand exists, there is a tendency for price to rise. When quantity demanded equals quantity supplied, excess demand is eliminated and the market is in equilibrium. Here the equilibrium price is \$2.50 and the equilibrium quantity is 35,000 bushels.



MyEconLab MyEconLab Real-time data

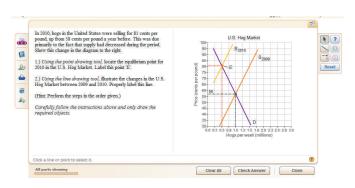
MyEconLab is a powerful assessment and tutorial system that works hand-in-hand with *Microeconomics, Macroeconomics*, and *Economics*. MyEconLab includes comprehensive homework, quiz, test, and tutorial options, allowing instructors to manage all assessment needs in one program. Key innovations in the MyEconLab course for the eleventh edition, include the following:

- Real-time *Data Analysis Exercises*, marked with , allow students and instructors to use the absolute latest data from FRED, the online macroeconomic data bank from the Federal Reserve Bank of St. Louis. By completing the exercises, students become familiar with a key data source, learn how to locate data, and develop skills to interpret data.
- In the eText available in MyEconLab, select figures labeled MyEconLab Real-time data allow students to display a popup graph updated with real-time data from FRED.
- Current News Exercises, new to this edition of the MyEconLab course, provide a turn-key way to assign gradable news-based exercises in MyEconLab. Every week, Pearson scours the news, finds a current article appropriate for the course, creates an exercise around this news article, and then automatically adds it to MyEconLab. Assigning and grading current news-based exercises that deal with the latest macro events and policy issues and has never been more convenient.

Both the text and supplement package provide ways for instructors and students to assess their knowledge and progress through the course. MyEconLab, the new standard in personalized online learning, is a key part of Case, Fair, and Oster's integrated learning package for the 11th edition.

For the Instructor

MyEconLab is an online course management, testing, and tutorial resource. Instructors can choose how much or how little time to spend setting up and using MyEconLab. Each chapter contains two Sample Tests, Study Plan Exercises, and Tutorial Resources. Student



use of these materials requires no initial setup by their instructor. The online Gradebook records each student's performance and time spent on the Tests and Study Plan and generates reports by student or by chapter. Instructors can assign tests, quizzes, and homework in MyEconLab using four resources:

- Preloaded Sample Tests
- Problems similar to the end-of-chapter problems
- Test Item File questions
- Self-authored questions using Econ Exercise Builder

Exercises use 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. MyEconLab grades every problem, even those with graphs. When working homework exercises, students receive immediate feedback with links to additional learning tools.

Customization and Communication Instructors who teach distance learning courses or very large lecture sections find MyEconLab useful because they can upload course documents and assignments, customize the order of chapters, and use communication features.

Experiments in MyEconLab

Experiments are a fun and engaging way to promote active learning and mastery of important economic concepts. Pearson's experiments program is flexible and easy for instructors and students to use.

- Single-player experiments allow your students to play an experiment against virtual players from anywhere at any time with an Internet connection.
- Multiplayer experiments allow you to assign and manage a real-time experiment with your class. In both cases, pre- and post-questions for each experiment are available for assignment in MyEconLab.

For the Student

MyEconLab puts students in control of their learning through a collection of tests, practice, and study tools tied to the online interactive version of the textbook, as well as other media resources. Within MyEconLab's structured environment, students practice what they learn, test their understanding, and pursue a personalized Study Plan generated from their performance on Sample Tests and tests set by their instructors. At the core of MyEconLab are the following features:

- Sample Tests, two per chapter
- · Personal Study Plan
- Tutorial Instruction
- Graphing Tool

Sample Tests Two Sample Tests for each chapter are preloaded in MyEconLab, enabling students to practice what they have learned, test their understanding, and identify areas in which they need further work. Students can study on their own, or they can complete assignments created by their instructor.

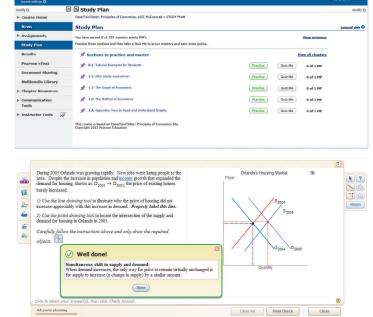
Personal Study Plan Based on a student's performance on tests, MyEconLab generates a personal Study Plan that shows where the student needs further study. The Study Plan consists of a series of additional practice exercises with detailed feedback and guided solutions that are keyed to other tutorial resources.

Tutorial Instruction Launched from many of the exercises in the Study Plan, MyEconLab provides tutorial instruction in the form of step-by-step solutions and other media-based explanations.

Graphing Tool A graphing tool is integrated into the Tests and Study Plan exercises to enable students to make and manipulate graphs. This feature helps students understand how concepts, numbers, and graphs connect.

Additional MyEconLab Tools MyEconLab includes the following additional features:

 Economics in the News—This feature provides weekly updates during the school year of news items with links to sources for further reading and discussion questions.



2. eText—While students are working in the Study Plan or completing homework assignments, one of the tutorial resources available is a direct link to the relevant page of the text so that students can review the appropriate material to help them complete the exercise.

- **3.** Glossary—This searchable version of the textbook glossary provides additional examples and links to related terms.
- **4.** Glossary Flashcards—Every key term is available as a flashcard, allowing students to quiz themselves on vocabulary from one or more chapters at a time.

MyEconLab content has been created through the efforts of the following individuals:

Charles Baum, Middle Tennessee State University; Sarah Ghosh, University of Scranton; Russell Kellogg, University of Colorado-Denver; Bert G.Wheeler, Cedarville University; and Noel Lotz and Douglas A. Ruby, Pearson Education

Resources for the Instructor

The following supplements are designed to make teaching and testing flexible and easy and are available for Micro, Macro, and Economics volumes.

Instructor's Manuals

Two Instructor's Manuals, one for Principles of Microeconomics and one for Principles of Macroeconomics, were prepared by Tony Lima of California State University, East Bay (Hayward, California). The *Instructor's Manuals* are designed to provide the utmost teaching support for instructors. They include the following content:

- Detailed Chapter Outlines include key terminology, teaching notes, and lecture suggestions.
- Topics for Class Discussion provide topics and real-world situations that help ensure that economic concepts resonate with students.
- Unique Economics in Practice features that are not in the main text provide extra realworld examples to present and discuss in class.
- Teaching Tips provide tips for alternative ways to cover the material and brief reminders on additional help to provide students. These tips include suggestions for exercises and experiments to complete in class.
- Extended Applications include exercises, activities, and experiments to help make economics relevant to students.
- Excel Workbooks, available for many chapters, make it easy to customize numerical examples and produce graphs.
- *Solutions* are provided for all problems in the book.

Six Test Item Files

We have tailored the Test Item Files to help instructors easily and efficiently assess student understanding of economic concepts and analyses. Test questions are annotated with the following information:

- 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
- Skill: Fact, definition, analytical, conceptual
- AACSB: See description in the next section.

The Test Item Files include questions with tables that students must analyze to solve for numerical answers. The Test Item Files also contain questions based on the graphs that appear in the book. The questions ask students to interpret the information presented in the graph. Many questions require students to sketch a graph on their own and interpret curve movements.

Microeconomics Test Item File 1, by Randy Methenitis of Richland College: Test Item File 1 (TIF1) includes over 2,700 questions. All questions are machine gradable and are either multiple-choice or true/false. This Test Item File is for use with the 11th edition of *Principles of Microeconomics* in the first year of publication. TIF1 is available in a computerized format using TestGen EQ test-generating software and is included in MyEconLab.

Microeconomics Test Item File 2, by Randy Methenitis of Richland College: This additional Test Item File contains another 2,700 machine-gradable questions based on the TIF1 but regenerated to provide instructors with fresh questions when using the book the second year. This Test Item File is available in a computerized format using TestGen EQ test-generating software.

Microeconomics Test Item File 3, by Richard Gosselin of Houston Community College: This third Test Item File includes 1,000 conceptual problems, essay questions, and short-answer questions. Application-type problems ask students to draw graphs and analyze tables. The Word files are available on the Instructor's Resource Center (www.pearsonglobaleditions.com/case).

Macroeconomics Test Item File 1, by Randy Methenitis of Richland College: Test Item File 1 (TIF1) includes over 2,900 questions. All questions are machine gradable and are either multiple-choice or true/false. This Test Item File is for use with the 10th edition of *Principles of Macroeconomics* in the first year of publication. This Test Item File is available in a computerized format using TestGen EQ test-generating software and included in MyEconLab.

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The Association to Advance Collegiate Schools of Business (AACSB) The authors of the Test Item File have connected select Test Item File questions to the general knowledge and skill guidelines found in the AACSB assurance of learning standards.

What Is the AACSB? AACSB is a not-for-profit corporation of educational institutions, corporations, and other organizations devoted to the promotion and improvement of higher education in business administration and accounting. A collegiate institution offering degrees in business administration or accounting may volunteer for AACSB accreditation review. The AACSB makes initial accreditation decisions and conducts periodic reviews to promote continuous quality improvement in management education. Pearson

Education is a proud member of the AACSB and is pleased to provide advice to help you apply AACSB assurance of learning standards.

What Are AACSB Assurance of Learning Standards? One of the criteria for AACSB accreditation is quality of the curricula. Although no specific courses are required, the AACSB expects a curriculum to include learning experiences in areas such as the following:

- Communication
- · Ethical Reasoning
- Analytic Skills
- Use of Information Technology
- Multicultural and Diversity
- Reflective Thinking

Questions that test skills relevant to these guidelines are appropriately tagged. For example, a question testing the moral questions associated with externalities would receive the Ethical Reasoning tag.

How Can Instructors Use the AACSB Tags? Tagged questions help you measure whether students are grasping the course content that aligns with the AACSB guidelines noted. In addition, the tagged questions may help instructors identify potential applications of these skills. This in turn may suggest enrichment activities or other educational experiences to help students achieve these skills.

TestGen

The computerized TestGen package allows instructors to customize, save, and generate classroom tests. The test program permits instructors to edit, add, or delete questions from the Test Item Files; create new graphics; analyze test results; and organize a database of tests and student results. This software allows for extensive flexibility and ease of use. It provides many options for organizing and displaying tests, along with search and sort features. The software and the Test Item Files can be downloaded from the Instructor's Resource Center (www.pearsonglobaleditions.com/case).

PowerPoint® Lecture Presentations

Six sets of PowerPoint slides, three for *Principles of Microeconomics* and three for *Principles of Macroeconomics*, prepared by Fernando Quijano of Dickinson State University, are available:

- A comprehensive set of PowerPoint slides that can be used by instructors for class presentations or by students for lecture preview or review. The presentation includes all the figures, photos, tables, key terms, and equations in the textbook. Two versions are available—the first is in step-by-step mode so that you can build graphs as you would on a blackboard, and the second is in automated mode, using a single click per slide.
- Student versions of the PowerPoint presentations are available as .pdf files from the book's MyEconLab course. This version allows students to print the slides and bring them to class for note taking.

Resources for the Student

The following supplements are designed to help students understand and retain the key concepts of each chapter.

MyEconLab

MyEconLab allows students to practice what they learn, test their understanding, and pursue a personalized Study Plan generated from their performance on Sample Tests and tests set by their instructors. Here are MyEconLab's key features. (See page xx of this preface for more details on MyEconLab.)

- Sample Tests, two per chapter
- Personal Study Plan
- Tutorial Instruction
- Graphing Tool

CourseSmart

CourseSmart is an exciting new *choice* for students looking to save money. As an alternative to purchasing the print textbook, students can purchase an electronic version of the same content and save up to 50 percent off the suggested list price of the print text. With a CourseSmart eTextbook, students can search the text, make notes online, print out reading assignments that incorporate lecture notes, and bookmark important passages for later review. For more information or to purchase access to the CourseSmart eTextbook, visit www.coursesmart.co.uk.

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- Little Rock
- Alejandro Gallegos, Winona State University
- Craig Gallet, California State University, Sacramento
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- Bill Ganley, Buffalo State College
- Martin A. Garrett, Jr., College of William and Mary
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- Joshua Goodman, New York University Ophelia Goma, DePauw University John Gonzales, University of San Francisco
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- University
 Osman Gulseven, North Carolina State
- Osman Gulseven, North Carolina State University
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Sung No, Southern University and A&M College

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