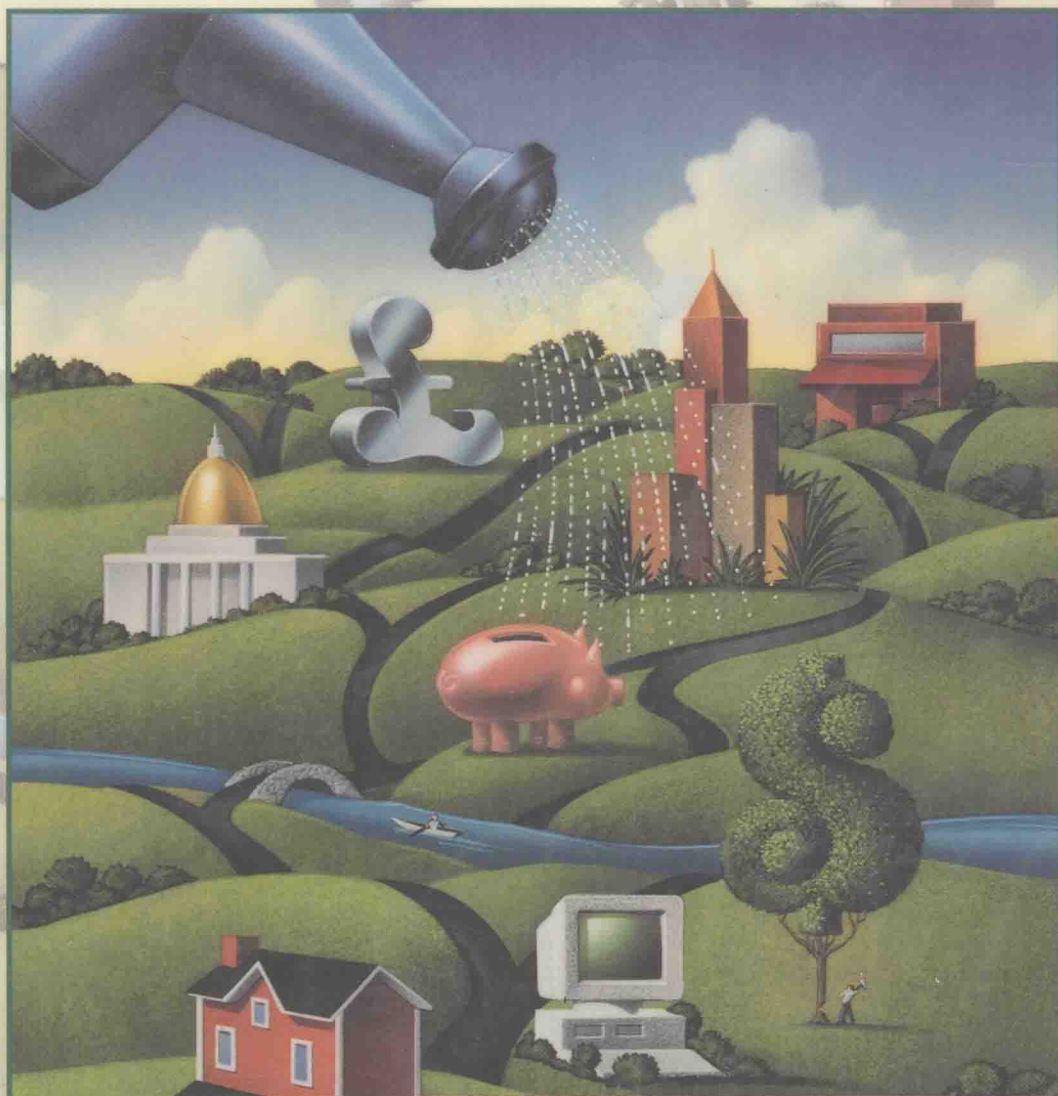


FOURTH EDITION

PRINCIPLES OF MICROECONOMICS



CASE / FAIR

FOURTH EDITION

PRINCIPLES OF MICROECONOMICS

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This textbook contains the five introductory chapters, 15 microeconomics chapters, and selected international chapters from our hardbound *Principles of Economics* textbook. It has been specially prepared for microeconomics courses in which professors prefer to assign a paperback “split” rather than a single volume containing coverage of both microeconomics and macroeconomics.

So that users of this book and its companion volume, *Principles of Macroeconomics*, can fully understand our methodology in preparing the fourth edition, what follows is an adaption of the preface as it appears in our single hardbound volume.

The process of revising a principles of economics text reveals dramatically how rapidly the world changes. When our first edition was published in 1989, the Berlin Wall had not yet fallen, the Cold War still raged, and Iraq had not yet invaded Kuwait. By the time our third edition was published in 1994, the disintegration of the Soviet Union had given way to a new administration in Washington, a jobless recovery from the recession of 1990–1991, a new tax act, and chaos in Eastern Europe. A year and a half later, the jobless recovery turned into an expansion that the Federal Reserve began trying to slow. The Japanese yen and the German mark appreciated beyond anyone’s expectations, NAFTA and GATT were ratified, Mexico did a 180-degree turnaround, and the emerging democracies of central Europe began growing while Russia struggled with the privatization process.

Because events have changed the economic landscape so rapidly, we decided to revise *Principles of Microeconomics* after two years instead of the usual three. All tables and figures have been updated with the most recent data available, and the case studies (with accompanying videos) that end each part are completely new. And while we continue to cover the core of economic theory, we have added new material on important topics that have only recently emerged as major economic issues. These include health-care reform, immigration, urban problems and crime, welfare reform, the new trade treaties, and the experiences of transitional economies.

In addition, the fourth edition contains more international material than any previous edition. Almost every chapter contains a global application or example.

(A complete list of global examples follows the detailed table of contents.) We’ve also added additional problems to the end of each chapter and included solutions to the even-numbered problems at the end of the text.

To date, more than 100,000 students and professors have used *Principles of Economics* or one of its split volumes. In this new edition, we have made every effort to be responsive to our readers’ suggestions while maintaining the book’s basic focus and pedagogical organization. To make the book accessible to a wider range of students, we have cut a great deal of extraneous material, simplified several of the more analytical sections, and redrawn many of the more technical graphs using real numbers rather than variable names. And, to make the book more appealing to today’s visual learners, we’ve completely revised the art, photo, and illustration program. The result, we hope, is a principles book that students will keep on their shelves and use throughout college and beyond.

THE PLAN OF *PRINCIPLES OF MICROECONOMICS*

Despite major revisions and new features, the themes of the fourth edition are the same themes of the first three editions. The purpose of this book is 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 tried to maintain a reasonable balance between these ingredients in every chapter in this book. Like the first three editions, the fourth edition also attempts to present different theoretical views in an evenhanded way.

ORGANIZATION

Market research and comments from users of the second edition convinced us that the organization of the material in the third edition of *Principles of Microeconomics* is pedagogically sound. For this reason, we have not altered the presentation drastically.

The organization of the microeconomic material 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 *and* input markets and the connections between them, before turning to noncompetitive market structures. When students understand how a simple 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.

Doing competition first also allows students to see the power of the market system. It is impossible to discuss the things that markets do well until students have seen how a simple system determines the allocation of resources. This is our purpose in Chapters 6–11. Chapter 12 remains a pivotal chapter that links the world of perfect competition with the imperfect world of noncompetitive markets, externalities, imperfect information, and poverty, all of which we discuss in Chapters 13–17. In Chapters 18–20 students use everything they’ve learned in Chapters 6–17 to take a closer look at some of the fields of applied microeconomics (the economics of taxation, labor economics, and the economics of health care, immigration, and urban problems). Finally, in Chapters 21–23, we examine some topics in international economics. Although we’ve chosen to place these chapters at the end of the book, professors can integrate them into their course at any time they feel is appropriate.

THE PLAN OF *PRINCIPLES OF MACROECONOMICS*

For professors who are teaching macroeconomics, a new version of *Principles of Macroeconomics* is also available. Although we have made a number of changes to the content of the macroeconomic material in the fourth edition of *Principles of Macroeconomics*, we remain committed to the view that it is a mistake to simply throw aggregate demand and aggregate supply curves at students in the first few chapters of a principles book. To understand the *AS* and *AD* curves, one needs to know about the functioning of the goods market and the money market. The logic behind the simple demand curve is simply wrong when applied to the relationship between aggregate demand and the price level. Similarly, the logic behind the simple supply curve is wrong when applied to the relationship between aggregate supply and the price level.

Part of teaching economics is teaching economic reasoning. Our discipline is built around deductive logic. Once we teach students a pattern of logic, we want and expect them to apply it to new circumstances. When they apply the logic of a simple demand curve or simple supply curve to the aggregate demand or aggregate supply curve, the logic does not fit. We believe the best way to teach the reasoning embodied in the aggregate demand and aggregate supply curves without creating serious confusion is to build up to them carefully.

Organization As in the third edition of *Principles of Macroeconomics*, the macroeconomics section begins with three introductory chapters (6–8) that introduce students to macroeconomic tools, national income accounting, and inflation and unemployment (both in the United States and abroad). These chapters are followed by two chapters that present the basic functioning of the goods market (Chapters 9 and 10) and two chapters that present the basic functioning of the money market (Chapters 11 and 12). It is in these four chapters that students are introduced to the concepts of fiscal and monetary policy. These chapters are followed by a chapter that brings the two markets together. This chapter, Chapter 13, does in essence a very simplified version of *IS/LM* analysis verbally. (The *IS* and *LM* curves are included in an appendix to Chapter 13 for those instructors who are interested in teaching them.)

Given the groundwork that has been laid in Chapter 13, Chapter 14 proceeds directly to derive the aggregate demand curve and then the aggregate supply curve. The two curves are then put together to determine the aggregate price level and to discuss the various theories of inflation.

Following the development of the *AD* and *AS* curves, we turn to a more detailed look at the labor market in Chapter 15 and discuss various theories of unemployment. By the end of Chapter 15, students have put the goods market, the money market, and the labor market together, and they have analyzed inflation, unemployment, and monetary and fiscal policy. Chapter 16 uses the material learned earlier to analyze a number of current macroeconomic issues, including proposed balanced-budget legislation and business cycles in Europe and Asia.

In Chapter 17, we take a closer look at the behavior of households and firms in the macroeconomy, and in Chapter 18 we use the material in Chapter 17

to analyze further macroeconomic issues. Chapters 17 and 18 have been grouped into an optional part that can be skipped without losing the flow of the material. We close the macro section of the book by looking at some current debates in macroeconomics (Chapter 19) and economic growth and productivity (Chapter 20). We then consider international economics in more detail in Chapters 21–24.

Content In preparing the fourth edition, we have maintained the two innovations we introduced in the second edition. The first is the treatment of aggregate supply. Clearly, there is strong disagreement among economists and across economics textbooks on the exact nature of the aggregate supply curve. All economists agree that if input prices rise at the same rate as output prices, the aggregate supply curve is vertical; firms have no incentive to change output if their costs and revenues change at the same rate. For the AS curve to have a positive slope in the short run, input prices must either be constant or there must be some lag in their adjustment.

Some textbooks assume that input prices are constant when the overall price level changes, essentially treating the aggregate supply curve as if it were the sum of individual market supply curves. This assumption of constant input prices is obviously unrealistic, and in the second edition we changed our description of the short-run AS curve to one that assumes some lag in input price adjustment when the overall price level changes. In addition, we clarified and expanded our description of the long-run aggregate supply curve, incorporating the concept of potential GDP.

Second, we continue to distinguish between inflation (a change in the overall price level) and *sustained* inflation (an increase in the overall price level that continues for some period of time). There can be confusion in students' minds as to what inflation is and whether or not it is a purely monetary phenomenon, and we think that this distinction helps to clarify our discussions.

HIGHLIGHTS OF THE FOURTH EDITION OF *PRINCIPLES OF MICROECONOMICS*

RECENT DATA, EXAMPLES, EVENTS, AND TOPICS

Every chart, table, and graph in the book has been revised with the most recent data available. In addition,

we have integrated topics that have generated a great deal of attention over the last few years—the economics of information, environmental economics, welfare reform, the economics of crime, and the recent experiences of Russia and Poland, to name just a few.

INCREASED COVERAGE OF INTERNATIONAL MATERIAL

We have increased our coverage of international material in three ways. First, we have added many new “Global Perspective” boxes throughout the text. These boxes are designed to illustrate economic logic with global examples and to emphasize today’s global economy. Second, we have integrated international examples directly into the text whenever appropriate. All international examples are listed in a table following the book’s detailed table of contents. Third, the last part of the book, *International Economics*, treats international economics in detail.

OPTIONAL CHAPTERS

We have tried to keep uppermost in our minds that time is always tight in a principles course. For this reason, we have made sure that certain chapters can be skipped without losing the flow of the material. Chapter 11 (on the capital market) can be skipped because Chapter 10 (on input markets in general) covers the basics of the capital market. Similarly, the “topics” chapters in Part Four can be skipped if time is short.

STUDENT LEARNING AIDS

Each chapter begins with a brief overview of what the student has learned in the previous chapter and ends with a brief “look ahead” to the following chapter. To help students study, key terms have been printed in boldface and glossed to the margins. Each chapter ends with a point-by-point summary of the chapter, a list of review terms and concepts (cross-referenced to text page), and a problem set.

Because many believe that economics must be relevant to be interesting, we have created three types of boxes for the fourth edition. *Global Perspective* boxes provide economic examples from around the world. *Application* boxes apply the theory learned in the text to real-world events and situations. *Issues and Controversies* boxes examine many of the economic issues currently under debate.

In addition, we have set the major principles of economics off from the text in such a way as to highlight their importance. These highlights flow logically from the preceding text and into the text that follows. Students tell us that they find these very useful as a way of reviewing the key points in each chapter to prepare for exams.

PROBLEM SETS AND SOLUTIONS

Each chapter and appendix ends with a problem set that asks students to think about 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. Approximately 40% of the problems are new to this edition. More challenging problems are indicated by an asterisk. The solutions to all even-numbered problems appear at the back of the book. The solutions to all odd-numbered problems, as well as additional problem sets, are available in the Instructor's Resource Manual.

CASE STUDIES

The end-of-part case studies introduced in the second edition proved to be quite popular. The fourth edition features five new case studies on topics ranging from rain-forest preservation to the Asia Pacific Economic Cooperation Forum. Each case study is accompanied by a video and questions for analytical thinking. The cases are not simply additional problems, and they are not simple extensions of the text material. They are meant to be applications of some of the *ideas* that the part was designed to teach and are designed to foster critical thinking and "thinking like an economist." They might be used as assignments or for class discussion.

THE TEACHING/LEARNING PACKAGE

Each component of the teaching and learning package has been carefully crafted to ensure that the principles of economics course is a rewarding experience for both instructors and students. All of the supplements have been significantly revised for the fourth edition. In addition, several innovative new supplements are available. To see a sample chapter from each of the ancillaries, ask your sales representative for a Case/Fair supplements sampler.

ECONOMICS EXPLORER MULTIMEDIA SOFTWARE/CD-ROM (*New!*)

The Economics Explorer software/CD-ROM—created by Logal Educational Software with the assistance of Steven Tomlinson of the University of Texas at Austin—combines video, animation, and spreadsheets to create the most powerful instructional software available. Logal has taken the basic economic models from the textbook and created a series of dynamic, interactive simulations that bring economics to life and helps students visualize how math, graphs, and economic intuition are connected.

Economics Explorer comes with 24 prepared labs, each one based on a key economics concept: the multiplier effect, profit maximization, market clearing, and so forth. Within each lab, an instructor introduces the concept with a mini-lecture illustrated with animated charts and graphs, manipulable equations, and film clips tying the concept to the "real world." The instructor then shows the student how to use the economic simulation to solve a problem from the textbook. Students can manipulate the model by entering numbers in equations, shifting curves in graphs, or adjusting values in circular flow diagrams.

Once students have learned to use the simulation, they will want to design their own experiments and test their own conjectures. Playing with Explorer, students can test the limits of economic models, input their own data to recreate events from economic history, and (using Explorer's spreadsheet capabilities) record the results and display them in graphs like those from their textbook. By clicking icons, students can move quickly to any point in a lab or, if they want a quick review, to any topic in the series.

Instructors can use the prepared labs or customize their own exercises using Explorer's user-friendly design tools. The accompanying Instructor's Guide also provides tips for integrating Economics Explorer into your course and using Explorer to add power to classroom presentations.

The Explorer is much more than a computerized study guide. It's a fun, flexible program that takes full advantage of computer power to help students with diverse learning styles visualize economics.

STUDY GUIDES

A comprehensive study guide has been prepared by Thomas Beveridge of North Carolina State University. This study aid reinforces the textbook and provides stu-

dents with additional applications and exercises. Each chapter in the Study Guides corresponds to a chapter in the textbook and contains the following features:

- **Point-by-Point Objectives:** A list of learning goals for the chapter, along with a brief summary of the material, helpful study hints, practice questions with solutions, and page references to the text.
- **Exercises and Problem Sets:** A series of questions that require the use of graphic or numerical analysis to solve economic problems. Also includes problems that present real-world situations and ask students to apply economic theory to their own experiences.
- **Practice Tests:** A series of multiple-choice, short-answer, discussion, and application questions designed to test students' grasp of the material and help them prepare for exams.
- **Solutions:** Complete solutions—not just answers—to all questions in the Study Guide, complete with page references to the text.

In addition, the Study Guide contains an introductory section (by Steven Pitts of Houston Community College) that guides students through graphing techniques. "Graphing Pitfalls" sections in selected chapters feature additional tips and insights for students as they learn the graphical material in that chapter.

INSTRUCTOR'S RESOURCE MANUAL

An innovative instructor's resource manual, by Patricia Euzent of the University of Central Florida, is available for *Principles of Microeconomics*. The Instructor's Resource Manual (IRM) is the key integrative supplement in the teaching and learning package and has been designed with the *teaching* of economics in mind. Each chapter in the instructor's manual corresponds to a chapter in the student text and includes suggestions for integrating all of the elements (both printed and electronic) of the teaching/learning package into the classroom. The manual also includes chapter outlines with key terminology; teaching notes and lecture suggestions that provide ideas for applying theory, reinforcing key concepts, overcoming student misconceptions, initiating classroom discussion, and integrating outside readings and global examples into the lecture; additional problems with solutions; solutions to all odd-numbered problems in the text; and solutions to all the analytical thinking questions that accompany the book's five case studies.

The IRM includes a new section not in the previous edition. *Extended Applications for Teaching Eco-*

nomics is a collection of instructors' favorite ideas, exercises, activities, experiments, and games that help economics come alive.

TEST ITEM FILE

The Case/Fair complete test item file is a revised, expanded, and comprehensive test bank of approximately 2300 short-answer/essay, multiple-choice, true/false, and problem set questions. The questions are divided into three levels of difficulty—easy, moderate, and difficult—and are page-referenced to the text. Problem sets (a series of questions based on a graph or scenario) can contain all three levels. Also included are challenging questions that require students to undertake several steps of reasoning, or to work backwards from effect to cause. The test item file is available in printed and electronic (work processing) formats.

PRENTICE HALL CUSTOM TEST

The test item file is designed for use with the Prentice Hall Custom Test, a computerized package that allows users to custom design, save, and generate classroom tests. The test program (which runs on DOS-based computers) permits professors to edit and add or delete questions from the test item file, to edit existing graphics and create new graphics, and to export files to various word processing programs, including WordPerfect and Microsoft Word. Graphics capability ensures that all graphs included in the test item file can be printed next to the appropriate questions.

For those with limited access to computers or secretarial support, Prentice Hall's Telephone Testing Service allows professors to order customized tests by calling a toll-free telephone number a few days before the test is to be administered. Additional information about the various forms of testing service can be obtained from your Prentice Hall sales representative.

REAL-WORLD PROBLEM SETS (*New!*)

This new ancillary, prepared by Chris Colburn of Old Dominion University for *Principles of Microeconomics*, provides over 1000 all-new questions that focus on analysis and problem solving. Created to provide the instructor with an additional testing resource and available in both printed and electronic formats, the Real-World Problem Sets can be used as quiz/testing tools or as homework problems.

Each problem set is based on current events and/or newspaper or magazine clippings. Students are asked

to analyze a scenario or minicase, draw or interpret graphs, and answer questions. Solutions are provided for each problem.

TRANSPARENCY RESOURCE PACKAGE WITH POWERPOINT TRANSPARENCIES

There are more than 300 graphs and charts in the combined *Principles of Economics* text. The Transparency Resource Package, prepared by Kathy Nantz of Fairfield University and Beth Ingram of Iowa State University, includes reproductions of 130 key text graphs on full-color 8 1/2" x 11" acetates for classroom use. Each acetate is accompanied by lecture notes.

Also included is a series of PowerPoint presentations that summarize concepts and theories, emphasize problem solving, provide visual support for lectures, and show the relevance of economics. The PowerPoint disk also includes additional sets of time-series data (not included in the textbook), drawn from a variety of sources. Lecture notes include a snapshot of each PowerPoint slide, provide lecture suggestions and discussion questions, and help instructors correlate the slides with the text and their classroom presentations.

ABC/PRENTICE HALL VIDEO LIBRARY FOR PRINCIPLES OF ECONOMICS

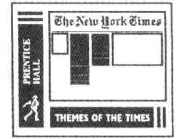


ABC News and Prentice Hall have combined their experience in academic publishing and global reporting to provide a comprehensive video ancillary to the fourth edition. The library contains 30 news clips from the ABC News programs *Nightline*, *World News Tonight*, *Business World*, and *This Week With David Brinkley*. Each of the clips has been chosen to illustrate or supplement a specific discussion in the text. All the videos are timely or timeless, and many can be used at different points in the course. The Video Guide provides suggestions on where and how to integrate each video.

VIDEO GUIDE

The integrated *Video Guide* (prepared by Steven Tomlinson of the University of Texas at Austin) includes a summary of each of the video clips in the Video Library. For each video, the Video Guide includes running time, teaching notes, and in-class exercises.

THE NEW YORK TIMES "THEMES OF THE TIMES" PROGRAM



The New York Times and Prentice Hall are sponsoring "Themes of the Times": a program designed to enhance student access to current information of relevance in the classroom.

Through this program, the core subject matter provided in the text is supplemented by a collection of articles from one of the world's most distinguished newspapers, *The New York Times*. These articles demonstrate the vital, ongoing connections between what is learned in the classroom and what is happening in the world around us.

A new edition of the mini-newspaper is available annually and is provided free to students upon adoption. For students and professors who want to enjoy the wealth of information of *The New York Times* daily, a reduced subscription rate is available in deliverable areas. For information, call toll-free: 1-800-631-1222.

PRINCIPLES OF ECONOMICS SOFTWARE AND WORKBOOK

Working with Microsoft Excel for Windows, the *Principles of Economics* software and workbook allow students to solve problems and create and analyze graphs without getting bogged down in calculations. Prepared by Ray Whitman of the University of the District of Columbia, the software/workbook teaches students how to use Excel with an easy-to-use tutorial. Once they've mastered the basics, students then work with a series of problems built around key economic concepts. Many of the problems are based on text or Study Guide problem sets. Students enter and manipulate data, draft and shift graphs, and answer questions regarding what has happened. Solutions to all exercises are provided at the end of each chapter.

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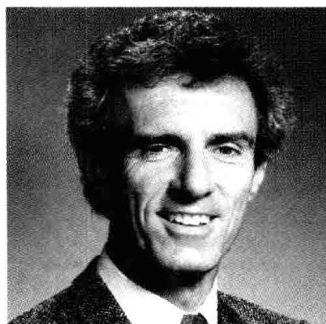
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