

Taylor

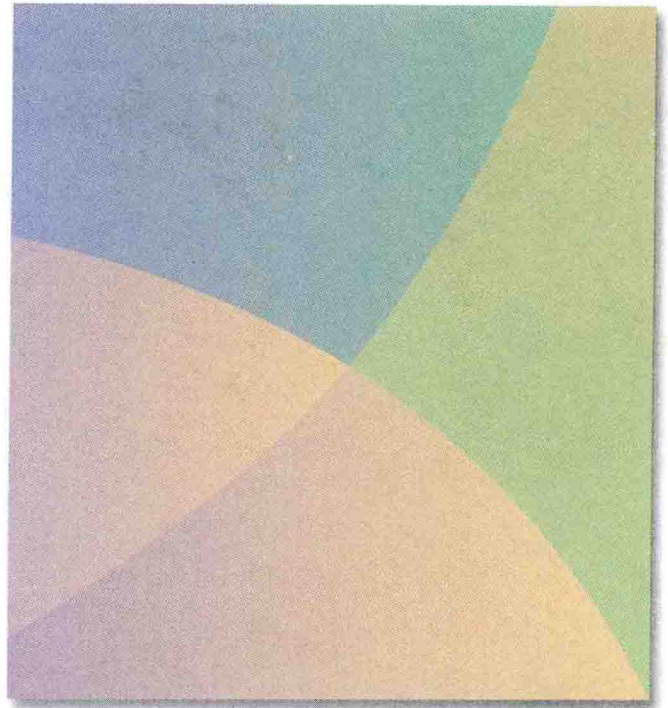
Economics

Third Edition



ECONOMICS

THIRD EDITION



John B. Taylor

Stanford University

Houghton Mifflin Company Boston New York

Editor-in-Chief: Jean Woy
Sponsoring Editor: Ann West
Senior Project Editors: Cathy Labresh Brooks, Nancy Blodget
Senior Production/Design Coordinator: Carol Merrigan
Senior Manufacturing Coordinator: Priscilla Bailey
Marketing Manager: Melissa Russell

Cover image: Richard Estes, "Woolworth's," 1974, oil on canvas, 38 x 55 inches, San Antonio Museum of Art. © Richard Estes/Licensed by VAGA, New York, NY/Marlborough Gallery, NY. Courtesy of San Antonio Museum of Art.
Cover design: Harold Burch Design/NYC

Text, photo, and art credits appear following the index.

Copyright © 2001 by Houghton Mifflin Company. All rights reserved.

No part of this work may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying and recording, or by any information storage or retrieval system without the prior written permission of Houghton Mifflin Company unless such copying is expressly permitted by federal copyright law. Address inquiries to College Permissions, Houghton Mifflin Company, 222 Berkeley Street, Boston, MA 02116-3764.

Printed in the U.S.A.

Library of Congress Catalog Card Number: 00-133827

ISBN: 0-618-05623-8

123456789-VH-04 03 02 01 00

Preface

I love economics and I enjoy sharing my love of it with others. That's why I wrote this textbook, and that's why I regularly take time to update and improve it—and now to produce this new third edition. The goal of the book is to present modern economics in a form that is intuitive, relevant, and memorable to students who have had no prior exposure to the subject. I have been gratified by the positive responses to the first two editions from economists who teach introductory economics. But most rewarding for me have been the kind thank-yous from the students—frequently by email from colleges around the country—for the clarity of the presentation and for the one-on-one teacher-student focus of the writing. When I write, I often imagine that I am talking with one of these students in my office.

STANDING ON THE SHOULDERS OF GIANTS

When I took the introductory economics course in college in the 1960s, I found the course and the textbook (Paul Samuelson's) fascinating. People called 1960s-vintage economics the “new economics,” because many new ideas, including those put forth by John Maynard Keynes, were being applied for the first time in public policy. But during the 1970s, the 1980s, and the 1990s, economics underwent another tremendous wave of change. Now at the start of the twenty-first century, economics places much greater emphasis on incentives, on expectations, on long-run fundamentals, on individual experiences, on institutions, and on the importance of stable, predictable economic policies. These new ideas are of great relevance to real-world economic policy and confirm to students that economic ideas do indeed affect people's lives. The world economy has also changed radically in recent years. The U.S. economy has had two record-breaking expansions, back-to-back, and worker productivity has surged. Market economies are now the preferred choice of virtually all countries around the world. Billions of people are linked together through international trade in this “new economy.” With these changes, economics is now more fascinating and more relevant than ever.

My strategy in revising the second edition was to give these changes a prominent, clearly explained place within the basic tradition of economics upon which they stand. I emphasize the central ideas of economics: that people make purposeful choices with scarce resources and interact with other people when they make these choices. I demonstrate how a market economy works and explain why markets are efficient when incentives are right and inefficient when incentives are wrong. I stress long-run fundamentals, but I discuss real-world public policy issues where the short run matters, too.

I believe that the third edition has achieved the right mix of old and new. I know from experience that its “newness” and the knowledge that the ideas are actually used in practice make economics more interesting to students, thereby making learning economics easier.

CHANGES TO THE THIRD EDITION

Throughout the revision process—including rearranging chapters; deleting outdated material; streamlining, rewriting, and updating passages; and adding new examples—I have focused on providing a clear, complete, and contemporary perspective on economics. I have been guided by helpful suggestions from students and teachers, many at colleges and universities around the country where I have traveled to talk about economics and teaching and to observe how others teach economics. I have enjoyed these visits and the book is better as a result of them.

Presentation Changes

I am happy to say that the revision process has resulted in a book that is easier to read and use, as well as somewhat shorter. How exactly was this accomplished? I think the following were most important:

1. Every passage I found that could be explained more easily—usually in a conversation with a student—was rewritten.
2. Chapters were repositioned to help one topic flow into another more easily and to bring greater attention to essential principles.
3. Chapter titles and section heads were revised to give a more accurate description of the topics covered.
4. Concise opening vignettes were added to every chapter; with just a few words, these vignettes create drama and motivate the ideas in each chapter.
5. New “conversation” boxes were added in the margins of the text to give readers a more detailed explanation, a reminder, or just some advice about a topic where experience showed me that a little extra clarification could help. (I am a great believer in placing conversation boxes in graphs; adding them judiciously into the margins is an extension of this idea.)
6. A large number of end-of-chapter problems were replaced by new problems; others were revised.
7. Appendices were moved to the back of the book and renamed “Advanced Topics.” This placement clarifies what is basic to each chapter and what is more advanced.
8. Other, more advanced topics, previously appearing toward the end of chapters, were removed to the book’s web site.
9. The book was redesigned. The new design makes the material both more visually appealing and more useful by highlighting fundamental ideas and showing students how examples fit in.
10. Examples are used in two different ways, and the new design has made very clear which is which. The first type of example may be likened to an interlude in a play or movie; these examples are boxed off either as “Reading the News” or “Economics in Action” features. These boxes provide a break in the action and at the same time help students absorb and apply the concepts introduced in the book to events happening in the real world. The second type of example is an integral part of the explanation in the text and is therefore not boxed off. These examples are critical for following the plot; they sometimes appear as a major section with the heading “Case Study” More frequently, this second type of example is imbedded in the main text narrative. To get a good idea of the scope and range of the boxes and case studies, refer to the listings on the inside back cover of the text.

Content Changes

A detailed account of the chapter-by-chapter changes in the text can be found in the Transition Guide available in the Instructor's Resource Manual or on the book's web site. Here are a few highlights:

- The book now begins with a new Chapter 1 called “The Central Idea,” which stresses scarcity, choice, and interaction. From this central idea, the key principles of economics—such as opportunity cost, gains from trade, and production possibilities—are shown to follow. By referring back to this central idea frequently, the book offers a secure foundation for new material.
- The presentation in Chapter 1 and the follow-up in Chapter 2 (on what economists actually do) represent a switching of the material in Chapters 1 and 2 from previous editions. New boxes found in these chapters on the gains from trade and using *eBay* and on teaching opportunity costs are examples of the many new “Economics in Action” boxes included in the text.
- Chapter 3, “Supply and Demand,” includes a new section on elasticity. This addition makes it possible to skip the more detailed treatment of elasticity in Chapter 4.
- A revised presentation of consumer behavior with new illustrative tables appears in Chapter 5, in an attempt to streamline the discussion of utility maximization. Also, Chapter 5 places greater emphasis on “willingness to pay,” which serves as an intuitive foundation of demand.
- The antitrust policy and regulation chapter (now Chapter 12) was moved to directly follow the chapters on monopoly and monopolistic competition, making it easier for faculty to show students how to apply these models.
- Chapter 16 on physical capital and financial markets (stocks, bonds, and foreign exchange) was thoroughly revised to build on the concepts from physical capital markets.
- The revised macroeconomics chapters improve on the new approach to teaching modern macroeconomics that was introduced in the first edition. That approach starts with long-run fundamentals about unemployment, economic growth, and the composition of spending. It stresses that the United States is part of the world economy. It shows how Fed decisions about the interest rate are intended both to keep inflation in control and to prevent or mitigate recessions.
- The third edition also streamlines the discussion of economic fluctuations by moving both the Keynesian multiplier and the forward-looking consumption model to the Advanced Topics section at the back of the book. It also simplifies the terminology (for example, ADIPA becomes ADIA), cuts older or overly detailed material, and adds new case studies about the long economic expansion and recent productivity trends.
- Chapter 19, “The Spending Allocation Model,” has been retitled and moved up. It shows how investment, consumption, and net exports are determined in the long run. Coming right after the discussion of GDP measurement, this chapter reinforces important GDP concepts.
- In Chapter 21, the growth accounting formula is used to show that technology has been a key factor in the recent productivity growth rebound in the United States, leading to the widespread use of the term *new economy*. A new “Reading the News about . . .” box features a front-page *New York Times* story about productivity growth. A new “Economics in Action” box explains how Robert Solow first explained his formula and brought it to Washington.

- Chapter 22 has been revised to provide a more integrated discussion of open market operations, money, and inflation. This consolidates material on central banks that had previously appeared later in the book and makes room for a new case study on the Fed's preemptive interest rate increases in 2000.
- The international finance chapter has been cut, with essential material moved to the chapter on financial markets or to the chapter on monetary policy.
- The chapter on macroeconomic debates was also omitted, with key contrasts between different schools of thought moved into other chapters.

Enhanced Teaching and Learning Package

The package of teaching and learning aids (described below) has also been completely revised with several new options, including fully revised tutorial software now available on CD—packaged free with each new student text—and an Instructor CD, called HMClassPrep, which collects in one place all the teaching resources a principles instructor or teaching assistant might need.

A BRIEF TOUR

Economics is designed for a two-term course. I recognize that teachers use a great variety of sequences and syllabi, and I have therefore allowed for alternative plans of coverage. Furthermore, the text is available in two self-contained volumes, *Principles of Microeconomics* and *Principles of Macroeconomics*. International economic issues are considered throughout the text.

The basic workings of markets and the reasons they improve people's lives are the subjects of Part 1. Chapter 1 outlines the unifying themes of economics: scarcity, choice, and economic interaction. The role of prices, the inherent international aspect of economics, the importance of property rights and incentives, and the difference between central planning and markets are some of the key ideas in this chapter. Chapter 2 introduces the field of economics through a case study showing how economists observe and explain economic puzzles. Chapters 3 and 4 cover the basic supply and demand model and elasticity. I have tried to explain these essential ideas as fully and as clearly as I can, adding the extra sentence of clarification whenever it might help in understanding. The goal is to show how to use the supply and demand model and to learn to “think like an economist.” A trio of chapters—5, 6, and 7—has the aim of explaining why competitive markets are efficient, perhaps the most important idea in economics. The parallel exposition of utility maximization (Chapter 5) and profit maximization (Chapter 6) culminates in a detailed description of why competitive markets are efficient (Chapter 7). The latest results from experimental economics have a dual role: to illustrate how well models work and to make the discussion of these important topics less abstract. This text provides a complete, self-contained analysis of competitive markets in these first seven chapters before going on to develop more difficult concepts such as long-run versus short-run cost curves or monopolistic competition. This approach enables the student to learn, appreciate, and use important concepts such as efficiency and dead-weight loss early in the course.

A modern market economy is not static; rather, it grows and changes over time as firms add new and better machines and as people add to their skills and training. Chapters 8 and 9 describe how firms and markets grow and change over time. Chapters 10 and 11 demonstrate how economists model the behavior of firms that are

not perfectly competitive, such as monopolies. The models of dynamic behavior and imperfect competition developed here are used to explain the rise and fall of real-world firms and industries. Chapter 12 reviews the policy implications.

Chapter 13 considers labor markets. Chapters 14 and 15 are devoted to the role of government in the economy. Tax policy, welfare reform, environmental policy, and the role of government in producing public goods are analyzed. Different countries have taken widely different approaches to the economy. The policy of some countries has been to directly intervene in virtually every economic decision; other countries have followed more hands-off policies. The problem of government failure is analyzed using models of government behavior. Chapter 16 discusses capital markets.

The study of macroeconomics begins with Chapter 17. This chapter is an overview of the facts emphasizing that macroeconomics is concerned with the growth and fluctuations in the economy as a whole. Chapter 18 shows how GDP and other variables are measured.

Chapter 19 starts with the first macro model to determine the long-run shares of GDP. Chapter 20 gives an analysis of how the level of unemployment in the economy as a whole is determined. Labor, capital, and technology are then presented in Chapter 21 as the fundamental determinants of the economy's growth path. One clear advantage of this approach is that it allows students to focus first on issues about which there is general agreement among economists. Moreover, this ordering helps students better understand short-term economic fluctuations. Similarly, Chapter 22's long-run treatment of money sets the stage for economic fluctuations.

As shown in the five chapters of Part 6, the economy does fluctuate as it grows over time. Declines in production and increases in unemployment (characteristics of recessions) have not vanished from the landscape as long-term growth issues have come to the fore. Part 6 delves into the causes of these fluctuations and an analysis of why they end. It begins by explaining why shifts in aggregate demand may cause the economy to fluctuate and ends by showing that price adjustment plays a significant role in the end of recessions.

Countries have tried a variety of approaches to deal with economic growth and economic fluctuations. Part 7 examines these approaches to policy, about which there are many differing opinions. I have tried to explain these clearly and objectively.

PEDAGOGICAL FEATURES

The following pedagogical features are designed to help the student learn economics.

Examples within the text. Illustrations of real-world situations help explain economic ideas and models, and I have attempted to include a wide variety of these throughout the text. Examples include the health care case study in Chapter 2 and the case study looking at a drought in the U.S. peanut market in Chapter 3; many others are simply woven into the text.

Boxed examples to give real-life perspectives. “Reading the News about . . .” boxes explain how to decipher recent news stories about economic policy. “Economics in Action” boxes examine the contributions of the great economists, such as Adam Smith, or notable current events.

Interesting vignettes to stimulate interest begin each chapter. Examples of opening vignettes include the opportunity costs of college for Tiger Woods in Chapter 1 and the work of health economist Mark McClellan in Chapter 2.

Functional use of full color to distinguish between curves and to show how the curves shift dynamically over time. An example of the effective use of multiple colors can be found in the equilibrium price and equilibrium quantity figure (Figure 3.8) in Chapter 3.

Complete captions and small conversation boxes in graphs. The captions and the small yellow-shaded conversation boxes, make many of the figures completely self-contained. In some graphs, sequential numbering of these conversation boxes stresses the dynamic nature of the curves. Again, see Figure 3.8 as an example.

Conversation boxes in text margins appear where an additional explanation or reminder might help students more easily grasp a new concept.

Use of photos and cartoons to illustrate abstract ideas. Special care has gone into the search for and selection of photos to illustrate difficult economic ideas such as inelastic supply curves and opportunity costs. Each text photo (many consisting of two or three parts) has a short title and caption to explain its relevance to the text discussion.

Key term definitions appear in the margins and the key terms are listed at the end of every chapter and Advanced Topic. There is also an alphabetized glossary at the end of the book.

Brief reviews at the end of each major section (about four per chapter) summarize the key points in abbreviated form as the chapter evolves; these reviews are useful for preliminary skim reading as well as for review.

Questions for review at the end of every chapter. These are tests of recall and require only short answers; they can be used for oral review or as a quick self-check.

Problems, an essential tool in learning economics, have been carefully selected, revised, and tested. An ample supply of these appear in every chapter and Advanced Topic. Some of these problems ask the reader to work out examples that are slightly different from the ones in the text; others require a more critical thinking approach. A second set of problems which parallels those at the end of each chapter is included in the accompanying Test Bank and on the Instructor's HMClassPrep CD. This problem set is also available to instructors via the web site.

A COMPLETE PACKAGE OF TEACHING AND LEARNING AIDS

The highly effective teaching and learning package prepared to accompany the text has been completely revised, updated, and expanded. It provides a full range of support for instructors and students.

Micro and Macro Study Guides. David Papell of the University of Houston, John Solow of the University of Iowa, and Wm. Stewart Mounts, Jr., of Mercer University have prepared the study guides for the text. These study guides provide a wonderful learning opportunity that many students will value. Each chapter contains an overview, informal chapter review, and a section called Zeroing In, which harnesses student intuition to explain the chapter's most important concepts. The study guides also provide ample means for practice in using the economic ideas and graphs introduced in each text chapter. There is a mix of question types, including many graph-based questions and problems as well as a twenty-question multiple-choice practice test. A section called Working It Out provides worked problems that

take the student step by step through the analytical process needed to solve real-world applications of core concepts covered in the chapter. These are followed by practice problems that require students to use the same analytical tools. Detailed answers are provided for all review and practice questions. End-of-part quizzes offer the student one last chance to test their retention of material before taking in-class exams.

Taylor Tutorial and Simulation Software: A Real Deal UpGrade CD-ROM. Tutorial/simulation software, revised to parallel this third edition, is now packaged with every new student copy of the text. A tutorial for each text chapter provides an opportunity for students to review graphing concepts and models and then to test themselves on what they've learned. A glossary and context-sensitive help are always available. The simulation component of the software includes more than 60 years of data on more than twenty key economic indicators, allowing students to plot data, compare various measurement instruments, and print out their results.

Micro and Macro Test Banks. A reliable test bank is the most important resource for efficient and effective teaching and learning. Micro and Macro Test Banks have been prepared by Jim Lee of Texas A&M, Corpus Christi; Nora Underwood of the University of California, Davis; and me. They contain more than 5,000 test questions—including multiple-choice, true/false, short-answer, and problems—many of which are based on graphs. The questions are coded for correct answer, question type, level of difficulty, and text topic. The Test Banks also include a set of parallel problems that match the end-of-chapter problems from the text. The Test Bank is available in both printed and computerized form.

Computerized Testing Program. A sophisticated and user-friendly program called HMTesting is available to help instructors quickly create tests according to various selection criteria, including random selection. The program prints graphs as well as the text part of each question. Instructors can scramble the answer choices, edit questions, add their own questions to the pool, and customize their exams in various other ways. HMTesting provides a complete testing solution, including classroom administration and online testing features in addition to test generation. The program is available in Windows and Mac versions.

Instructor's Resource Manual. Prepared and revised by Wm. Stewart Mounts, Jr., of Mercer University, Clifford Sowell of Berea College, and me, the Instructor's Resource Manual provides both first-time and experienced instructors with a variety of additional resources for use with the text. Each chapter contains a brief overview, teaching objectives, key terms from the text, a section that orients instructors to the text's unique approach, and a suggested lecture outline with teaching tips that provide additional examples not found in the text and hints for teaching more difficult material. Discussion topics and solutions to end-of-chapter text problems are also provided.

PowerPoint Slides. A complete set of PowerPoint slides is available to adopters of the text for downloading from the Taylor third edition web site. To gain access to the web site's instructor resources, obtain a user name and password from your Houghton Mifflin sales representative. The slides will also be available to adopters of the third edition on the Taylor HMClassPrep CD-Rom.

Overhead Transparencies. Overhead transparencies for key figures from the text are available to adopters of *Economics* and the splits. I usually use two overhead projectors in class so that more than one figure or table can be shown simultaneously.

HMClassPrep CD-ROM. This supplement contains all the resources you need to prepare lessons based on the third edition of the text, including lecture outlines, teaching tips and objectives, PowerPoint slides, a set of parallel problems and solutions, video footage, and in-class experiment and discussion ideas. This wealth of resources is organized by chapter and resource type for easy reference and class planning.

Experimental Economics Lab Manual. Instructors who would like to incorporate experiments into their classroom teaching should request a copy of the experiments manual prepared by Greg Delemeester of Marietta College and John Neral of Frostburg State University. Written with the first-time user in mind, this manual provides detailed instructor support, including an overview of the experiment and its purpose, materials needed, step-by-step instructions for conducting the experiment, and any worksheets needed.

Economics Video Series. The Economics Video—which combines footage from my own classroom, animated charts and graphs, and additional narration—brings key economic ideas from the text to life. The video segments can be used as lecture launchers or as a review of material both inside and outside the classroom. The videos also serve as an introduction to some of the concepts that are unique to my text—such as the experimental auction or the development of the aggregate demand and price adjustment graph.

Web Site. The Taylor *Economics* web site provides an extended learning environment for students and a rich store of teaching resources for instructors who are using my text. With materials carefully developed to complement and supplement each chapter, students will find key economic links for every chapter as well as numerous opportunities to test their mastery of chapter content—including both objective-type quizzes and more extended web-based assignments developed by John Kane of SUNY, Oswego. Instructors will find, among other things, a complete set of parallel questions matching the end-of-chapter problems from the text (with answers), economic and teaching resource links, teaching tips, and the opportunity to view and demo the teaching and student software components of the teaching package.

WebCT WebCourselet and Blackboard Course Cartridge. These resources provide text-specific student study aids in customizable, Internet-based education platforms. Both platforms provide a full array of content delivery and course management features for instructors who wish to incorporate educational technology in their traditional classrooms or for those who are creating distance learning courses.

ACKNOWLEDGMENTS

Completing a project like this is a team effort. I have had the chance to work with an excellent team of professionals at Houghton Mifflin on this third edition, including Melissa Mashburn, Ann West, Cathy Brooks, Nancy Blodget, and Jennifer DiDomenico. I am grateful to them for their help and encouragement. I would also like to thank Pam Bachorz, Priscilla Bailey, Joan Cannon-Minklei, Nancy Doherty-Schmitt, Tonya Lobato, Carol Merrigan, Melissa Russell, Elizabeth Santiago, and Jean Woy for their many contributions to this project.

I am grateful to many of my colleagues at Stanford whom I consulted hundreds of times and to the students at Stanford and other colleges and universities who used the book and gave me feedback that helped me determine when and where to add that extra sentence of explanation.

I would also like to thank the authors of the third edition supplements, including John Kane, Jim Lee, Wm. Stewart Mounts Jr., David Papell, John Solow, Cliff Sowell, and Nora Underwood. Their careful attention to text changes both small and large has resulted in ancillaries that match the text in content and spirit.

Many college teachers and researchers read all or part of the manuscript and provided very helpful comments that were incorporated into revisions. The book would not exist without the help of these reviewers, who are listed below. In particular I wish to thank Anthony O'Brien, Lehigh University, who reviewed the text for accuracy during the last stages of production, and Marcelo Clerici-Arias, with whom I work at the Introductory Economics Center.

My family deserves very special thanks for putting up with me and with the seemingly endless early morning phone calls and piles of manuscript, news clippings, reviews, galleys, and page proof scattered about the house as I worked on the third edition.

John B. Taylor
Stanford, California
September, 2000

REVIEWERS

Mark D. Agee
Pennsylvania State University, Altoona
James Alm
University of Colorado at Boulder
Lee J. Alston
University of Illinois
Christine Amsler
Michigan State University
Lisa Anderson
College of William and Mary
Dean Baim
Pepperdine University
R. J. Ballman, Jr.
Augustana College
Raymond S. Barnstone
Northeastern University and Lesley College
Kari Battaglia
University of North Texas
Klaus G. Becker
Texas Tech University
Valerie R. Bencivenga
Cornell University
Sidney M. Blumner
California Polytechnic University
William M. Boal
Drake University

Roger Bowles
University of Bath
Paula Bracy
University of Toledo
Jozell Brister
Abilene Christian University
Robert Brown
Texas Technical University
Robert Buchele
Smith College
Michael R. Butler
Texas Christian University
Richard Call
American River College
Leonard Carlson
Emory University
Michael J. Carter
University of Massachusetts, Lowell
William F. Chapel
University of Mississippi
Kenneth Chinn
Southeastern Oklahoma State University
Stephen L. Cobb
University of North Texas
Mike Cohick
Collin County Community College

Kathy L. Combs
California State University, Los Angeles
Joyce Cooper
Boston University
Eric D. Craft
University of Richmond
Steven Craig
University of Houston
Sarah Culver
University of Alabama, Birmingham
Ward S. Curran
Trinity College
Joseph Daniels
Marquette University
Audrey Davidson
University of Louisville
Gregg Davis
Marshall University
Gregory E. DeFreitas
Hofstra University
David N. DeJong
University of Pittsburgh
David Denslow
University of Florida
Enrica Detragiache
Johns Hopkins University

Michael Devereux <i>University of British Columbia</i>	Richard Harper <i>University of West Florida</i>	William Lang <i>Rutgers University</i>
Michael Dowd <i>University of Toledo</i>	Mitchell Harwitz <i>State University of New York, Buffalo</i>	William D. Lastrapes <i>University of Georgia</i>
Douglas Downing <i>Seattle Pacific University</i>	Mary Ann Hendryson <i>Western Washington University</i>	Lawrence A. Leger <i>Loughborough University</i>
Dean Dudley <i>United States Military Academy</i>	James B. Herendeen <i>University of Texas, El Paso</i>	David Li <i>University of Michigan</i>
Mary E. Edwards <i>St. Cloud State University</i>	Pershing J. Hill <i>University of Alaska, Anchorage</i>	Susan Linz <i>Michigan State University</i>
Ken Farr <i>Georgia College</i>	Denise Hixson <i>Midlands Technical College</i>	John K. Lodewijks <i>University of New South Wales</i>
David Figlio <i>University of Oregon</i>	Gail Mitchell Hoyt <i>University of Richmond</i>	R. Ashley Lyman <i>University of Idaho</i>
Gerald Friedman <i>University of Massachusetts, Amherst</i>	Jim Hvidding <i>Kutztown University</i>	Craig MacPhee <i>University of Nebraska, Lincoln</i>
Edwin T. Fujii <i>University of Hawaii</i>	Beth Ingram <i>University of Iowa</i>	Michael Magura <i>University of Toledo</i>
Charles Geiss <i>University of Missouri</i>	Joyce Jacobsen <i>Wesleyan University</i>	Robert A. Margo <i>Vanderbilt University</i>
Janet Gerson <i>University of Michigan</i>	Syed Jafri <i>Tarleton State University</i>	John D. Mason <i>Gordon College</i>
J. Robert Gillette <i>University of Kentucky</i>	David Jaques <i>California Polytech University, Pomona</i>	Robert McAuliffe <i>Babson College</i>
Donna Ginther <i>Southern Methodist College</i>	Allan Jenkins <i>University of Nebraska</i>	Henry N. McCarl <i>University of Alabama, Birmingham</i>
Mark Glick <i>University of Utah</i>	David Johnson <i>Wilfred Laurier University</i>	Laurence C. McCulloch <i>Ohio State University</i>
Stuart M. Glosser <i>University of Wisconsin, Whitewater</i>	Charles W. Johnston <i>University of Michigan, Flint</i>	Rob Roy McGregor <i>University of North Carolina, Charlotte</i>
Phil Graves <i>University of Colorado, Boulder</i>	Nake Kamrany <i>University of Southern California</i>	Richard McIntyre <i>University of Rhode Island</i>
Paul W. Grimes <i>Mississippi State University</i>	John Kane <i>State University of New York, Oswego</i>	Gaminie Meepagala <i>Howard University</i>
Lorna S. Gross <i>Worcester State College</i>	Manfred Keil <i>Claremont McKenna College</i>	Micke Meurs <i>American University</i>
Shoshana Grossbard-Shechtman <i>San Diego State University</i>	Kristen Keith <i>University of Alaska</i>	Khan A. Mohabbat <i>Northern Illinois University</i>
Robin Hahnel <i>American University</i>	Elizabeth Kelly <i>University of Wisconsin-Madison</i>	Douglas W. Morgan <i>University of California, Santa Barbara</i>
Alan Haight <i>Bowling Green State University</i>	John Klein <i>Georgia State University</i>	Norma Morgan <i>Curry College</i>
David R. Hakes <i>University of Northern Iowa</i>	Harry T. Kolendrianos <i>Danville Community College</i>	Peter Morgan <i>State University of New York at Buffalo</i>
Greg Hamilton <i>Marist College</i>	Margaret Landman <i>Bridgewater State College</i>	Wm. Stewart Mounts, Jr. <i>Mercer University</i>
David Hansen <i>Linfield College</i>	Philip J. Lane <i>Fairfield University</i>	
Mehdi Haririan <i>Bloomsburg University</i>		

Vai-Lam Mui
University of Southern California

David C. Murphy
Boston College

Ronald C. Necoechea
Ball State University

Rebecca Neumann
University of Colorado at Boulder

Hong V. Nguyen
University of Scranton

Lou Noyd
Northern Kentucky University

Rachel Nugent
Pacific Lutheran University

Anthony Patrick O'Brien
Lehigh University

William C. O'Connor
Western Montana College

Eliot S. Orton
New Mexico State University

Jan Palmer
Ohio University

David Papell
University of Houston

Walter Park
American University

Charles Parker
Wayne State College

James Payne
Eastern Kentucky University

David Peterson
American River College, Sacramento

E. Charles Pflanz
Scottsdale Community College

William A. Phillips
University of Southern Maine

Charles Plott
California Institute of Technology

Lidija Polutnik
Babson College

David L. Prychitko
State University of New York, Oswego

Salim Rashid
*University of Illinois,
Urbana-Champaign*

Margaret A. Ray
Mary Washington College

Geoffrey Renshaw
University of Warwick

John Ridpath
York University

Greg Rose
Sacramento City College

B. Peter Rosendorff
University of Southern California

Robert Rossana
Wayne State University

Marina Rosser
James Madison University

Kartic C. Roy
University of Queensland

Daniel Rubenson
Southern Oregon State College

Jeffrey Rubin
Rutgers University

Robert S. Rycroft
Mary Washington College

Jonathan Sandy
University of San Diego

Gary Saxonhouse
University of Michigan

Edward Scahill
University of Scranton

James Byron Schlomach
Texas A&M University

Torsten Schmidt
University of New Hampshire

Thomas J. Shea
Springfield College

William J. Simeone
Providence College

Michael Smitka
Washington & Lee University

Ronald Soligo
Rice University

John L. Solow
University of Iowa

Clifford Sowell
Berea College

Michael Spagat
Brown University

David Spencer
Brigham Young University

J. R. Stanfield
Colorado State University

Ann B. Sternlicht
University of Richmond

Richard Stevenson
Liverpool University

James Stodder
Rensselaer Polytechnic Institute

Leslie S. Stratton
University of Arizona

Robert Stuart
Rutgers University

Dave Surdam
Loyola University, Chicago

James Swoffard
University of South Alabama

Bette Lewis Tokar
Holy Family College

Paul Turner
University of Leeds

Lee J. Vanscyoc
University of Wisconsin, Oshkosh

Gerald R. Visgilio
Connecticut College

Manhar Vyas
University of Pittsburgh

William V. Weber
Eastern Illinois University

Akila Weerapana
Wellesley College

Karl Wesolowski
Salem State College

Joseph Wesson
*State University of New York,
Potsdam*

Geoff Whittam
University of Glasgow

Kenneth P. Wickman
*State University of New York,
Cortland*

Catherine Winnett
University of Bath

Jennifer P. Wissink
Cornell University

Simon Wren-Lewis
University of Strathclyde

Peter R. Wyman
Spokane Falls Community College

Yung Y. Yang
*California State University,
Sacramento*

Brief Contents

PART ONE

Introduction to Economics 1

- 1 The Central Idea 2
- 2 Observing and Explaining the Economy 20
- 3 The Supply and Demand Model 38
- 4 Elasticity and Its Uses 72

PART TWO

Principles of Microeconomics 92

- 5 The Demand Curve and the Behavior of Consumers 94
- 6 The Supply Curve and the Behavior of Firms 114
- 7 The Interaction of People in Markets 138

PART THREE

The Economics of the Firm 163

- 8 Costs and the Changes at Firms Over Time 164
- 9 The Rise and Fall of Industries 192
- 10 Monopoly 214
- 11 Product Differentiation, Monopolistic Competition, and Oligopoly 242
- 12 Antitrust Policy and Regulation 264

PART FOUR

Markets, Income Distribution, and Public Goods 283

- 13 Labor Markets 284
- 14 Taxes, Transfers, and Income Distribution 312
- 15 Public Goods, Externalities, and Government Behavior 342
- 16 Physical Capital and Financial Markets 368

PART FIVE

Principles of Macroeconomics 395

- 17 Macroeconomics: The Big Picture 396

- 18 Measuring the Production, Income, and Spending of Nations 414

- 19 The Spending Allocation Model 438

- 20 Unemployment and Employment 458

- 21 Productivity and Economic Growth 482

- 22 Money and Inflation 506

PART SIX

Economic Fluctuations and Macroeconomic Policy 527

- 23 The Nature and Causes of Economic Fluctuations 528

- 24 The Economic Fluctuations Model 554

- 25 Using the Economic Fluctuations Model 574

- 26 Fiscal Policy 592

- 27 Monetary Policy 610

PART SEVEN

Trade and Global Markets 633

- 28 Economic Growth Around the World 634

- 29 The Gains from International Trade 650

- 30 International Trade Policy 672

- 31 Emerging Market Economies 690

Advanced Topics 703

- A Reading, Understanding, and Creating Graphs 703

- B Consumer Theory with Indifference Curves 710

- C Producer Theory with Isoquants 716

- D Present Discounted Value 721

- E The Miracle of Compound Growth 723

- F Deriving the Growth Accounting Formula 726

- G Deriving the Formula for the Keynesian Multiplier 728

- H The Forward-Looking Consumption Model 733

Contents

Preface xxix

PART ONE Introduction to Economics 1

1 The Central Idea 2

Scarcity and Choice for Individuals 3

Consumer Decisions 3

Opportunity Cost 4 Gains from Trade: A Better Allocation 4

Producer Decisions 5

Gains from Trade: Greater Production 6 Specialization, Division of Labor, and Comparative Advantage 6

International Trade 7

Scarcity and Choice for the Economy as a Whole 7

Production Possibilities 7

Increasing Opportunity Costs 8

The Production Possibilities Curve 8

Inefficient, Efficient, or Impossible? 9 Shifts in the Production Possibilities Curve 10 Scarcity, Choice, and Economic Progress 10

Market Economies and the Price System 12

Three Questions 12

Key Elements of a Market Economy 13

Freely Determined Prices 13 Property Rights and Incentives 13
Freedom to Trade at Home and Abroad 13 A Role for Government 14
The Role of Private Organizations 14

The Price System 14

Conclusion 17 Key Points 17 Key Terms 17 Questions for Review 17
Problems 18

■ ECONOMICS IN ACTION Gains from Trade on the Internet 7

■ ECONOMICS IN ACTION Should We Teach the Idea of Scarcity and Choice to Fourth Graders? 15

2 Observing and Explaining the Economy 20

Case Study: What's Happening in the Biggest Industry in America? 21

Spending as a Share of GDP 22

The Relative Price 23

Correlations Between Economic Variables 24

Correlation versus Causation 25 The Lack of Controlled Experiments in Economics 25 Faulty Data 26

The Circular Flow Diagram: People Interacting in Markets 26