

Boyes

Melvin

# ECONOMICS

Fourth Edition



# Economics

*Fourth Edition*

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## To our families

W. B.      M. M.

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# Economics

# Preface

In the first edition of *Economics* we integrated the global perspective with the traditional economic principles to give students a framework to understand the globally developing economic world. Events since then have made this approach even more imperative. The Soviet Union has disintegrated, newly independent nations have emerged, and markets have been established where none had existed before. Students and instructors embraced the idea that the economies of countries are interrelated and that this should be made clear in the study of economics. *Economics* gives students the tools they need to make connections between the economic principles they learn and the now-global world they live in.

Current users of *Economics* report that their students find the book “very interesting,” “really easy to understand,” and “easy to learn from.” We have also discovered that this book has well served students from many different backgrounds and with varying future plans—from those who major in business, psychology, education, engineering, English, and other fields to those who choose to pursue economics.

Now, in the fourth edition, we continue to refine and improve the text as a teaching and learning instrument while expanding its international base by updating and adding examples related to global economics throughout.

## CHANGES IN THE FOURTH EDITION

The fourth edition of *Economics* has been streamlined and thoroughly updated and refined. Streamlining was primarily achieved by eliminating or combining several chapters as outlined in the sections following. A detailed account of all the additions, deletions, and modifications is in the Transition Guide in the *Instructor's Resource Manual* and on the web site at <http://www.hmco.com/college>.

### Revised Macroeconomic Coverage

The macroeconomic chapters have been updated to include the latest available economic statistics, in most instances up through 1998. In many chapters, numerical examples have been revised to provide greater clarity in the graphical presentations. These chapters stress one model—aggregate demand and aggregate supply. The Keynesian aggregate expenditures material is available and thoroughly covered in Chapters 10 and 11 and then

is integrated into the aggregate demand model at the end of Chapter 11. The last chapter of the Third Edition, “The Transition from Socialism to Capitalism,” has now been integrated into Chapter 19, “Development Economics.”

### Revised Microeconomic Coverage

The microeconomic material includes further refinements to enable students to see the forest while wandering around the trees. Chapter 32 in the third edition, which dealt with land, capital, and entrepreneurial ability, has been significantly reworked. The new Chapter 31, “Capital and Technological Change,” deals with capital markets and the role of technological change in those markets. It includes a discussion of the financial capital markets and their role in financing the acquisition of physical capital. Chapter 35 from the third edition, which focused on market failures and the environment, has also been totally revised and placed earlier as a new Chapter 32, “Natural Resources and Environmental Policy.” Chapter 36 from the third edition, “Government and Public Choice,” was dropped; the material from this chapter has been woven into several chapters, including in particular Chapters 5, 27, and 32.

### Modern Topics and Features Throughout

Modern topics continue to be the emphasis of the text. The economics of personnel, strategic behavior, and the economics of information are maintained but are restructured and reemphasized. The economics of information is included in the chapter on oligopoly and monopolistic competition; this ensures that students realize that what they are studying is indeed real-world oriented. The effects of corruption on economic growth and development is now included in the economic development chapter to mirror the current policy emphasis in multinational organizations on this topic.

Each chapter contains approximately fifteen exercises that challenge students, test their retention and understanding of the material, and extend their knowledge. New to the fourth edition are Internet Exercises, one per chapter, which allow interested students to participate in activities that require accessing data from the Internet. For example, in Chapter 1, students can access our web site and examine statistics of people attending college in the United States. Students are then asked several questions about the data. Additional web-based assign-

ments, at least one per chapter, are also available on the supporting web site at <http://www.hmco.com/college>.

## SUCCESSFUL FEATURES RETAINED FROM THE THIRD EDITION

In addition to the considerable updating and revising we've done for the fourth edition, there are several features preserved from the previous edition that we think instructors will find interesting.

### Enhanced Student Relevance

With all the demands on today's students, it's no wonder that they resist spending time on a subject unless they see how the material relates to them and how they will benefit from mastering it. We incorporate features throughout the text that show economics as the relevant and necessary subject we know it to be.

**Real-World Examples** Students are rarely intrigued by unknown manufacturers or service companies. Our text talks about people and firms that students recognize. We describe business decisions made by McDonald's and Pizza Hut, by Kodak and Fuji, and by the local video store or café. We discuss the policies of Bill Clinton and other world leaders. These examples grab students' interest. Reviewers have repeatedly praised the use of novel examples to convey economic concepts.

**Economic Insight Boxes** These brief boxes bring in contemporary material from current periodicals and journals to illustrate or extend the discussion in the chapter. By reserving interesting but more technical sidelights for boxes, we lessen the likelihood that students will be confused or distracted by issues that are not critical to understanding the chapter. By including excerpts from articles, we help students learn to move from theory to real-world examples. And by including plenty of contemporary issues, we guarantee that students will see how economics relates to their own lives.

**Economically Speaking Boxes** The objective of the principles course is to teach students how to translate the predictions that come out of economic models to the real world and to translate real-world events into an economic model in order to analyze and understand what lies behind the events. The Economically Speaking boxes present students with examples of this kind of analysis. Students read an article that appears on the left-hand page of a two-page spread at the end of each chapter. The commentary on the right-hand page shows how the facts and events in the arti-

cle translate into a specific economic model or idea, thereby demonstrating the relevance of theory.

### An Effective and Proven System of Teaching and Learning Aids

This text is designed to make teaching easier by enhancing student learning. Tested pedagogy motivates students, emphasizes clarity, reinforces relationships, simplifies review, and fosters critical thinking. And, as we have discovered from reviewer and user feedback, this pedagogy works.

**In-Text Referencing System** Sections are numbered for easy reference and to reinforce hierarchies of ideas. Numbered section heads serve as an outline of the chapter, allowing instructors flexibility in assigning reading, and making it easy for students to find topics to review. Each item in the key terms list and summary at the end of the chapter refers students back to the appropriate section's number.

The section numbering system appears throughout the Boyes/Melvin ancillary package; the *Test Banks*, *Study Guides*, and *Instructor's Resource Manual* are organized according to the same system.

**Fundamental Questions** These questions help to organize the chapter and highlight those issues that are critical to understanding. Students can then read the chapter with these questions in mind; this active participation enhances understanding and retention. Each fundamental question also appears in the margin by the text discussion that helps students to answer the question. Fundamental questions are also used to organize the chapter summaries. Brief paragraphs answering each of these questions are found in the *Study Guides* available as supplements to this text. The fundamental questions also serve as one of several criteria used to categorize questions in the *Test Banks*.

**Preview** This motivating lead-in sets the stage for the chapter. Much more than a road map, it helps students identify real-world issues that relate to the concepts that will be presented.

**Recaps** Briefly listing the main points covered, a recap appears at the end of each major section within a chapter. Students are able to quickly review what they have just read before going on to the next section.

**Summary** The summary at the end of each chapter is organized along two dimensions. The primary organizational device is the list of fundamental questions. A brief synopsis of the discussion that helps students to answer those questions is arranged by section below each of the questions. Students are encouraged to create their own

links among topics as they keep in mind the connections between the big picture and the details that make it up.

**Comments** Found in the text margins, these comments highlight especially important concepts, point out common mistakes, and warn students of common pitfalls. They alert students to parts of the discussion that they should read with particular care.

**Key Terms** Key terms appear in bold type in the text. They also appear with their definition in the margin and are listed at the end of the chapter for easy review. All key terms are included in the Glossary at the end of the text.

## Friendly Appearance

Economics can be intimidating; this is why we've striven to keep *Economics* looking friendly and inviting. The one-column design and ample white space in this text provide an accessible backdrop. Over 300 figures rely on well-developed pedagogy and consistent use of color to reinforce understanding. Striking colors were chosen to enhance readability and provide visual interest. Specific curves were assigned specific colors, and families of curves were assigned related colors.

Annotations on the art point out areas of particular concern or importance. Students can see exactly which part of a graph illustrates a shortage or a surplus, a change in consumption or consumer surplus. Tables that provide data from which graphs are plotted are paired with their graphs. Where appropriate, color is used to show correlations between the art and the table, and captions clearly explain what is shown in the figures and link them to the text discussion.

The color photographs not only provide visual images but make the text appealing. These vibrant photos tell stories as well as illustrate concepts, and often lengthy captions explain what is in the photos, again to draw connections between the images and the text discussion.

## Thoroughly International Coverage

Students understand that they live in a global economy; they can hardly shop, watch the news, or read a newspaper without stumbling on this basic fact. International examples are presented in every chapter but are not merely added on, as is the case with many other texts. By introducing international effects on demand and supply in Chapter 3 and then describing in a nontechnical manner the basics of the foreign exchange market and the balance of payments in Chapter 7, we are able to incorporate the international sector into the economic models and applications wherever appropriate thereafter. Because the international content is incorporated from the beginning,

students develop a far more realistic picture of the national economy; as a result they don't have to alter their thinking to allow for international factors later on. The three chapters that focus on international topics at the end of the text allow those instructors who desire to delve much more deeply into international issues to do so.

The global applicability of economics is emphasized by *using traditional economic concepts to explain international economic events and using international events to illustrate economic concepts that have traditionally been illustrated with domestic examples*. Instructors need not know the international institutions to introduce international examples since the topics through which they are addressed are familiar, for example, price ceilings, price discrimination, expenditures on resources, marginal productivity theory, and others.

Uniquely international elements of the macroeconomic coverage in the text include:

- The treatment of the international sector as one of the economic participants and the inclusion of net exports as early as Chapter 4
- The early description of the foreign exchange market and the balance of payments in Chapter 7
- International elements in the development of aggregate demand and supply
- An extended treatment of macroeconomic links between countries in Chapter 17

Unique international elements of microeconomic coverage in the text include:

- The introduction of exchange rates as a determinant of demand and supply in Chapter 3
- Extensive analyses of the effects of trade barriers, tariffs, and quotas
- An examination of strategic trade
- An examination of dumping as a special case of price discrimination
- The identification of problems faced by multinational firms
- A comparison of behavior, results, and institutions among nations with respect to consumption, production, firm size, government policies toward business, labor markets, health care, income distribution, environmental policy, and other issues

## Modern Macroeconomic Organization and Content

Macroeconomics is changing and textbooks must reflect that change. We begin with the basics—GDP, unemploy-

ment, and inflation. These are the ongoing concerns of any economy, for they have a significant influence on how people feel. These are the issues that don't go away. Added to these core topics is an easy-to-understand, descriptive introduction to the foreign exchange market and the balance of payments. We provide a critical alternative for those instructors who believe that it is no longer reasonable to relegate this material to the final chapters, where coverage may be rushed.

Armed with these basics, students are ready to delve into the richness of macroeconomic thought. Macro models and approaches have evolved over the years, and they continue to invite exciting theoretical and policy debates. The majority of instructors we asked voiced frustration with the challenge of pulling this rich and varied material together in class and stressed that a coherent picture of the aggregate demand and supply model was critical. We have structured the macro portion to allow for many teaching preferences while assuring a clear delineation of the aggregate demand/aggregate supply model.

To help instructors successfully present a single coherent model, we present aggregate demand and aggregate supply first, in Chapter 9, immediately following the chapter on inflation and unemployment. This sequence allows for the smooth transition from business cycle fluctuations to aggregate demand/aggregate supply (*AD/AS*). The Keynesian income and expenditures model is presented in full in Chapters 10 and 11 as the fixed-price version of the *AD/AS* model (with a horizontal aggregate supply curve). Those who want to use the *AD/AS* model exclusively will have no problem moving from the Chapter 9 presentation of it to the fiscal policy material in Chapter 12. The policy chapters rely on the *AD/AS* model for analysis.

The macroeconomic policy chapters begin with a thorough presentation of fiscal policy, money and banking, and monetary policy, with international elements included. Chapter 15 covers contemporary policy issues, and various schools of thought are treated in Chapter 16, when students are ready to appreciate the differences and can benefit from a discussion of new Keynesian and new classical models as well as of their precursors. Chapter 17 develops macroeconomic links between countries. This chapter helps students understand why economies cannot function in isolation from each other and clearly demonstrates why policy actions undertaken by one government affect not only that government's citizens but citizens and businesses of other countries as well.

Part IV, "Economic Growth and Development," brings together the concepts and issues presented in the core macro chapters to explain how economies grow and what factors encourage or discourage growth. Most of the

world's population live in poor countries. Growth and development are critical to those people. The material in these chapters also addresses issues of importance to industrial countries, such as the slowdown of productivity growth in the United States.

## Modern Microeconomic Organization and Content

All too often microeconomics is presented as a succession of facts, graphs, and theories whose connections are not easily grasped or appreciated. Because students don't see the big picture, they find microeconomics difficult and unrelated to their lives. We give students a context for organizing and understanding the material covered and point out how it relates to their everyday experience. We also draw students' interest by extending the application of economic principles to important social issues of the day—families, aging, health care, college and occupational choice, and discrimination.

Part V presents basic concepts such as elasticity, consumer behavior, and costs of production. Parts VI and VII both begin with overview chapters (Chapter 23 on product markets and Chapter 28 on resource markets). These overviews give students a chance to look at the big picture before delving into details they often find confusing. Chapter 23, for instance, gives students an intuitive overview of the market structures before they explore each type of structure in more detail in succeeding chapters. Chapter 23 lightens the load that the more-detailed chapters have to bear, easing students into the market structure material. The traditional topics are covered in the separate market structure chapters, Chapters 24 to 26, but the coverage is also modern, including such topics as strategic behavior, price discrimination, nonprice competition, and the economics of information. Having fought their way first through the cost curves and then the market structures, students often complain that they do not see the relevance of that material to real-world situations. The intuitive overview chapter alleviates some of that frustration. New material on technological change and financial capital is included in the thoroughly revised Chapter 31. The coverage of environmental issues is expanded and given prominent positioning as Chapter 32.

## A COMPLETE TEACHING AND LEARNING PACKAGE

In today's market no book is complete without a full complement of ancillaries. Those instructors who face huge classes find good transparencies (acetates) to be critical instructional tools. Others may find that comput-



er simulations and tutorials are invaluable. Still others use projection technology and want *PowerPoint* slides. All of these are available. And to foster the development of consistent teaching and study strategies, the ancillaries pick up pedagogical features of the text—like the fundamental questions—wherever appropriate.

**Transparencies** Available to adopters are over 100 color acetates showing the most important figures in the text. Over 10 percent of these figures have one to three overlays, which in addition to adding clarity and flexibility to the discussion, allow instructors to visually demonstrate the dynamic nature of economics.

**Instructor's Resource Manual (IRM)** Patricia Diane Nipper has produced a manual that will streamline preparation for both new and experienced faculty. Preliminary sections cover class administration, alternative syllabi, and a guide to the use of cooperative learning in teaching the principles of economics.

The *IRM* also contains a detailed chapter-by-chapter review of all the changes made in the fourth edition. This Transition Guide should help instructors more easily move from the use of the third edition to this new edition.

Each chapter of the *IRM* contains:

- Teaching objectives *that address (1) critical points to cover if your students are to succeed with later chapters, (2) concepts traditionally difficult for students to master, and (3) the unique features of the chapter*
- The fundamental questions
- The key terms
- A lecture outline with *teaching strategies*—general techniques and guidelines, essay topics, and other hints to enliven your classes
- Opportunities for discussion
- Answers to every end-of-chapter exercise
- Answers to *Study Guide* homework questions

**Study Guides** Janet L. Wolcutt and James E. Clark of the Center for Economic Education at Wichita State University have revised the *Macroeconomics* and *Microeconomics Study Guides* to give students the practice they need to master this course. Initially received by students and instructors with great enthusiasm, the guides maintain their warm and lively style to keep students on the right track. For each chapter:

- Fundamental questions are answered in one or several paragraphs. For students who have trouble formulating their own answers to these questions after reading the text, the *Study Guides* provide an invaluable model.

- Key terms are listed.
- A Quick Check Quiz is organized by section, so any wrong answers send the student directly to the relevant material in the text.
- Practice Questions and Problems, which is also organized by section, includes a variety of question formats—multiple choice, true/false, matching, and fill in the blank. They test understanding of the concepts and ask students to construct or perform computations.
- Thinking About and Applying . . . uses newspaper headlines or some other real-life applications to test students' ability to reason in economic terms.
- A Homework page at the end of each chapter contains five (two factual, two applied, and one synthesis/analysis) questions that can be answered on the sheet and turned in for grading. Answers are included in the *IRM*.
- Sample tests appear at the end of each *Study Guide* part and consist of 25 to 50 questions similar to *Test Bank* questions. Taking the sample tests helps students determine whether they are prepared for exams.
- Answers are provided to all but Homework questions. Students are referred back to the relevant pages in the main text.

**Test Banks** *Test Banks* for both *Macroeconomics* and *Microeconomics* are available. Nearly 8,000 test items, many of them new to this edition, provide a wealth of material for classroom testing. Features include:

- Multiple choice, true/false, and essay questions in every chapter
- Nearly 1,000 questions new to this edition, marked for easy identification
- An increased number of analytical, applied, and graphical questions
- The identification of all test items according to topic, question type (factual, interpretive, or applied), level of difficulty, and applicable fundamental question
- A *Study Guide* section of the test that includes five test items taken directly from the *Study Guide* and five test items that parallel *Study Guide* questions, for the instructor who is interested in rewarding students for working through the *Study Guide*

## Computerized Test Bank

This innovative test-assembly program, revised for this edition, renders precise, preprogrammed graphs on the

computer quickly, easily, and accurately. You can select from among more than 7,000 questions, edit nongraphic items, peruse items in order, add your own questions to customize tests, and print out alternative versions using a number of variables. Individual items or tests in their entirety can be previewed before printing. The sophisticated data retrieval capabilities of the computerized test bank allow instructors to generate multiple versions of a test automatically and assure compatibility of tests consisting of different test items. This program also allows the importation of files from ASCII, WordStar, and WordPerfect. It is available for IBM-PC®, PS/2, and compatible microcomputers.

**New Tutorial/Simulation Software** This software provides the opportunity for students to review and apply the most important concepts covered in the text. It consists of two major components—tutorial and simulation—either of which can be used for independent study and practice, in small group work in a computer lab, or as part of a classroom demonstration. The instructor could also assign specific modules as homework, since students can print the graphs they generate.

- The tutorial portion of the program consists of modules, one per chapter, tied to the major topics of the text (e.g., “Supply and Demand,” “Consumer Theory and Utility,” “The Role of Government,” and “Monetary Policy”). Each module is broken up into several major sections, with a self-test offered at the end of each section to reinforce what has been covered.

Working at their own pace, students experiment with the curves by entering and changing the values of discrete variables in order to see the results played out in the corresponding graph window. Narrating text prompts the student to make changes to variables and, with reinforcing explanation, encourages the student to reflect on what has happened in the graph window. A View menu allows students to view the graphs with or without a background grid (in a variety of styles) or with thin or thick curves. (This feature is also handy for classroom demonstrations.) An extensive Help menu enables students to access the Boyes/Melvin Glossary whenever they need to refresh their memories on the meaning of a particular term.

- In the simulation component of the Courseware, the structured sequence of the tutorial is replaced by more open-ended problem-solving. Students begin

by choosing one of several scenarios, which range from “Effects of a Tariff” to “A Pollution Policy for Denver.” But, instead of being presented with graphs linked to text screens, the student is encouraged to pull up his or her choice of data from a rich library of data, choose a relevant time period, and construct a meaningful graph or table. Here the student must not only choose and assemble the data but also begin the process of interpretation. With over 20 complete sets of data that include such information as nominal GDP, inflation rate, and unemployment rate, the possibilities for analysis of data are almost endless. All data are provided in both annual and quarterly figures from 1930 to 1998 where those years are available.

The simulation scenarios also offer a kind of exploration that is not possible in other software programs. When the student is interested in doing some independent exploring, the screen is cleared and all the micro and macro data sets become accessible. Students can plot up to three data series against time or choose from among the data series to plot variables against each other. This is an ideal vehicle around which professors can build substantive student assignments.

**PowerPoint Slides** Figures, tables, key equations from the text, and other resources that extend the text are provided on electronic slides created for Microsoft’s popular *PowerPoint* presentation software. *PowerPoint* allows instructors to create customized lecture presentations that can be displayed on computer-based projection systems. The slides are produced as a complete presentation, but using *PowerPoint*, presenters can also insert their own slides into the presentation or use specific slides in sets that they create themselves. These slides ship with a copy of the *PowerPoint Viewer*, which allows presenters who don’t own a copy of *PowerPoint* to use the presentation software but not to change or add to the slides.

**Web Site** The web site used in this edition (<http://www.hmco.com/college>) provides an extended learning environment for students and a rich store of teaching resources for instructors. Included are key economic links for every chapter, extended web-based assignments, and on-line tests—all intended to help students test their mastery of the chapter content. Also included for instructors are economic and teaching resource links, teaching tips, and access to demonstrations of other components of the teaching package.

## ACKNOWLEDGMENTS

Writing a text of this scope is a challenge that requires the expertise and efforts of many. We are grateful to our friends and colleagues who have so generously given their time, creativity, and insight to help us create a text that best meets the needs of today's students.

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Our students at Arizona State University continue to help us improve the text through each edition; their many questions have given us invaluable insight into how best to present this intriguing subject. It is our hope that this textbook will bring a clear understanding of economic thought to many other students as well. We welcome any feedback for improvements.

W. B.      M. M.

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# Economics



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