



# ECONOMICS

THIRTEENTH EDITION

*Campbell R. McConnell*

*Stanley L. Brue*



# ECONOMICS

## PRINCIPLES, PROBLEMS, AND POLICIES

THIRTEENTH EDITION

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## **ECONOMICS**

### **Principles, Problems, and Policies**

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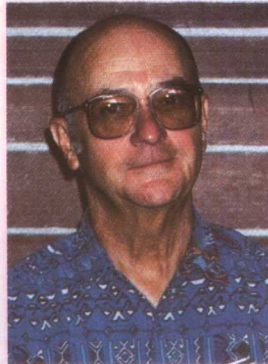
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## ABOUT THE AUTHORS

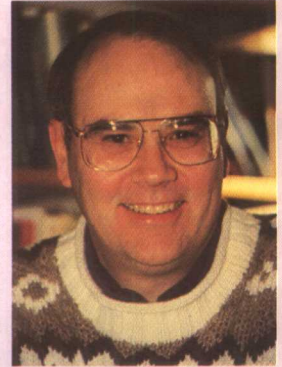
### **Campbell R. McConnell**

earned his Ph.D. from the University of Iowa after receiving degrees from Cornell College and the University of Illinois. He taught at the University of Nebraska—Lincoln from 1953 until his retirement in 1990. He is also coauthor of *Contemporary Labor Economics*, 4th ed. (McGraw-Hill) and has edited readers for the principles and labor economics courses. He is a recipient of both the University of Nebraska Distinguished Teaching Award and the James A. Lake Academic Freedom Award and is past-president of the Midwest Economics Association. Professor McConnell was awarded an honorary Doctor of Laws degree from Cornell College in 1973 and received its Distinguished Achievement Award in 1994. His primary areas of interest are labor economics and economic education. He has an extensive collection of jazz recordings and enjoys reading jazz history.



### **Stanley L. Brue**

did his undergraduate work at Augustana College (S.D.) and received his Ph.D. from the University of Nebraska—Lincoln. He teaches at Pacific Lutheran University, where he has been honored as a recipient of the Burlington Northern Faculty Achievement Award. He has also received the national Leavey Award for excellence in economic education. Professor Brue is national President and member of the International Executive Board of Omicron Delta Epsilon International Economics Honorary. He is coauthor of *Economic Scenes*, 5th ed. (Prentice-Hall) and *Contemporary Labor Economics*, 4th ed. (McGraw-Hill) and author of *The Evolution of Economic Thought*, 5th ed. (HB/Dryden). For relaxation, he enjoys boating on Puget Sound and skiing trips with his family.







# PREFACE

We are pleased to present the thirteenth edition of *Economics* (and its companion editions *Macroeconomics* and *Microeconomics*). *Economics* continues to be the top-selling economics text in the United States—with an expanded market share in the twelfth edition. Moreover, the Russian-language version of *Economics* is the leading economics text in Russia. More than 1 million Russians have learned about market economics from it since the fall of communism. The Canadian and Australian adaptations of this book and its translations into French, Spanish, and other languages have further extended its reach.

Capitalism in Russia, interest-rate hikes, GATT and NAFTA, pollution rights, the balanced budget amendment—what a remarkable time for teaching and learning economics! More than ever before it is clear that people who comprehend economic principles will be better able to make sense of the emerging world and have an advantage functioning in it. We thank each of you using *Economics*, wherever you are in this rapidly changing world, for granting us a modest role in your efforts to teach or learn this vital subject.

## WHAT'S NEW?

This edition has been thoroughly revised, polished, and updated. Many of the changes have been motivated by the comments of 43 reviewers, 10 participants in focus groups and 124 respondents to a questionnaire. We sincerely thank each of these contributors and have acknowledged them at the end of this preface.

Here, we strive only for an overview of the changes in the thirteenth edition; chapter-by-chapter details are provided in the *Instructor's Resource Manual*.

### New Chapters

We have written two new chapters for this edition.

- *The United States in the Global Economy.*

The material throughout Part 1 has been condensed and rearranged to allow for an early and comprehensive new chapter (Chapter 6) on the global economy. This chapter contains not only descriptive material (volume and pattern of world trade), but also essential theory (comparative advantage, exchange rates) and institutional features (trade barriers, GATT, EU, NAFTA). By providing the basics of international trade and finance, the chapter is a springboard for the instructor who wishes to fully integrate micro and macro materials into a global framework.

- *Economics of Health Care.* A new chapter (Chapter 35) presents the economics of health care, an issue that has dominated and will continue to dominate national debates. The twin problems of rising costs of health care and unequal access to health care are presented, as is a demand and supply model explaining cost increases. The chapter applies and reinforces a host of economic concepts, including asymmetric information, spillovers, tax subsidies, income and price elasticities, the moral hazard problem, optimal health care, and more. The chapter concludes with a discussion of reform options. To make room for this new chapter, we have deleted the twelfth-edition's chapter on general equilibrium analysis.

### New Features

The thirteenth edition contains two new features— one adding another global dimension to *Economics*, the other making the book more interactive

- *Global Perspectives.* We have added 43 Global Perspective sections—most containing charts— throughout the book to compare the United States economy with other nations. To merely state, for example, United States' rates of inflation, unemployment, or taxes, the size of American farm subsidies, or health care spending, without international comparisons denies students the context needed for meaningful comparisons

- **Key Questions (with Answers).** In each chapter we have designated two to five end-of-chapter questions as “Key Questions,” providing answers in the back of the text. Many of these questions are quantitative and are designed to help the student work through and understand basic concepts. The student is alerted within the chapters as to when a particular Key Question is relevant. Students wanting to immediately test their understanding can turn to the specially marked Key Question, checking their answer against the end-of-book answer. Others may want to wait until they have read the full chapter before answering the Key Questions. Either way, the Key Questions make this edition of *Economics* more interactive.

### Reconstituted Macroeconomics

The macro analysis has been carefully rethought and restructured for logical development of the ideas and to provide greater flexibility for instructors. Because these changes are extensive, we describe them more fully.

- **Chapters 7 and 8** on national income accounting and macroeconomic instability have undergone only minor revision.

- **Chapter 9** addresses the components of the private, closed aggregate expenditures (AE) model and examines equilibrium GDP. We have abridged the discussion of classical economics, quickly getting the student into the AE model. We present the AE theory as part of integrated modern macro rather than emphasizing disputes between “camps.” Comparison of schools of macroeconomic thought is deferred to Chapter 16 on alternative perspectives.

- **Chapter 10** examines changes in equilibrium GDP and the multiplier in the private, closed economy. It then brings in the net export and government components of the aggregate expenditures model, the latter from the previous edition’s chapter on fiscal policy. Then, recessionary and inflationary gaps are considered, along with historical applications of these concepts (the Great Depression and Vietnam inflation).

- **Chapter 11** develops the aggregate demand–aggregate supply (AD-AS) model, with two optional sections which (1) derive the AD curve from the AE model, and (2) show how shifts in the AD curve and AE curve are related. We anticipate that most instructors will assign the AE chapters, but instructors wishing to use only AD-AS can delete the AE chap-

ters along with these optional sections in Chapter 11. With in-class supplementation, Chapter 11’s section on the multiplier with inflation could serve as a springboard for instructors to develop the concepts of the MPC, MPS, and multiplier (the latter in an AD-AS framework).

- **Chapter 12** on fiscal policy has been recast entirely in terms of AD-AS.

We believe the new organization of the macroeconomics chapters accomplishes three goals.

Most importantly, by eliminating all “jumping” between models, the AE and AD-AS models are better integrated for the majority of professors who teach both. The new progression is: National income accounting, macroeconomic instability, the AE model, derivation of AD from the AE model, addition of AS, and application of the AD-AS model to fiscal policy (and later to monetary policy).

Second, the new organization provides an exclusive AD-AS option (Chapters 11 and 12 and beyond) for those desiring it.

Finally, the two AE chapters are now unencumbered with AD-AS sections for instructors wishing to emphasize the AE model.

### Consolidated Introductory Chapters

We have consolidated the introductory chapters for clearer focus and to make room for the new Chapter 6 on the global economy. The two twelfth-edition chapters on the private and public sectors are combined into new Chapter 5 (The Mixed Economy) in this edition. Also, new Chapter 4 (previously Chapter 5) now meshes the former Chapter 3 discussion of pure capitalism with analysis of the market system. This is facilitated by relocating supply and demand analysis as Chapter 3 in this edition.

### The Economic Perspective

We have placed greater emphasis on the economic way of thinking. In Chapter 1 we have greatly expanded the section on the economic perspective, discussing scarcity and choice, rational behavior, and marginal analysis. In Chapter 2 we use the ideas of marginal benefits and marginal costs (Figure 2-2) to determine the optimal position on the production possibilities curve. We then take opportunities to reinforce the economic perspective in the remainder of the book.



## Culling and Tightening

Our considerable culling and tightening in the twelfth edition has been well received by instructors and, of course, students. Buoyed by that response, we have again looked to delete the archaic, remove redundancy, tighten sentences, and reduce formality. In further economizing on words, we were careful *not* to reduce the thoroughness of our explanations. Where needed, the “extra sentence of explanation” remains a distinguishing characteristic of *Economics*.

## Other New Topics and Revised Discussions

Along with the changes just discussed, there are many other revisions.

- **Part 1. Chapter 1:** Reorganization of the “policy” section; new discussion of the correlation-causation fallacy. **Chapter 2:** Clarification of productive versus allocative efficiency; new application on lumber versus owls. **Chapter 3:** New examples: increased demand for broccoli, carrots, guns; reduced supply of haddock. **Chapter 4:** Expanded discussion of property rights. **Chapter 5:** New discussions on growth of transfer payments and lottery revenues.

- **Part 2. Chapter 8:** Revised Figure 8-7 to allow for output beyond the full-employment output; new Figure 8-8 on nominal versus real interest rate. **Chapter 10:** Major new aggregate expenditure applications: the Great Depression and Vietnam inflation. **Chapter 11:** Removal of “Keynesian” and “classical” labels from the horizontal and vertical ranges of AS; new distinction between full-employment GDP and full-capacity GDP. **Chapter 12:** New presentation of fiscal policy in the AD-AS framework (Figures 12-1 and 12-2); revised discussion of the full-employment budget (new Figure 12-4).

- **Part 3. Chapter 13:** New discussions on the relative decline of bank and thrift assets and globalization of financial activity. **Chapter 15:** New AD-AS presentation of monetary policy (Figure 15-2); new discussions of recent successes of monetary policy; the “loss of control” issue; the effect of interest-rate changes on interest income; and the recent policy focus on the Federal funds rate. New Figure 15-3 provides an extended AD-AS “overview” of macro theory and policy.

- **Part 4. Chapter 16:** New title: “Alternative Views of Macro Theory and Policy”; AD-AS comparison of classical and Keynesian analysis (from twelfth-edition Chapter 10). **Chapter 17:** New discussion of employ-

ment and training policy. **Chapter 18:** New topics: entitlements; ownership of the public debt (Figure 18-1); debt as a curb on fiscal policy; Deficit Reduction Act of 1993. **Chapter 19:** Clarification of demand and efficiency factors in growth (Figure 19-1); new Figure 19-4 on the educational attainment of the population; discussions of slow growth of median family income (new Figure 19-5) and the new resurrection of Doomsday models (Figure 19-6).

- **Part 5. Chapter 20:** New price elasticity example on the excise tax on luxury boats; fuller discussions of cross and income elasticity of demand; **Chapter 21:** Clearer delineation of the total utility–marginal utility relationship (Figure 22-1); new applications: compact discs, transfers and gifts, medical care. **Chapter 22:** New numerical example of the difference between accounting and economic profits; new examples of scale economies, including the prices of introductory versus advanced textbooks and bank mergers. **Chapter 24:** Improved discussion of economies of scale as an entry barrier (Figure 24-1); new graphical comparison of a single-price monopolist versus price-discriminating monopolist (Figure 24-7). **Chapter 25:** Revised discussion of long-run equilibrium in monopolistic competition; new Figure 25-4 on advertising and economies of scale. **Chapter 26:** Revision of the “causes of oligopoly” section; updating in the case study of autos.

- **Part 6. Chapter 27:** New applications of the determinants of labor demand: auto workers, fast-food workers, impact of personal computers, defense cutbacks, contingent workers. **Chapter 28:** Discussions of real wage stagnation and failed pay-for-performance plans. **Chapter 29:** New application: usury laws.

- **Part 7. Chapter 30:** Graphical analysis of spillovers (from twelfth-edition Chapter 6); updates on pollution credits and the Superfund. **Chapter 31:** Discussion of the “reinventing government” effort and the Deficit Reduction Act of 1993. **Chapter 32:** New section on the tradeoffs between antitrust and other goals (balance of trade, desired consolidation in the defense industry, and promoting new technologies); new examples of price-fixing cases; major new section on industrial policy. **Chapter 33:** New Figure 33-3 showing volatility and long-run decline in farm prices; new discussions of rent-seeking in agriculture and environmental impacts of price supports. **Chapter 34:** New discussions on causes of increasing inequality; decomposed poverty rates (Figure 34-5); the Earned Income Tax Credit; and welfare reform proposals. **Chapter 36:**

Greatly tightened sections on union history and union impacts; new discussion of immigrants' use of welfare programs.

- **Part 8. Chapter 37:** New topics: supply and demand analysis of exports and imports (Figures 37-3, 37-4, and 37-5); government export promotion policies; renewal of China's most-favored-nation status; and negotiations with Japan. **Chapter 38:** Revised discussion of the managed float; updated discussion of recent American trade deficits. **Chapter 39:** New table on the distribution of world income (Table 39-1); a reworked and extended discussion of population problems; new discussion of the difficulties associated with foreign aid; reworked discussion of the debt crisis; new section on the "New Global Compact." **Chapter 40:** Progress report on the Russian transition to capitalism.

### New Last Words

Reviewers have indicated they appreciate the "Last Word" minireadings and their placement toward the conclusion of each chapter. These selections serve several purposes: Some provide current or historical real-world applications of economic concepts; others reveal human interest aspects of economic problems; some present contrasting or nonmainstream points of view; and still others present economic concepts or issues in a global context. Sixteen of the Last Words are new and others have been revised and updated.

The new topics are: Cuba's declining production possibilities (Chapter 2); ticket scalping (Chapter 3); alternative views on why Europe's unemployment rate is so high (Chapter 11); the use of the dollar around the world (Chapter 13); the problem of entitlements (Chapter 18); pros and cons of economic growth (Chapter 19); market forces and the rising value of education (Chapter 20); the inefficiency of Christmas gift giving (Chapter 21); creative destruction as a competitive force (Chapter 23); the De Beers diamond monopoly (Chapter 24); news accounts of public sector failure (Chapter 31); the impact of airline deregulation (Chapter 32); welfare for the rich (Chapter 34); physicians versus economists on health care reform (Chapter 35); speculation in currency markets (Chapter 38); and China as an emerging economic power (Chapter 40).

### New Software and Multimedia Materials

The extensive ancillaries available with the thirteenth edition for either students or instructors are described

later in the Preface. Three new items are described here.

### PowerPoint Presentation/Tutorial Software for Windows

C. Norman Hollingsworth of Dekalb College, North Campus, Dunwoody, Georgia, has prepared a multi-slide presentation for every chapter in the thirteenth edition (2000 slides in all). This Windows software includes a full run-time version of PowerPoint, allowing instructors to use these presentations "right out of the box" without having to purchase the PowerPoint software program. Owners of PowerPoint software can edit any slide in the set or add additional slides to the set to more closely match their classroom needs. This software is interactive, flexible, and in full color. While designed to enhance the instructor's classroom lecture/discussion, it can also be used in a computer lab for tutorial/review purposes.

### Interactive Key Graphs Presentation/Tutorial Software for Windows

The 21 Key Graphs in the thirteenth edition are critical for student understanding of the concepts in introductory economics. With this Key Graphs Tutorial Software students will be able to study and review critical concepts in the IBM-PC/Windows environment in a computer lab or on their own PC. Instructors may also use this software in class, manipulating the full-color graphs to dynamically illustrate concepts in ways that a book or overhead transparencies never can.

### Multimedia: Principles of Economics on CD-ROM

Charles Link, Jeffrey Miller, and Fred Hofstetter of the University of Delaware have prepared a stand-alone multimedia CD-ROM for principles of economics that contains both an instructor and a tutorial component. The CD-ROM, with sound, video, and animation, includes substantial interactive tutorial material for creative learning. There are eight content modules covering the topics in macroeconomics and eight modules covering microeconomics.

In addition we continue to provide *Concept Master*, a DOS-based student tutorial by William and Irene Gunther, updated to reflect the changes in the thirteenth edition, *Macroeconomics: A Lab Course* by Nor-



ris Peterson, for use with IBM-PCs, and *DiscoverEcon* by Gerald Nelson and Wesley Seitz, for use with the Macintosh computer.

## FUNDAMENTAL GOALS

Although the thirteenth edition bears only a modest resemblance to the first, the basic purpose remains the same—to introduce the beginning economics student to principles essential in understanding the basic economizing problem, specific economic issues, and the policy alternatives available for dealing with them. We hope that an ability to reason accurately and objectively about economic matters and a lasting interest in economics will be two byproducts of this basic objective. Our intention remains to present the principles and problems of economics in a straightforward, logical fashion. Therefore, we continue to stress clarity of presentation and organization.

## PRODUCT DIFFERENTIATION

This text embraces a number of distinguishing features.

- ***Comprehensive explanations at an appropriate level.*** We have attempted to craft a comprehensive, analytical text which is challenging to better students, yet accessible—with appropriate diligence—to average students. We think the thoroughness and accessibility of *Economics* enables the instructor to select topics for special classroom emphasis with confidence that students can independently read and comprehend other assigned material in the book.

- ***Comprehensive definition of economics.*** The principles course sometimes fails to provide students with a comprehensive and meaningful definition of economics. To avoid this shortcoming, all of Chapter 2 is devoted to a careful statement and development of the economizing problem and an exploration of its implications. This foundation should be helpful in putting the many particular subject areas of economics in proper perspective.

- ***Fundamentals of the market system.*** Economies the world over are making the difficult transition from planning to markets. Our detailed description of the institutions and operation of the market system in Chapter 4 is even more relevant than before. Property rights, freedom of enterprise and choice, competition, the role of profits—these and

related concepts are poorly understood by the typical student. We think we have accorded them the elaboration they require.

- ***Early integration of international economics.*** The principles and institutions of the global economy are given early treatment. Chapter 6 examines the growth of world trade, the major participants in world trade, specialization and comparative advantage, the foreign exchange market, tariffs and subsidies, and various trade agreements. This strong introduction to international economics permits “globalization” of later discussions of macroeconomics and microeconomics.

- ***Early and extensive treatment of government.*** Government is an integral component of modern capitalism. Its economic role, therefore, should not be treated piecemeal or as an afterthought. This text introduces the economic functions of government early and accords them systematic treatment in Chapter 5. Chapter 30 examines government and market failure in further detail, and Chapter 31 looks at salient facets of public choice theory and public finance. Both the macroeconomics and the microeconomics sections of the text have problem- and policy-oriented chapters.

- ***Emphasis on economic growth.*** This volume continues to emphasize economic growth. Chapter 2 employs the production possibilities curve to show the basic ingredients of growth. Chapter 19 discusses the rate and causes of American growth, in addition to some of the controversies surrounding it. Chapter 39 focuses on the less-developed countries and the growth obstacles they confront. A segment of Chapter 40 concerns the stalling of growth in the former Soviet Union. Beyond these the chapters on price theory pay special attention to the implications that the various market structures have for technological progress.

- ***Emphasis on the theory of the firm.*** We have given much attention to microeconomics in general and to the theory of the firm in particular, for two reasons. First, the concepts of microeconomics are difficult for most beginning students. Short expositions usually compound these difficulties by raising more questions than they answer. Second, we have coupled analysis of the various market structures with a discussion of the impact of each market arrangement on price, output levels, resource allocation, and the rate of technological advance.

- ***Chapters on economic issues.*** As most students see it, Part 4 on macroeconomic issues and

Part 7 on micro-oriented problems are where the action is. We have sought to guide the action along logical lines through the application of appropriate analytical tools. Our bias favors inclusiveness; each instructor can effectively counter this bias by omitting those chapters felt to be less relevant for a particular group of students.

## ORGANIZATION AND CONTENT

The prerequisite of an understandable economics text is the logical arrangement and clear exposition of subject matter. This book has been organized so the exposition of each particular topic and concept is directly related to the level of difficulty which the average student is likely to encounter. For this reason we have given microeconomics and macro employment theory comprehensive and careful treatments. Simplicity here is correlated with comprehensiveness, not brevity.

Furthermore, our experience suggests that in treating each basic topic—aggregate demand and aggregate supply, money and banking, theory of the firm, and international economics—it is desirable to couple analysis with policy. Generally, a three-step development of analytical tools is employed: (1) verbal descriptions and illustrations, (2) numerical examples, and (3) graphical presentation based on these numerical illustrations.

The material in this book is organized into eight parts: Part 1: An Introduction to Economics and the Economy; Part 2: National Income, Employment, and Fiscal Policy; Part 3: Money, Banking, and Monetary Policy; Part 4: Problems and Controversies in Macroeconomics; Part 5: Microeconomics of Product Markets; Part 6: Microeconomics of Resource Markets; Part 7: Government and Current Economic Problems; and Part 8: International Economics and the World Economy. The Contents lists the specific chapters in each part and the topics within each chapter.

## ORGANIZATION ALTERNATIVES

Although instructors generally agree as to the content of a principles of economics course, there are differences of opinion on what particular arrangement of material is best. The structure of this book provides considerable organizational flexibility. Users of prior editions tell us they accomplish substantial rearrangements of chapters with little sacrifice of continuity.

We have chosen to move from macro- to microeconomics, but the introductory material of Part 1 can be followed immediately by the micro analysis of Parts 5 and 6. Similarly, the AD-AS model appears after, rather than before, aggregate expenditures analysis. Those who disagree with this reorganization will encounter no special problems by covering Chapter 11 before Chapters 9 and 10.

Furthermore, some instructors will prefer to intersperse the microeconomics of Parts 5 and 6 with the problems chapters of Part 7. This is easily accomplished. Chapter 33 on agriculture may follow Chapter 23 on pure competition; Chapter 32 on antitrust, regulation, and industrial policy may follow Chapters 24 to 26 on imperfect competition. Chapter 36 on labor market issues may follow Chapter 28 on wages; and Chapter 34 on income inequality may follow Chapters 28 and 29 on distributive shares of national income.

Those who teach the typical two-semester course and who feel comfortable with the books' organization will find that, by putting the first four parts in the first semester and Parts 5 through 8 in the second, the material is divided both logically in terms of content and satisfactorily in terms of quantity and level of difficulty between the two semesters. For those instructors who choose to emphasize international economics, Parts 1, 2, 3, and 8 may be treated in the first semester and Parts 4 through 7 in the second.

For a course based on three quarters of work we would suggest Chapters 1 through 12 for the first quarter, 13 through 29 for the second, and 31 through 40 for the third.

Those interested in the one-semester course will discern several possible groups of chapters appropriate for such a course. Tentative outlines for three one-semester courses, emphasizing macroeconomics, microeconomics, or a survey of micro and macro theory, follow this preface. Also included are several one-quarter course options.

## PEDAGOGICAL AIDS

As in previous editions, *Economics* is highly student-oriented. The new "To the Student" statement at the beginning of Part 1 details the many pedagogical aids.

## SUPPLEMENTS

The thirteenth edition is accompanied by a variety of high-quality supplements.



## Study Guide

Professor William Walstad—one of the nation's foremost experts on economic education—has prepared the thirteenth edition of the *Study Guide*, which many students find to be indispensable. It contains for each chapter an introductory statement, a checklist of behavioral objectives, an outline, a list of important terms, hints and tips, fill-in questions, problems and projects, objective questions, and discussion questions. The glossary found at the end of *Economics* also appears in the *Study Guide*.

The *Guide* is a superb “portable tutor” for the principles student. Separate *Study Guides* have been prepared to correspond with the individual macro and micro paperback editions of the text.

## Instructors' Resource Manual

Professor Joyce Gleason of Nebraska Wesleyan University has revised and updated the *Instructor's Resource Manual*. It comprises chapter summaries, listings of “what's new” in each chapter, teaching tips and suggestions, learning objectives, chapter outlines, data and visual aid sources with suggestions for classroom use, and questions and problems. Answers to the text's end-of-chapter questions are also found in the manual (with the exception of the answers to the Key Questions, which are found at the end of *Economics*).

Available again in this edition is a computerized version of the *Manual*, suitable for use with IBM-PC compatibles and Macintosh computers. Users of *Economics* can print out portions of the *Manual's* contents, complete with their own additions and alterations, for use as student handouts or in whatever ways they might wish. This capability includes printing out answers to the end-of-chapter questions not answered in the textbook.

## Three Test Banks

This edition of *Economics* is supplemented by two test banks of objective, predominantly multiple-choice questions and a third test bank of short-answer essay questions and problems.

- **Test Bank I** now comprises about 5200 questions, all written by the text authors.
- **Test Bank II** by Professor Walstad, contains over 4700 questions.
- **Test Bank III**, also prepared by Professor Walstad, contains “constructive response” testing to eval-

uate student understanding in a manner different from conventional multiple-choice and true-false questions. Suggested answers to the essay and problem questions are included.

For all test items in Test Banks I and II, the nature of each question is identified (for example, G = graphical; C = conceptual, etc.) as are the page numbers in the text containing the material that is the basis for each question. Also, each chapter in Test Banks I and II begins with a list that groups questions by topics. Text adopters can use this sizable number of questions, organized into three test banks of equal quality, with maximum flexibility. The fact that the text authors and *Study Guide* authors have prepared all the test items assures the fullest possible correlation with the text content.

## Additional Supplements

- **Computerized testing.** Test Banks I, II, and III are available in computerized versions, both for IBM-PC and compatibles and for Macintosh computers. These systems include test generation, capable of producing high-quality graphs from the test banks. They also can generate multiple tests, with versions “scrambled” to be distinctive, and other useful features. This software will meet the various needs of the widest spectrum of computer users. Separate versions of the Computerized Test Banks have been prepared to correspond with the individual macro and micro editions of the text.

- **Color transparencies (figures and tables).** Over 250 new full-color transparencies for overhead projectors have been prepared especially for the thirteenth edition. They encompass all the figures appearing in *Economics* and are available on request to adopters. New to this edition are overhead transparencies for the tables in the book. As with the Computerized Test Banks, the transparencies are also available in versions corresponding to *Macroeconomics* and *Microeconomics*.

- **Student software.** *Concept Master III*, a student software package, has been prepared for users of IBM-PCs and compatibles by William Gunther of the University of Alabama and Irene Gunther. The previous version of this software was widely praised by its users. It provides extensive and varied computer-assisted study material.

More than twenty graphic-based tutorial programs provide an opportunity for students to study key topics in the book in an interactive way. The tutorial programs are linked to the text. Selected end-

of-chapter questions relating to the content of one of the tutorial programs are highlighted by a floppy disk symbol (■). The questions themselves are not necessarily contained within the tutorial program, but the tutorial does contain material relating directly to the concepts underlying the highlighted questions.

In addition to the tutorial programs, students can quiz themselves with a self-testing program accompanying each text chapter. The package also features eight simulation games, divided between macroeconomics and microeconomics. Some of the simulations are elementary, others are more complex. Wherever possible, they include a global perspective. Also included in the package are a list of key terms, a pop-up calculator for computations, and a section using the Key Graphs in the text to direct students to the appropriate tutorial lesson.

- **Macroeconomics: A Lab Course.** Professor Norris Peterson of Pacific Lutheran University, working with the talented staff of Intellipro, Inc., has created the software package *Macroeconomics: A Lab Course*, to be used in macroeconomics courses. It builds the basic macroeconomic framework in sequential, "building block" laboratory simulations that allow students to grasp the fundamental concepts of macroeconomics in a dynamic and creative manner.

- **DiscoverEcon.** For users of Macintosh computers, there is an exciting tutorial program, *DiscoverEcon*. Developed by Professors Gerald Nelson and Wesley Seitz of the University of Illinois, this innovative package uses Apple's HYPERCARD programming environment to produce an extremely interactive learning experience. Dynamic shifts of curves, screen animation, sound effects, and simple-to-use command keys are features of this program.

- **Videos.** New videotape materials have been assembled for this edition to illustrate fundamental concepts and economic issues in a manner that will be equally effective in classroom settings or media resource centers. Among these materials are numerous videos selected from "Adam Smith's Money World" that may be used when covering such topics as production possibilities, the role of government, the labor market, monopolistic competition and international economics. Your local McGraw-Hill representative can provide details on all video ancillaries for the text.

## DEBTS

The publication of this thirteenth edition will extend the life of *Economics* well into its fourth decade. This gracious acceptance has no doubt been fostered by the many teachers and students kind enough to provide their suggestions and criticisms.

Our colleagues at the University of Nebraska—Lincoln and Pacific Lutheran University have generously shared knowledge of their specialties with us and have provided encouragement. We are especially indebted to Jerry Petr, Dave Palm, and Norris Peterson, who have been most helpful in offsetting our comparative ignorance in their areas of specialty.

As indicated, the thirteenth edition has benefited from a number of perceptive reviews. In both quantity and quality, they provided us the richest possible source of suggestions for this revision. These contributors are listed at the end of this Preface.

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With this much assistance, we see no compelling reason why the authors should assume full responsibility for errors of omission or commission. But we bow to tradition.

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**SUGGESTED ONE-SEMESTER AND ONE-QUARTER COURSE OUTLINES**  
(Core chapters are indicated by "c"; optional chapters by "o")

<i>Chapter</i>	<i>One-semester course</i>			<i>One-quarter course</i>	
	<i>Macro emphasis</i>	<i>Micro emphasis</i>	<i>Macro-micro survey</i>	<i>Macro emphasis</i>	<i>Micro emphasis</i>
1	c	c	c	c	c
2	c	c	c	c	c
3	c	c	c	c	c
4	c	c	c	c	c
5	c	c		c	c
6	c	c		c	c
7	c		c	c	
8	c		c	c	
9	c		c	c	
10	c		c	c	
11	c		c	c	
12	c		c	c	
13	c		c	c	
14	c		c	c	
15	c		c	c	
16	c		c	o	
17	c		o	o	
18	c		o		
19	c		o		
20		c	c		c
21		o			
22		c	c		c
23		c	c		c
24		c	c		c
25		c	o		c
26		c	o		c
27		c			c
28		c			c
29		c			c
30		o			o
31		o			
32		o <sup>1</sup>			
33		o <sup>2</sup>			
34		o <sup>3</sup>			
35		o			
36		o <sup>4</sup>			
37	o	o			
38	o	o			
39	o				
40	o				

<sup>1</sup>If used, Chapter 32 may follow Chapter 26.

<sup>2</sup>If used, Chapter 33 may follow Chapter 23.

<sup>3</sup>If used, Chapter 34 may follow Chapter 28 or 29.

<sup>4</sup>If used, Chapter 36 may follow Chapter 28.



# CONTENTS IN BRIEF

*List of Key Graphs*

xx

*Preface*

xxi

*Contributors*

xxix

**15 The Federal Reserve Banks and Monetary Policy**

293

## **PART 1**

### **An Introduction to Economics and the Economy**

To the Student

- |   |    |
|---|----|
| 1 The Nature and Method of Economics                  | 1  |
| 2 The Economizing Problem                             | 21 |
| 3 Understanding Individual Markets: Demand and Supply | 39 |
| 4 Pure Capitalism and the Market System               | 58 |
| 5 The Mixed Economy: Private and Public Sectors       | 74 |
| 6 The United States in the Global Economy             | 96 |

## **PART 2**

### **National Income, Employment, and Fiscal Policy**

- |  |     |
|--|-----|
| 7 Measuring Domestic Output, National Income, and the Price Level      | 119 |
| 8 Macroeconomic Instability: Unemployment and Inflation                | 143 |
| 9 Building the Aggregate Expenditures Model                            | 166 |
| 10 Aggregate Expenditures: The Multiplier, Net Exports, and Government | 191 |
| 11 Aggregate Demand and Aggregate Supply                               | 213 |
| 12 Fiscal Policy   | 234 |

## **PART 3**

### **Money, Banking, and Monetary Policy**

- |                           |     |
|---------------------------|-----|
| 13 Money and Banking      | 253 |
| 14 How Banks Create Money | 276 |

## **PART 4**

### **Problems and Controversies in Macroeconomics**

- |   |     |
|---|-----|
| 16 Alternative Views on Macro Theory and Policy | 317 |
| 17 The Inflation-Unemployment Relationship      | 338 |
| 18 Budget Deficits and the Public Debt          | 362 |
| 19 Economic Growth                              | 379 |

## **PART 5**

### **Microeconomics of Product Markets**

- |   |     |
|---|-----|
| 20 Demand and Supply: Elasticities and Applications         | 399 |
| 21 Consumer Behavior and Utility Maximization               | 418 |
| 22 The Costs of Production                                  | 436 |
| 23 Price and Output Determination: Pure Competition         | 457 |
| 24 Price and Output Determination: Pure Monopoly            | 484 |
| 25 Price and Output Determination: Monopolistic Competition | 506 |
| 26 Price and Output Determination: Oligopoly                | 520 |

## **PART 6**

### **Microeconomics of Resource Markets**

- |   |     |
|---|-----|
| 27 Production and the Demand for Resources                              | 541 |
| 28 The Pricing and Employment of Resources: Wage Determination          | 558 |
| 29 The Pricing and Employment of Resources: Rent, Interest, and Profits | 579 |

---

**PART 7****Government and Current Economic Problems**

30	Government and Market Failure: Public Goods, the Environment, and Information Problems	595
31	Public Choice Theory and Taxation	618
32	Antitrust, Regulation, and Industrial Policy	639
33	Agriculture: Economics and Policy	660
34	Income Inequality and Poverty	678
35	The Economics of Health Care	698
36	Labor Market Issues: Unionism, Discrimination, and Immigration	716

---

**PART 8****International Economics and the World Economy**

37	International Trade	737
38	Exchange Rates, the Balance of Payments, and Trade Deficits	761
39	Growth and the Less Developed Countries	788
40	Russia: An Economy in Transition	811
	<i>Answers to Key Questions</i>	A-1
	<i>Glossary</i>	G-1
	<i>Index</i>	I-1