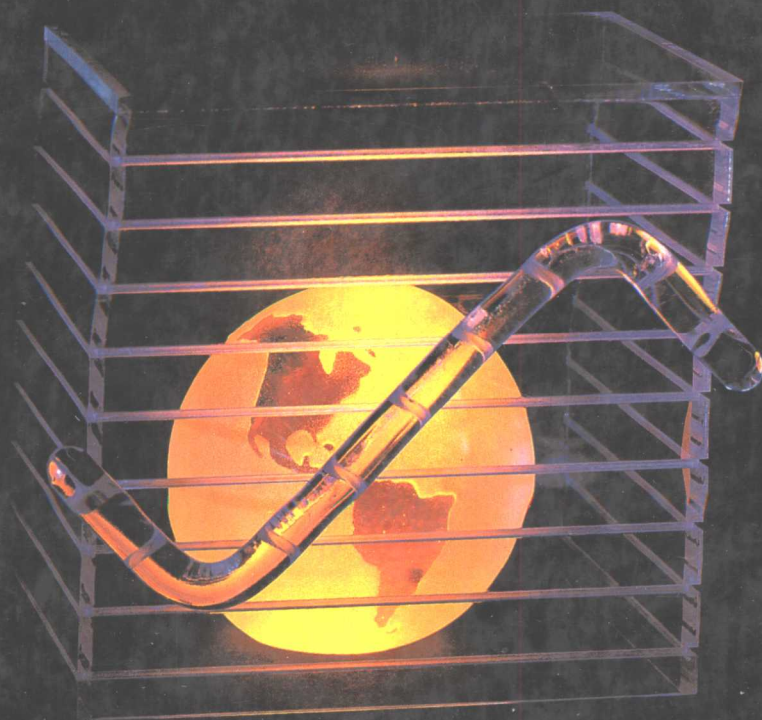


# ECONOMICS

PRINCIPLES AND POLICY

FIFTH EDITION



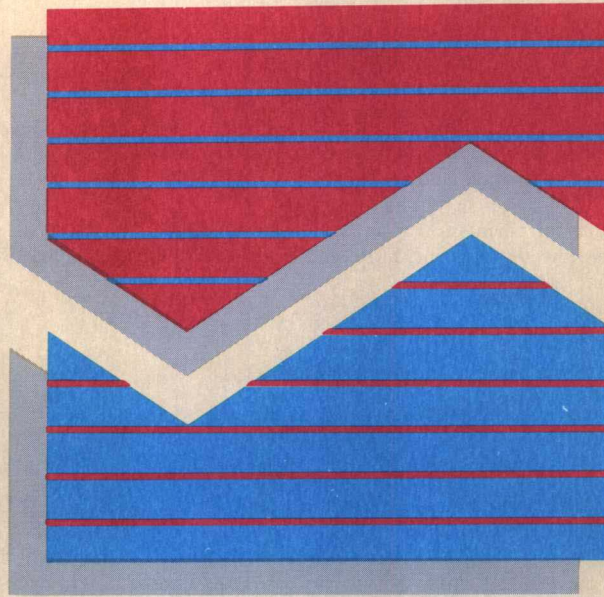
WILLIAM J. BAUMOL  
ALAN S. BLINDER



# ECONOMICS

PRINCIPLES AND POLICY

FIFTH EDITION



**WILLIAM J. BAUMOL**

New York University  
and  
Princeton University

**ALAN S. BLINDER**

Princeton University

HARCOURT BRACE JOVANOVIĆ, PUBLISHERS

San Diego New York Chicago Austin  
London Sydney Tokyo Toronto

To my four children,  
Ellen, Daniel,  
and now Sabrina and Jim  
W.J. B.

For Scott, who is now Beyond  
the Final Exam,  
and William, who is on his way  
A. S. B.

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# Preface

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Economic analysis has continued to progress since the writing of the previous edition; but it has produced no revolutionary upheavals requiring major changes in this book. However, the world about us has changed in ways that were beyond belief just three years ago. Who would have dreamed in 1987 that in 1990 the Berlin wall would be chopped up and sold as souvenirs in shops throughout the world, or that the formerly socialist economies of Eastern Europe—perhaps even the USSR itself—would be headed by leaders eager to declare their commitment to the market mechanism.

For us, the fundamental importance of these events stems not only from their negative verdict on the workability of central planning, nor from the fact that the free market has won the competitive struggle with “Marxism,” sensational though that victory clearly is. Perhaps equally important for the long run is the fact that the United States cannot just stand by as a passive observer of these cataclysmic developments. They affect our economy inescapably, and in a large variety of ways. U.S. military spending will probably be cut substantially, under powerful public pressure. The reunification of Germany has implications for the U.S. balance of payments and for American competitiveness in world markets that constitute a major and persistent source of concern. U.S. business is now offered substantial marketing and investment opportunities in the newly opened economies of Eastern Europe that competition does not permit it to ignore.


These and other related developments hammer home the fact that American workers and American firms carry out their economic activities *in a market that is fundamentally international*. Half a century ago, the rest of the world mattered far less to the U.S. economy than it does today. Back then, General Motors was primarily concerned with competition from Ford and Chrysler; foreign cars were hardly worth worrying about. In almost all industries, the bulk of U.S. production was sold to other Americans. Imports and exports constituted a far smaller share of GNP than they do today. But all this has changed. American producers of computers, airplanes, and TV programs make a large proportion of their sales and profits outside our borders. Television sets in U.S. homes come almost entirely from abroad, and Japanese cars are the primary competitive threat to our automobile industry.

For these reasons, it made sense in the past for most of the pages of an *American* textbook to treat the U.S. economy as an isolated world complete in itself. And, for the sake of expository simplicity, that is how most books were written. Only in later chapters were international economic linkages introduced as a necessary but troublesome complication, modifying somewhat the isolated-country analysis of the remainder of the volume.

Whether such an approach was defensible in the past is perhaps debatable. But it clearly no longer makes sense. The isolated-country economy is so gross a distortion of reality that its use for expository simplicity can no longer be justified even as a starting point.

Accordingly, in this Fifth Edition, our book has been transformed to provide the reader with a depiction of the workings of an economy firmly intertwined with many others. The international interconnections of our economy are embedded throughout the book rather than appended as an afterthought. Illustrative cases, descriptive factual materials, analytic tools, and end-of-chapter problems have all been modified in this way. We trust the result will give the reader an enhanced sense of pertinence, and offer him or her more illuminating insights into the way the economy really works.

There have been other major changes in this new edition. For example, we have scattered throughout the book a new feature, *At the Frontier*, which was introduced in the Fourth Edition. These boxed inserts offer straightforward introductory descriptions of work that currently occupies the attention of the most innovative academic economists, work that is currently featured prominently in the leading professional journals. This feature offers glimpses of exciting developments that constitute work currently in progress, so that students get some sense that economics is a living and evolving discipline, not one that is confined to the insights of the distant past.

This edition, however, continues the basic philosophy of its predecessors. In particular, we avoid the fiction, so popular among textbook writers, that everything is of the utmost importance—a pretense that students are sufficiently intelligent to see through in any event. We have, instead, tried to highlight those important ideas that are likely to be of lasting significance—principles that students will want to remember long after the course is over because they offer insights that are far from obvious, because they are of practical importance, and because they are widely misunderstood by intelligent laymen. A dozen of the most important of these ideas have been selected as **12 Ideas for Beyond the Final Exam** and are called to your attention when they occur through the use of the book's logo. 

All modern economics textbooks abound with “real world” examples. We have tried to go beyond this by elevating the examples to preeminence for, in our view, the policy issue or everyday economic problem ought to lead the student naturally to the economic principle, not the other way around. For this reason, many chapters start with a real policy issue or a practical problem, sometimes drawn from our own experience, that may seem puzzling or paradoxical to noneconomists. We then proceed to describe the economic analysis required to remove the mystery.

In so doing, we utilize technical terminology and diagrams only where there is a clear need for them, never for their own sake. Still, economics is a technical subject and so this is, unavoidably, a book for the desk, and not for the bed. We have, however, made strenuous efforts to simplify the technical level of the discussion as much as possible without sacrificing content. Fortunately, almost every important idea in economics can be explained in plain English, and this is what we have tried to do.

While closely monitoring the technical difficulty of the book, we have nonetheless incorporated some essential elements of economic analysis that have traditionally been left out of introductory books. Foremost among these is the extensive treatment of prices and inflation in Parts 2 through 4. Before our First Edition, introductory textbooks devoted many chapters to unrealistic but simpler economic models in which prices never rose. Ours was the first to put inflation into the story from the beginning, rather than as an afterthought—a practice we have maintained ever since.

We also offer an unusually complete coverage of open-economy macroeconomics, a topic generally reserved for intermediate textbooks—and often treated cursorily even there. By focusing on the particular circumstances relevant to the United States, we teach students what they really need to know to understand contemporary events, while avoiding the taxonomy that complicates advanced works.

A final example is our treatment of the market mechanism's ability, under ideal circumstances, to allocate society's resources in the most efficient manner possible.



Many introductory textbooks, thinking the topic too difficult for beginning students, give little more than general hints about this important result. We offer a genuine description of a proof and an extensive discussion of precisely what the result does—and does not—imply about the efficiency of real-world market economies. This issue has emerged dramatically in newspapers in the wake of the collapse of central planning in so many countries.

## Changes from the Fourth Edition

Our theme of greater internationalization is most noticeable in three major changes. First, the macroeconomic portions of the book now deal with an open economy right from the start. Thus, the student is never asked to think about a mythical closed economy and can immediately begin grappling with such issues as the effect of trade deficits on the U.S. economy. That might seem to complicate the analysis, but it is achieved in an elementary way, analogous to the treatment of investment. In all previous editions of this book, investment was treated as exogenous until the student studied money and interest rates and then was made endogenous (dependent on interest rates). Similarly, the Fifth Edition treats net exports as exogenous until exchange rates and the international monetary system are studied in Chapter 19. Chapter 20 then explains how net exports depend on exchange rates, income, and other factors. Chapter 20 has been completely rewritten to be shorter, simpler, less formal, and more closely tied to current policy debates. All this is in accord with valuable suggestions from readers.

Second, Chapter 40 on comparative economic systems has been given a major facelift in the hope that instructors who have not previously found time for this chapter will begin to include it in their courses. The transition from planning to markets is, after all, the most burning economic issue of our time. Naturally, the material on the Soviet Union was extensively rewritten and some new material on Eastern Europe added. In addition, the current importance of Japan in the world economy, and the growing recognition that Japanese capitalism really is something different from American capitalism, prompted us to add a unique discussion of the Japanese economy.

Third, Chapter 17 on productivity (Chapter 7 in the Fourth Edition) has been relocated to start Part 4. It thus serves to place modern America in historical and geographical context. More important, the text has been drastically revised to accommodate dramatic new research findings in W.J. Baumol, S. A. B. Blackman, and E. N. Wolff, *Productivity and American Leadership: The Long View* (MIT Press, 1989) and elsewhere.

Beyond this, a number of other changes are noteworthy. Chapter 14 has been refashioned considerably to downplay the now-archaic debate between monetarists and Keynesians. The important issues of substance are still there (for example, controlling the money supply versus controlling interest rates); but the protagonists are no longer labeled Keynesians and monetarists, and the tenor of the chapter is quite different. Chapter 16's discussion of rational expectations has been reorganized to achieve greater clarity and to make it more up to date. We have also added to Chapter 16 a stop-the-presses box on the consequences of the 1990 oil shock.

Changes are generally less extensive in the microeconomic chapters (Parts 5–8). But references to international competition and the problems of central planning are sprinkled throughout; data and examples are updated; a few new topics are added (for example, in a series of *At the Frontier* boxes); and sections found difficult by readers of the Fourth Edition have been rewritten.

## Note to the Student

Most courses will begin with Part 1. There we have touched most of the traditional bases while keeping the introductory materials briefer than in most textbooks. Courses concentrating on macroeconomic theory and policy will proceed to Parts 2

through 4, while courses specializing in microeconomics will skip to Part 5. Either sort of course may make use of some of the chapters in Part 9.

Whatever the nature of your course, we would like to offer one suggestion. Unlike some of the other courses you may be taking, principles of economics is cumulative—each week's lesson builds on what you have learned before. You will save yourself both a lot of frustration and a lot of work by keeping up on a week-to-week basis. To help you do this, there is a chapter summary, a list of important terms and concepts, and a selection of questions to help you review at the end of each chapter. In addition to these aids, special supplementary materials have been designed specifically to accompany this text. Many students will find the *Study Guide* by Professor Craig Swan helpful as a self-testing and diagnostic device. Others may prefer one of two computer-assisted software packages, *CAPER* by Calvin Hoerneman, John Cole, Karen Wilson, and David Howard and *ECO TALK* by Michael Claudon and Kipley Olson. When you encounter difficulties, the *Study Guide* and the interactive software will help you target the specific sections of the text you need to review.

### Note to the Instructor

The ordering of chapters in the book is based on courses that treat macroeconomics before microeconomics, although the book is equally well suited to courses that reverse this sequence. The macroeconomic analysis is found in Parts 2 through 4. The core micro materials occupy Parts 5 through 8, in an order chosen to emphasize the central theme: the working of markets. Part 9 contains an assortment of miscellaneous topics for you to use or omit. There seems to us no obvious "order" in which to treat these chapters. Similarly, some instructors may prefer to take up international trade (Chapter 18) in a course on microeconomics.

Several materials are available for instructors to use with the text:

- *Instructor's Manual* by John Isbister
- *Testbook-A* by Jim Starkey
- *Testbook-B* by Diane Owen and Jozell Brister (Both testbooks are available in book and computerized formats.)
- Transparencies
- Transparency Masters

In trying to improve the book from one edition to the next, we rely heavily on our experiences as teachers. But our experience using the book is minuscule compared with that of the hundreds of instructors who use it nationwide. If you encounter problems, or have suggestions for improving the book, we urge you to let us know by writing to either one of us in care of Harcourt Brace Jovanovich, College Department, 1250 Sixth Avenue, San Diego, California 92101. Such letters are invaluable, and we are glad to receive them, even if they are critical (but not *too* critical!). Many such suggestions accumulated over the past three years found their way into the Fifth Edition.

What follows is a set of suggested course outlines predicated on the assumptions that a one-semester course will be able to cover about half the book, and a one-quarter course will be able to cover about one-third of the book.

### OUTLINE FOR A ONE-SEMESTER COURSE EMPHASIZING MACROECONOMICS

Chapter Number	Title
1	What Is Economics?
2	The Use and Misuse of Graphs
3	Scarcity and Choice: <i>The Economic Problem</i>

4	Supply and Demand: An Initial Look
5	The Realm of Macroeconomics
6	Unemployment and Inflation: The Twin Evils of Macroeconomics
7	Income and Spending: The Powerful Consumer
8	Demand-Side Equilibrium: Unemployment or Inflation?
9	Changes on the Demand Side: Multiplier Analysis
10	Supply-Side Equilibrium: Unemployment <i>and</i> Inflation?
11	Fiscal Policy and Supply-Side Economics
12	Money and the Banking System
13	Monetary Policy and the National Economy
14	The Debate over Monetary Policy
15	Budget Deficits and the National Debt: Fact and Fiction
16	The Trade-Off between Inflation and Unemployment
17	Productivity and Growth in the Wealth of Nations
18	International Trade and Comparative Advantage
19	The International Monetary System: Order or Disorder?
20	Macroeconomics in a World Economy
38	Growth in Developed and Developing Countries

## OUTLINE FOR A ONE-SEMESTER COURSE EMPHASIZING MICROECONOMICS

Chapter Number	Title
1	What Is Economics?
2	The Use and Misuse of Graphs
3	Scarcity and Choice: <i>The Economic Problem</i>
4	Supply and Demand: An Initial Look
21	Consumer Choice and the Individual's Demand Curve
22	Market Demand and Elasticity
23	Input Decisions and Production Costs
24	Output-Price Decisions: The Importance of Marginal Analysis
25	The Firm and the Industry under Perfect Competition
26	The Price System and the Case for Laissez Faire
27	Monopoly
28	Between Competition and Monopoly
29	The Market Mechanism: Shortcomings and Remedies
30	Real Firms and Their Financing: Stocks and Bonds
31	Limiting Market Power: Regulation of Industry
32	Limiting Market Power: Antitrust Policy
33	Taxation, Government Spending, and Resource Allocation
35	Pricing the Factors of Production
36	Labor: The Human Input

### *Plus Any Two of the Following:*

34	Environmental Protection and Resource Conservation
37	Poverty, Inequality, and Discrimination
39	The Economics of Karl Marx
40	Comparative Economic Systems: What Are the Choices?
41	Dissenting Opinions: Conservative, Moderate, and Radical

## OUTLINE FOR A ONE-SEMESTER COURSE COVERING BOTH MACRO AND MICRO

Chapter Number	Title
1	What Is Economics?
2	The Use and Misuse of Graphs
3	Scarcity and Choice: <i>The Economic Problem</i>



4	Supply and Demand: An Initial Look
5	The Realm of Macroeconomics
7	Income and Spending: The Powerful Consumer
8	Demand-Side Equilibrium: Unemployment or Inflation?
10	Supply-Side Equilibrium: Unemployment <i>and</i> Inflation?
11	Fiscal Policy and Supply-Side Economics
12	Money and the Banking System
13	Monetary Policy and the National Economy
21	Consumer Choice and the Individual's Demand Curve
22	Market Demand and Elasticity
23	Input Decisions and Production Costs
24	Output-Price Decisions: The Importance of Marginal Analysis
25	The Firm and the Industry under Perfect Competition
26	The Price System and the Case for Laissez Faire
27	Monopoly
28	Between Competition and Monopoly
29	The Market Mechanism: Shortcomings and Remedies
35	Pricing the Factors of Production
36	Labor: The Human Input
40	Comparative Economic Systems: What Are the Choices?

## OUTLINE FOR A ONE-QUARTER COURSE IN MACROECONOMICS

Chapter Number	Title
1	What Is Economics?
2	The Use and Misuse of Graphs
3	Scarcity and Choice: <i>The Economic Problem</i>
4	Supply and Demand: An Initial Look
5	The Realm of Macroeconomics
6	Unemployment and Inflation: The Twin Evils of Macroeconomics
7	Income and Spending: The Powerful Consumer
8	Demand-Side Equilibrium: Unemployment or Inflation?
9	Changes on the Demand Side: Multiplier Analysis
10	Supply-Side Equilibrium: Unemployment <i>and</i> Inflation?
11	Fiscal Policy and Supply-Side Economics
12	Money and the Banking System
13	Monetary Policy and the National Economy
14	The Debate over Monetary Policy
15	Budget Deficits and the National Debt: Fact and Fiction
16	The Trade-Off between Inflation and Unemployment

## OUTLINE FOR A ONE-QUARTER COURSE IN MICROECONOMICS

Chapter Number	Title
3	Scarcity and Choice: <i>The Economic Problem</i>
4	Supply and Demand: An Initial Look
21	Consumer Choice and the Individual's Demand Curve
22	Market Demand and Elasticity
23	Input Decisions and Production Costs
24	Output-Price Decisions: The Importance of Marginal Analysis
25	The Firm and the Industry under Perfect Competition
26	The Price System and the Case for Laissez Faire
27	Monopoly
28	Between Competition and Monopoly
29	The Market Mechanism: Shortcomings and Remedies
30	Real Firms and Their Financing: Stocks and Bonds
33	Taxation, Government Spending, and Resource Allocation
35	Pricing the Factors of Production
36	Labor: The Human Input

## OUTLINE FOR A ONE-QUARTER COURSE ON APPLICATIONS OF BOTH MACRO AND MICRO

Chapter Number	Title
6	The Realm of Macroeconomics
15	Budget Deficits and the National Debt: Fact and Fiction
17	Productivity and Growth in the Wealth of Nations
18	International Trade and Comparative Advantage
19	The International Monetary System: Order or Disorder?
31	Limiting Market Power: Regulation of Industry
32	Limiting Market Power: Antitrust Policy
33	Taxation, Government Spending, and Resource Allocation
34	Environmental Protection and Resource Conservation
37	Poverty, Inequality, and Discrimination
38	Growth in Developed and Developing Countries
39	The Economics of Karl Marx
40	Comparative Economic Systems: What Are the Choices?
41	Dissenting Opinions: Conservative, Moderate, and Radical

## With Thanks

Finally, and with great pleasure, we turn to the customary acknowledgments of indebtedness. Ours have been accumulating now through five editions. In these days of specialization, not even a pair of authors can master every subject that an introductory text must cover. Our friends and colleagues Albert Ando, Charles Berry, Rebecca Blank, William Branson, the late Lester Chandler, Gregory Chow, Avinash Dixit, Robert Eisner, Stephen Goldfeld, Claudia Goldin, Ronald Grieson, Daniel Hamermesh, Yuzo Honda, Peter Kenen, Melvin Krauss, Herbert Levine, Arthur Lewis, Burton Malkiel, Edwin Mills, Janusz Ordover, Uwe Reinhardt, Harvey Rosen, Laura Tyson, and Martin Weitzman have all given generously of their knowledge in particular areas over the course of five editions. We have learned much from them, and only wish we had learned more.

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The book you hold in your hand was not done by us alone. The fine people at Harcourt Brace Jovanovich, including Rick Hammonds, Margie Rogers, Leslie Leland, Ann Smith, Avery Hallowell, and Lynne Bush worked hard and well to turn our manuscript into the book you see. We appreciate their efforts.

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William J. Baumol  
Alan S. Blinder

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