MACROECONOMICS



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Macroeconomics

Eighth Edition

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To Fine, Rhoda, and Shelly

PREFACE

The eighth edition of *Macroeconomics* is published 23 years after the first. We have been both amazed and flattered by the response our book has received over those years. Besides its use in the classrooms of many U.S. universities, it has been translated into many languages and used in many countries, from Canada to Argentina to Australia; all over Europe; in India, Indonesia, and Japan; and from China and Albania to Russia. Even before the Czech Republic gained independence from communism, an underground translation was secretly used in macroeconomics seminars at Charles University in Prague. There is no greater pleasure for teachers and textbook authors than to see their efforts succeed so concretely around the world.

We believe that the success of our textbook reflects the unique features it brings to the universe of undergraduate macroeconomics. These features can be summarized as follows.

- "Compassionate Difficulty" Through the years we have held the conviction that the best textbook is one written with an abiding respect for both student and instructor. What does this mean exactly? In practice it means that we explore more state-of-the-art research than is customary in undergraduate textbooks, allowing students a point of departure for deeper exploration of various topics and teachers the flexibility to emphasize topics in greater detail. At the same time, however, we have reduced the book's level of difficulty by providing straightforward explanations, emphasizing concepts over technique, and fitting difficult material into a larger framework so students can see its relevance. We also emphasize how empirical data can explain and test macroeconomic theory by providing numerous illustrations using real-world data.
- Focus on Models The best economists have a rich "toolbox" of simple models they can use to analyze various facets of the economy and know when to apply the right model to answer specific questions. We have consistently focused our text-book on the presentation of a series of simple models relevant to particular issues. We strive to help students understand the importance of a model-based approach to macroeconomic analysis as well as how the various models are connected. Our goal is to produce students who have the capacity to analyze current economic issues in

- the context of an economic frame of reference, namely, a set of macroeconomic models.
- International Perspective It has always been important for students living in countries with highly open economies to understand the important links connecting foreign economies to their own. This is becoming increasingly true in the United States as goods and financial markets become more intertwined. Recognizing this, we provide two detailed chapters discussing international linkages. The first, Chapter 12, provides a discussion of mainstream intermediate macroeconomic topics. The second, Chapter 19, gives advanced students the opportunity to explore modern theories of balance-of-payments crises, determinants of exchange rates, and the choice of exchange rate regimes. These chapters give instructors the flexibility to range from touching on a few international topics to a thorough discussion lasting several weeks.
- Focus on Changing Times In preparing this edition we were surprised by how many issues have emerged and how many have become moot in just the three short years since the last edition of the textbook was published. We have strived to present updated data throughout the book, demonstrating key trends and thorough discussions of how such trends might be explained by traditional macroeconomic models. For example, we have added discussions of the recent balancing of the U.S. federal budget, the Asian financial crisis, and the surge in U.S. labor productivity in the 1990s.

PLANS OF ATTACK

A major goal we have in writing this textbook is to provide one that is comprehensive yet flexible enough to allow teachers to focus a class on their particular interests and time constraints. Our personal preference is to begin at the beginning and work through the entire book (which is, of course, why we organized the material in the way we did), but a number of approaches can be taken to give a different emphasis or simply to reduce the breadth of material covered. Examples of these approaches include:

- An Overview Course An overview course should contain what we feel is the core of the textbook: Chapters 1 and 2, which introduce the textbook and provide details on national income accounting; Chapter 5, which gives an overview of aggregate supply and demand; Chapter 6, which presents the aggregate supply curve in more detail; Chapter 7, which discusses the headline issues of inflation and unemployment; and Chapters 9, 10, and 11, which introduce the goods market, asset market, and some basics of monetary and fiscal policy. Beyond these core chapters the course can be shortened substantially by omitting chapters that focus on the microeconomic detail beneath macroeconomic theory—Chapters 13–17 and 20, for example, which supply such detail for consumption, investment, and money markets. And Chapters 8 and 18, which detail several current issues in policymaking, can be omitted or done only in part. In the United States, Chapters 4, 12, and 19, which present many basic issues of international interdependence and growth policy, might also be omitted (although probably everyone should do Sections 12-1 and 12-2).
- A Traditional Aggregate Demand-Oriented Course For a Keynesian, short-run treatment of the course, the core chapters for the overview course should be em-

phasized and Chapter 8, which discusses policy, added. Chapter 18, which discusses big macroeconomic events, can be moved in front of Chapter 13. Chapters 3 and 4, on growth and policies to promote growth, can be moved to the end of the course. And for advanced students, the sections on New Keynesian economics in Chapter 20 might be included.

- A Classical "Supply-Side" Course For a classical treatment of the course the core chapters for the overview course can be shortened by de-emphasizing the IS-LM material in Chapters 9–11. And in the early chapters greater emphasis might be given to Chapters 3 and 4 on long-run growth. The microeconomics of macroeconomic theory in Chapters 13–15 might also be emphasized, as might the discussion of hyperinflation in Chapter 18. Advanced students may wish to explore the sections on the random walk in GDP and on real business cycles in Chapter 20.
- A Business School Course
 In addition to the core chapters for the overview course, a business school course should emphasize Chapters 16 and 17, which deal with the Federal Reserve and financial markets. And Chapters 3 and 4 on growth can be deemphasized, while the advanced topics in Chapter 20 can be omitted. For students with an international perspective, Chapter 12 and parts of Chapter 19, especially the discussion of exchange rate determination, might be emphasized.

Throughout the book, we have labeled some material that is technically difficult as "optional." Many of the optional sections will be fun for students who enjoy a technical challenge, but the instructor should specify clearly which of these sections are required and which are truly optional.

CHANGES IN THE EIGHTH EDITION

In 1977, the first edition of this textbook opened with these words: "Our aim in writing this book has been to explain how modern macroeconomics is used in understanding important economic issues, and to help the reader analyze macroeconomic problems for her or himself. . . . The book is policy- and issue-oriented."

Although these words remain true today, the economy has changed drastically in the years since the first edition, and indeed, in the years since the last edition. And this has required us to make quite a few changes for this edition. In addition to new and updated material, we have also done some rearranging to make the material flow more easily.

BIG CHANGES

The first big change is that Chapter 8 is new. We bring together there material on policymaking under uncertainty. At this point in the book students will have sufficient mastery of the aggregate supply/aggregate demand apparatus to think intelligently about issues such as inflation versus GDP targeting and dynamic consistency.

The second big change is that the chapter on "Advanced Macroeconomics" has been placed at the end of the text and considerably reworked. This chapter covers several topics at a much deeper level than is customary. We recommend instructors assign only those portions that they find to be of particular interest.

Chapter 12 now includes a section introducing the euro. "Investment Spending," Chapter 14, has been extensively rewritten and much simplified. Chapter 18 now discusses

the "big events" of the Great Depression, hyperinflations, massive budget deficits, and the (we hope it won't happen but it could) crash of the social security system—both as a way to learn about these events and as a way to illustrate principles that are harder to identify in smoothly running economies. Finally, by some judicious cutting and reordering of material, the text is now one chapter shorter than the previous edition.

SMALLER CHANGES

Naturally we have made many little changes. We list here some of the bigger of the small ones.

- 1. A discussion of real interest rates has been added to Chapter 2, along with a whole bunch of urls.
- 2. Chapter 5 provides an easier introduction to aggregate supply and demand, including the use of quantity theory as an example source of the aggregate demand curve.
- 3. Chapter 6 now makes a more straightforward translation between aggregate supply (in price/output space) and the Phillips curve (in inflation/unemployment space). We've also moved material on inflationary expectations forward and presented a discussion of rational expectations.
- **4.** An optional section on Ricardian Equivalence has been moved into Chapter 13 (consumption).
- 5. Chapter 19 includes a new section on the choice of exchange rate regime, including discussions of target zones and dollarization.

ACKNOWLEDGMENTS



In the past we have acknowledged our debts to correspondents, colleagues, and students individually. There is no longer room to do that, but we have to depart from our new rule to thank Jeremy Piger for his assistance in preparing this inspired eighth edition.

In addition, the authors and McGraw-Hill would like to thank the following teachers for reviewing this edition: Michael Ben-Gad, University of Houston; David Butler, University of Western Australia; E. Mine Cinar, Loyola University-Chicago; Monoranjan Dutta, Rutgers University; Michael Edelstein, Queens College-CUNY; James R. Gale, Michigan Technological University; Steven L. Green, Baylor University; Oscar Jorda, University of California-Davis; Garry MacDonald, Curtin University; Neil B. Niman, University of New Hampshire; Martha Olney, University of California-Berkeley; John Prestage, Edith Cowan University; Willem Thorbecke, George Mason University; and Robert Windle, University of Maryland.

SUPPLEMENTARY MATERIAL



An *Instructor's Manual* and *Test Bank* to accompany the text have been prepared by Professor Juergen Fleck of Hollins College. The *Instructor's Manual* has been substantially updated and includes chapter summaries, learning objectives, solutions to the end-of-chapter problems, and many additional problems (and their solutions) that can be used for class discussion, homework assignments, or examination questions. The

Test Bank has been expanded and now includes more than 750 questions. And there is also a computerized (Windows) test bank that has been provided by Brownstone's Diploma, sophisticated test-making software that ensures maximum flexibility in test development.

The *Study Guide*, by Jessica Rutledge of the University of Washington, has again been revised and brought up to date. It contains a wide range of questions, starting from the very easy and progressing in each chapter to material that will challenge the more advanced student. The *Study Guide* is a great help in studying, particularly since active learning is so important in mastering new material.

For this edition there will also be *transparency masters* and *PowerPoint* slides of all the graphs in the book, along with a *website* (www.mhhe.com/economics/dornbusch) that provides study aids for students and useful resources for teachers.

Rudiger Dornbusch Stanley Fischer Richard Startz



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