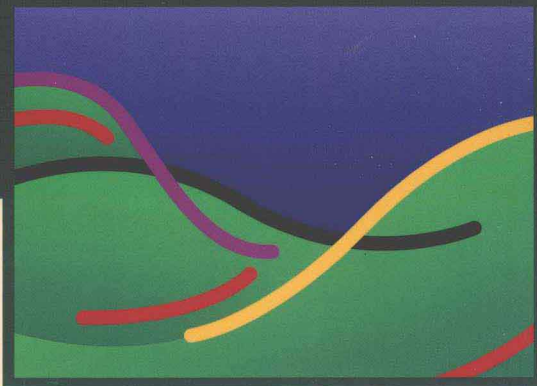


MACROECONOMICS

PRINCIPLES AND APPLICATIONS



ROBERT E. HALL

MARC LIEBERMAN

SECOND EDITION

MACROECONOMICS

PRINCIPLES AND APPLICATIONS

SECOND EDITION

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PREFACE—TO THE INSTRUCTOR

This book is about economic principles and how economists use them to understand the world. It was conceived, written, and for the second edition, substantially revised to help your students focus on those basic principles and applications.

We decided to write this book because we thought that existing books often confused students about economics and what it is all about. In our view, the leading texts can be divided into three categories. In the first category are the encyclopedias—the heavy tomes with a section or a paragraph on every topic or subtopic you might possibly want to present to your students. The result is a book that covers too much—often superficially—with the central themes and ideas lost in the shuffle.

The second type of text we call the “scrapbook.” In an effort to elevate student interest, these books insert multi-colored boxes, news clippings, interviews, cartoons, and whatever else they can find to jolt the reader on each page. While these special features are often entertaining, there is a tradeoff: these books sacrifice a logical, focused presentation of the material, and the central themes and ideas are lost.

Finally, the third type of text, perhaps in response to the first two, tries to do less in every area—a *lot* less. But instead of just omitting the extraneous or inessential details, these texts attempt to redefine introductory economics by throwing out key ideas, models and concepts. If these books could talk, they would say, “We don’t trust our readers to think much or remember much, so we won’t really bother.” Students who use these books may think that economics is overly simplified and unrealistic. After the course, they may be unprepared to go on in the field, or to think about the economy on their own.

A DISTINCTIVE APPROACH

Our approach is very different. We believe that the best way to teach Principles is to present economics as a coherent, unified subject. This does not happen automati-

cally. On the contrary, Principles students often miss the unity of what we call “the economic way of thinking.” For example, they are likely to see the analysis of goods markets, labor markets and financial markets as entirely different phenomena, rather than as a repeated application of the same methodology with a new twist here and there. So the Principles course appears to be just “one thing after another,” rather than the coherent presentation we aim for.

To help students appreciate the virtues of the economic approach, we have included some important features in this book. One is a consistent methodology. Most economists, when approaching a problem, begin by thinking about buyers and sellers, about goals and constraints. They move on to study equilibrium, then give their model a workout in a comparative statics exercise. To understand what economics is about, students need to understand this process, and see it in action in different contexts. To help them do so, we have identified and stressed four “Key Steps to Understanding the Economy” that economists use in analyzing problems. These are:

1. **Characterize the Markets.** Define the market or markets that best suit the problem being analyzed, and identify the decision makers (buyers and sellers) who interact in that market.
2. **Identify the Goals and Constraints.** Identify the goals that the decision makers are trying to achieve, and the constraints they face in achieving those goals.
3. **Find the Equilibrium.** Describe the conditions necessary for equilibrium in the market, and a method for finding that equilibrium.
4. **What Happens When Things Change?** Explore how events and government policies change the market equilibrium.

A full statement of each Key Step appears toward the end of Chapter 3. Thereafter, whenever the Key Step is used in future chapters, it is identified with a key symbol as shown in the margin. Through the use of Key Steps, students learn how to think like economists, and

in a very natural way. And, they come to see economics as a unified whole, rather than a series of disconnected ideas.

Another way we stress the unity of economics is through a new capstone chapter developed for this edition:

Using All the Theory: The Stock Market and the Macroeconomy. We also want to help students see macroeconomics as a unified subject, so we have included this capstone chapter. It brings together a variety of macro tools to study an issue that students find intriguing—the relationship between the stock market and the macroeconomy. More specifically, we look at the ways in which the economy affects the stock market as well as how the stock market affects the economy.

In this chapter, students come to see that much of what they read and hear in the media can be understood by using the tools that they've learned in their Principles course.

CAREFUL FOCUS

Because we have avoided encyclopedic complexity, we have had to think hard about what topics are most important. As you will see:

We avoid nonessential material. When we believed a topic was not essential to a basic understanding of economics, we left it out. We also avoided interviews, news clippings, and boxed inserts with only distant connections to the core material. The features your students *will* find in our book are there to help them understand and apply economic theory itself, and to help them explore sources of information on their own using the Internet.

We explain difficult concepts patiently. Because we have omitted topics of minor importance, we can explain the topics we do cover more thoroughly and patiently. We lead students, step-by-step, through each aspect of the theory, through each graph, and through each numerical example. In developing this book, we asked other experienced teachers to tell us which aspects of economic theory were hardest for their students to learn, and we have paid special attention to the trouble spots.

We use concrete examples. Students learn best when they see how economics can explain the world

around them. Whenever possible, we develop the theory using real-world examples. When we employ hypothetical examples, because they illustrate the theory more cleanly, we try to make them realistic. In addition, each chapter ends with a thorough, extended application focusing on an important real-world issue.

FEATURES THAT REINFORCE

We have chosen features that reinforce the basic theory, rather than distract from it. Here is a list of the most important ones, and how we believe they help students focus on essentials.

Dangerous Curves inserts appear within many of the chapters. These are designed to eliminate confusion that sometimes arises as students read the text—the kinds of mistakes we see year after year in their exams.



Using the Theory sections, which present extended applications, appear at the end of each chapter. While there are plenty of real-world examples and facts in the body of each chapter, helping to illustrate each step along the way, we also felt it important to have one extended application that unifies the material in the chapter. In the Using the Theory sections, students see how the tools they have learned can explain something about the world—something that would be difficult to explain without those tools.

Using the
THEORY

Internet references point students to resources that contain truly up-to-the-minute information. We prefer to integrate current events through Internet references, rather than with news clippings in the text, for two reasons. First, we want to minimize distractions; and second, news clippings are usually stale by the time of publication.



CONTENT INNOVATIONS

In addition to the special features just described, you will find some important differences from other texts in topical approach and arrangement. These, too, are de-

signed to make the theory stand out more cleanly, and to make learning easier. These are not pedagogical experiments, nor are they innovation for the sake of innovation. The differences you will find in this text are the product of years of classroom experience.

INNOVATIONS IN MACROECONOMICS

Long-Run Macroeconomics (Chapters 7 and 8): Our text presents long-run growth before short-run fluctuations. Chapter 7 develops the long-run, classical model at a level appropriate for introductory students, mostly using supply and demand. Chapter 8 then *uses* the classical model to explain the causes—and costs—of economic growth in both rich and poor countries.

We believe it is better to treat the long run before the short run, for two reasons. First, the long-run model makes full use of the tools of supply and demand, and thus allows a natural transition from the preliminary chapters (1, 2, and 3) into macroeconomics. Second, we believe that students can truly understand economic fluctuations only if they understand *how* and *why* the long-run model breaks down over shorter time periods. This, of course, requires an introduction to the long-run model first.

Economics and Fluctuations (Chapter 9): This unique chapter provides a bridge from the long-run to the short-run macro model, and paves the way for the short-run focus on *spending* as the driving force behind economic fluctuations.

Aggregate Demand and Aggregate Supply (Chapter 13): One of our pet peeves about other introductory texts is the too-early introduction of aggregate demand and aggregate supply curves, *before* teaching where these curves come from. Students then confuse the *AD* and *AS* curves with their microeconomic counterparts, requiring corrective action later. In this text, the *AD* and *AS* curves do not appear until Chapter 13, where they are fully explained. Our treatment of aggregate supply is based on a very simple mark-up model that our students have found easy to understand.

Exchange Rates and Open-Economy Macroeconomics (Chapter 16): Many students find international macroeconomics the most interesting topic in the course, especially the material on exchange rates and what causes them to change. Accordingly, you will find

unusually full coverage of exchange rate determination in this chapter. This treatment is kept simple and straightforward, relying exclusively on supply and demand. And it forms the foundation for the discussion of open-economy macro policy that ends the chapter.

ORGANIZATIONAL FLEXIBILITY

We have arranged the contents of each chapter, and the table of contents as a whole, according to our recommended order of presentation. But we have also built in flexibility. Once the core chapters (4 through 13) have been taught, the remaining chapters (14–16) can be taught in any order.

Finally, we have included only those chapters that we thought were both essential and teachable in a year-long course. But not everyone will agree about what is essential. While we—as authors—cringe at the thought of a chapter being omitted in the interest of time, we have allowed for that possibility. Nothing in Chapter 14 (monetary policy), Chapter 15 (fiscal policy), or Chapter 16 (international finance) is required to understand any of the other numbered chapters in the book. Skipping any of these should not cause continuity problems.

In many cases, a chapter can be assigned selectively. For example, an instructor who is anxious to get to the short-run macro model could freely select among the sections in Chapter 8 (Economic Growth and Rising Living Standards) and Chapter 9 (Economic Fluctuations).

ABOUT THE SECOND EDITION

For the second edition of our text, we have undertaken a careful revision. First, there is a global change. To shine even more light on the unity of economics, we have replaced the first edition's *Eight Basic Principles* with the current edition's *Four Key Steps*. This shifts the emphasis from analytic *results* to analytic *methods*, but retains the “common thread” approach of the first edition.

Second, there are many specific changes. Indeed, every chapter of this text was reviewed and scrutinized for improvements. Most chapters were at least partially rewritten, and some are entirely new. The resulting changes from the first edition are too numerous to list here. However, we know that many instructors who invested time reading the first edition will want a list of

specific changes, and we have posted that list on our Web site.

TEACHING AND LEARNING AIDS

To help you to present the most interesting Principles courses possible, we have created an extensive set of supplementary items. Many of them can be downloaded from the Hall/Lieberman Web site. The list includes:

FOR THE INSTRUCTOR:

- An *Instructor's Manual* that provides chapter outlines, teaching ideas, and suggested answers to end-of-chapter questions and problems.
- *The Macroeconomics Test Bank* containing over 2,000 multiple-choice questions. For this edition, the test questions have been arranged according to chapter headings and subheadings. This makes it easy to find the material needed to construct examinations.
- *ExamView Computerized Testing Software* contains all of the questions in the printed Test Banks. ExamView is an easy-to-use test creation package compatible with both Microsoft Windows and Macintosh client software. You can select questions by previewing them on the screen, selecting them by number, or selecting them randomly. Questions, instructions, and answers can be edited, and new questions can easily be added. You can also administer quizzes online—over the Internet, through a local area network (LAN), or through a wide area network (WAN).
- *Full-Color Transparency Acetates* are available for almost all graphs and illustrations in the text.
- A *CNN Video* provides a variety of short clips on various aspects of economics.
- *PowerPoint Slides* of figures and tables are available.
- *Instructor's Resource CD-ROM* allows quick access to instructor ancillaries from your desktop. This easy-to-use CD allows you to review, edit, and copy exactly the material you need.

FOR THE STUDENT:

- The *Mastery Study Guide* provides numerous exercises and self-tests for problem solving practice. It is a valuable tool for helping students strengthen their knowledge of economics.
- The *Student Study CD-ROM*, available packaged with the text, is a powerful study tool that pro-

vides access to useful technology tools and learning support.

- *Macroeconomics Alive! CD-ROM* is an interactive multimedia study aid that provides a high-tech, high-fun way to study economics. Through a combination of animated presentations, interactive graphing exercises, and simulations, the core principles of economics come to life in an upbeat and entertaining way. (ISBN: 0-538-86850-3)

Ask your South-Western/Thomson Learning sales representative for more details, or visit the Economics Alive! Web site at <http://econalive.swcollege.com/>.

- *The Wall Street Journal Edition*. The Hall and Lieberman texts are available with a special 10-week *Wall Street Journal* subscription offer. Contact your South-Western/Thomson Learning sales representative for package pricing and ordering information.
- With *Infotrac® College Edition* students can receive anytime, anywhere, online access to a database of full-text articles from hundreds of scholarly and popular periodicals such as *Newsweek*, *Fortune*, *American Economist*, and the *Quarterly Journal of Economics*. It is a great way to expose students to online research using academically based and reliable sources. An Infotrac subscription card can be packaged with this text. Contact your South-Western/Thomson Learning sales representative for ordering information, or for more information on Infotrac, visit <http://www.swcollege.com/infotrac/infotrac.html>.
- *The New York Times Guide to Economics* by Sliger, Jennings, and Murphy is a collection of the best economics-related articles from *The New York Times*. It can be used in the classroom or informally as complementary reading. All articles are accompanied by exploratory exercises and probing questions developed by experts in the field. The guide is divided into six sections, allowing easy integration into any economics course. (ISBN: 0-324-04159-4)

FOR INSTRUCTORS AND STUDENTS:

- The *Hall/Lieberman Web site* (<http://hall-lieb.swcollege.com>) contains a wealth of useful teaching and learning resources. Important features available at the Web site include:
 - Downloadable ancillary materials for instructors and students.

- *Online Quizzes* with feedback on correct answers. Completed quizzes can be e-mailed directly to the instructor
- Links to the Internet addresses referred to in the text.
- Links to relevant *EconNews Online*, *EconDebate Online*, and *EconData Online* articles and exercises for each text chapter.
- *Using the Theory Online* activities that ask students to use the Four Key Steps to analyze interesting questions. The answers can then be e-mailed to the instructor.
- An *Online Graphing Workshop* designed to help students master economic reasoning and graphical analysis. It includes a set of animated graphical tutorials—with audio explanations. Students are also asked to manipulate graphs (using a specially designed freehand graph-drawing tool) to describe specific scenarios, and then are presented with the correct graphical answer. Other scenarios are provided without answers, and students can submit their work to their instructor via e-mail.
- For additional course support, our South-Western *Economics Resource Center* Web site, accessible at <http://economics.swcollege.com>, contains a variety of content features and applications. They are added monthly and updated semiannually.

These special online features include the following:

 - *EconDebate Online* keeps students informed on today's most crucial economics policy issues. Each debate provides a primer on a single timely issue and includes links to background information and current, in-depth commentaries from experts around the world.
 - *EconNews Online* provides summaries of the latest economics news stories. Each contains a three to five paragraph review of a news article and provides questions to spur further thought.
 - *EconData Online* provides current and historical economic data with accompanying commentary, diagrams, analysis, and exercises.
 - *EconLinks Online* gives students a navigation partner for further exploration of economics on the Web. Topic links provide a list of key economics Web sites, including "best bets."
- *WebTutor on WebCT* offers concept presentations, flashcards, Internet links, discussion questions, and tutorials. It also includes an internal e-mail system, chat and discussion areas, search capabilities, calendars, custom printing features, and instructor cus-

tomization options. For more information, visit the South-Western Electronic Learning site at <http://www.swcollege.com/elearning.html>.

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tremely persuasive advocates for the book. We sincerely appreciate all their efforts!

A REQUEST

Although we have worked hard on the first two editions of this book, we know there is always room for further improvement. For that, our fellow users are indispensable. We invite your comments and suggestions wholeheartedly. We especially welcome your suggestions for additional “Using the Theory” sections and “Dangerous Curves.” You may send your comments to either of us care of South-Western College Publishing.

Bob Hall
Marc Lieberman

ABOUT THE AUTHORS

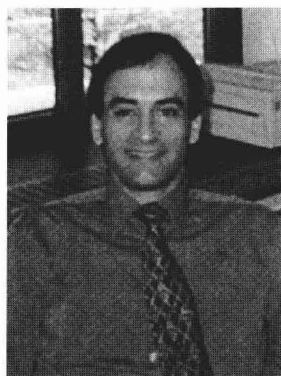
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