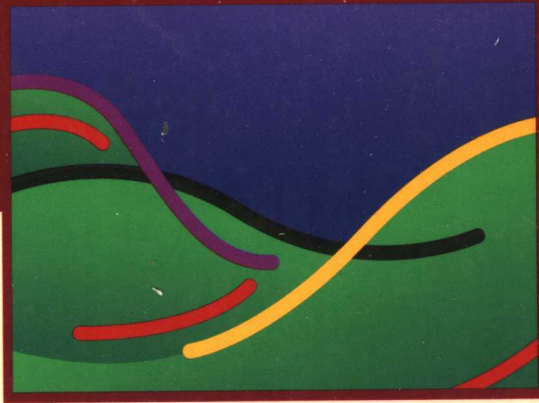


MICROECONOMICS

PRINCIPLES AND APPLICATIONS



ROBERT E. HALL

MARC LIEBERMAN

SECOND EDITION

MICROECONOMICS

PRINCIPLES AND APPLICATIONS

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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 Microeconomics of On-line Retailing. This capstone micro chapter helps students appreciate the essential unity of microeconomics. In it, we use the four Key Steps to study an important and interesting issue—the evolution and economic impact of Internet retailing. We revisit key ideas about product markets, labor markets, and financial markets, and apply them in this new and important context.

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.

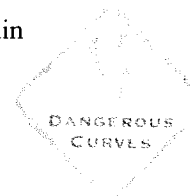
We use concrete examples. Students learn best when they see how economics can explain the world around them. Whenever possible, we develop the the-

ory 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.



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 designed 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 inno-

vation. The differences you will find in this text are the product of years of classroom experience.

INNOVATIONS IN MICROECONOMICS

Scarcity, Choice, and Economic Systems (Chapter 2): This early chapter, while covering standard material such as opportunity cost, also introduces some central concepts much earlier than other texts. Most importantly, it introduces the concept of *comparative advantage*, and the basic principle of *specialization and exchange*. We have placed them at the front of our book because we believe they provide important building blocks for much that comes later. For example, comparative advantage and specialization *within* the firm help explain economies of scale (Chapter 6). International trade (Chapter 16) can be seen as a special application of these principles, extending them to trade between nations.

The Theory of the Firm (Chapter 7): Many texts introduce the theory of the firm using the perfectly competitive model. We believe this is an unfortunate choice because it forces students to master the logic of profit maximization and the details of a rather special kind of market at the same time. Students quite naturally think of firms as facing *downward-sloping* demand curves—not horizontal ones. We have found that they have an easier time learning the theory of the firm with this more familiar type of demand curve.

Further, by treating the theory of the firm in a separate chapter, *before* perfect competition, we can separate concepts that apply in *all* market structures (the shapes of marginal cost and average cost curves, marginal cost equals marginal revenue, the shut-down rule, etc.), from concepts that are unique to perfect competition (horizontal demand curve, marginal revenue the same as price, etc). This avoids confusion later on.

Monopolistic Competition and Oligopoly (Chapter 10): Two features of our treatment are worth noting. First, we emphasize advertising, a key feature of both of these types of markets. Students are very interested in advertising, and how firms make decisions about it. The chapter opens with this theme, and the Using the Theory section pursues it further. Second, we have omitted older theories of oligopoly that raised more questions than they answered, such as the kinked demand curve model. Our treatment of oligopoly is strictly game theoretic, but we have taken great care to keep it simple and clear.

Capital and Financial Markets (Chapter 13). For this edition, we have written an entirely new chapter on capital and financial markets. It focuses on the common theme of these subjects: the present value of future income. Moreover, it provides simple, Principles-level analyses of the stock and bond markets—something that students are hungry for, but that few textbooks address.

Description vs. Assessment (Chapters 8–10 and 14): In treating product market structures, most texts switch back and forth between the *description and analysis* of different markets on the one hand, and their *efficiency* properties on the other.

Our book collects the material on efficiency into a single chapter (Chapter 14). This has several advantages. First, it permits you to focus on *description* and *prediction* when teaching about market structures—a full plate, in our experience. Second, a chapter devoted to efficiency allows a more comprehensive treatment of the topic than we have seen elsewhere. Finally, our approach—in which students learn about efficiency *after* they have mastered the four market structures—allows them to study efficiency with the perspective needed to really understand it.

The Government's Role in Economic Efficiency (Chapter 15): We cover market failures—and government intervention designed to correct them—in a single chapter. In addition to the standard topics (externalities, public goods, and assessment of imperfect competition), we introduce a crucial subject often missing from introductory texts: the economic role of the legal system. We believe this should be a core topic in the introductory course.

Comparative Advantage and the Gains from Trade (Chapter 16): We've found that international trade is best understood through clear numerical examples, and we've developed them carefully in this chapter. We also try to bridge the gap between the economics and politics of international trade with a systematic discussion of winners and losers.

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. For example, Chapter 5 develops consumer theory with both marginal utility and (in an appendix)

indifference curves, allowing you to present either method in class. If you wish to highlight international trade, you could assign Chapter 16 immediately following Chapter 3.

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 12 (income inequality and poverty), Chapter 13 (capital and financial markets), Chapter 15 (government's role in economic efficiency), or Chapter 16 (international trade) 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, in Chapter 11 (labor markets), an instructor who feels rushed could focus on the equilibrium and comparative statics results in labor *markets*, and skip the analyses of the firm as a demander of labor.

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.
- *Microeconomics 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 provides access to useful technology tools and learning support.
 - *Microeconomics 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: 0-538-84650-X)
- Ask your South-Western/Thomson Learning sales representative for more details, or visit the Eco-

nomics 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)
- *The Tobacco Wars* by Walter Adams and James W. Brock presents the economic issues surrounding the tobacco litigation through a creative dialogue among many key players in the debate—including tobacco industry executives, consumers, attorneys, economists, health care professionals, historians, and political activists. It provides a balanced and provocative framework to illustrate microeconomic principles, including consumer behavior, industrial organization and public policy, antitrust policy, externalities, social costs, and market imperfections. (ISBN: 0-324-01296-9)

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, calen-

dars, custom printing features, and instructor customization options. For more information, visit the South-Western Electronic Learning site at <http://www.swcollege.com/elearning.html>.

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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

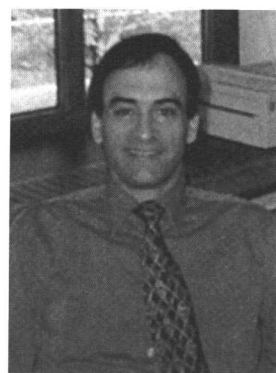
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Economics Society Award for Excellence in Teaching. He is co-editor and contributor to *The Road to Capitalism: Economic Transformation in Eastern Europe and the Soviet Union*. Lieberman has consulted for the Bank of America and the Educational Testing Service. In his spare time, he is a professional screenwriter. He co-wrote the script for *Love Kills*, a thriller that aired on the USA Cable Network, and he periodically teaches screenwriting at NYU's School of Continuing and Professional Studies.

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USING ALL THE THEORY

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