# 5e MICROECONOMICS

William A.

A Contemporary Introduction



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## MICROECONOMICS A Contemporary Introduction

FIFTH EDITION

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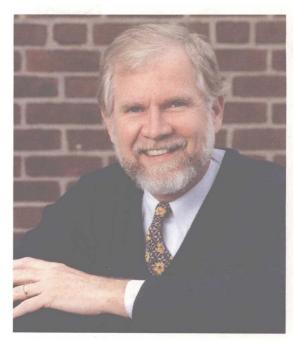
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### About the Author

William A. McEachern, Professor of Economics at the University of Connecticut, has taught principles of economics since 1973 and has offered teaching workshops since 1980. His research has appeared in a variety of journals, including Economic Inquiry, National Tax Journal, Journal of Industrial Economics, and Public Choice. He is Founding Editor of The Teaching Economist, a newsletter that focuses on teaching economics at the college level, and is Editor in Chief of The Connecticut Economy: A University of Connecticut Quarterly Review. Professor McEachern has advised federal, state, and local governments on policy matters and directed a bipartisan commission examining



Connecticut's finances. Publications in which he has been quoted include the New York Times, London Times, Wall Street Journal, Christian Science Monitor, USA Today, and Reader's Digest. The University of Connecticut Alumni Association conferred on him its Faculty Award for Distinguished Public Service, and the Connecticut Academy of Arts and Sciences elected him to membership. He was born in Portsmouth, N.H., earned an undergraduate degree with honors from Holy Cross College and an M.A. and Ph.D. from the University of Virginia.

## To Pat

## Preface

Economics has a short history but a long past. As a distinct discipline, economics has been studied for only a few hundred years, yet civilizations have confronted the economic problem of scarce resources but unlimited wants for millennia. Economics, the discipline, may be centuries old, but it is new every day as fresh evidence supports or reshapes economic theory. In *Microeconomics: A Contemporary Introduction*, I draw upon more than a quarter century of teaching experience to convey the vitality, timeliness, and evolving nature of economics.

#### LEADING BY EXAMPLE

Remember the last time you were in unknown parts and had to ask for directions? Along with the directions came the standard comment "You can't miss it!" So how come you missed it? Because the "landmark" that was obvious to the neighborhood resident who gave the directions might as well have been invisible to you, a stranger. Writing a principles text is much like giving directions. The author must be familiar with the material, but familiarity can also dull one's perceptions, making it difficult to see things through the fresh eyes of new students. Some authors try to compensate by telling all they know, in the process overwhelming students with so much detail that the central point gets lost. Other authors take a minimalist approach by offering little of what students may already know intuitively, and instead talking abstractly about good x and good y, units of labor and units of capital, or the proverbial widget. This turns economics into a foreign language.

Good directions rely on landmarks familiar to us all—a stoplight, a fork in the road, a white picket fence. Likewise, a good textbook builds bridges from the familiar to the new. How? In essence, I try to *lead by example*—I provide examples that draw on the students' common experience. I try to create graphic pictures that need little explanation, thereby eliciting from the reader that light of recognition, that "Aha!" Examples should be self-explanatory; they should convey the point quickly and directly. Having to explain an example is like having to explain a joke—the point gets lost. Throughout, I provide just enough intuitive information and institutional detail to get the point across without overwhelming the student. My emphasis is on economic ideas, not economic jargon.

Students arrive the first day of class with eighteen or more years of experience with economic choices, economic institutions, and economic events. Each student grew up in a household-the central economic institution. As consumers, students are familiar with fast-food restaurants, movie theaters, car dealerships, and dozens of stores at the mall. Most students have been resource suppliers—more than half held jobs while in high school. Students also have experience with government—they know about taxes, drivers' licenses, speed limits, and public education. And, from imported cars to the World Wide Web, students are becoming more familiar with the rest of the world.

Thus, students have abundant experience with the stuff of economics. They may not recognize the economic content of that experience, but they possess it nonetheless. Yet many principles authors neglect this rich lode of experience and, instead, try to create for the student a new world of economics. Such an approach fails to make the connection between economics and what Alfred Marshall called "the ordinary business of life."

Since instructors can cover only a fraction of the textbook material in class, principles texts should, to the extent possible, be self-explanatory, thereby providing instructors with greater flexibility to emphasize topics of special interest. My approach is to start where students are, not where we would like them to be. For example, to explain the division of labor, rather than refer to Adam Smith's pin factory, I call attention to the division of labor at McDonald's. To explain resource substitution, rather than referring to abstract units of labor and capital, I discuss a specific example, such as labor-capital combinations for washing a car—ranging from a drive-through car wash (much capital and little labor) to a Saturday-morning-send-the-band-to-Disney-World charity car wash (little capital and much labor). This edition is loaded with similar down-to-earth examples.

#### **CLARITY BY DESIGN**

In many principles textbooks, chapters are interrupted by boxed material, parenthetical explanations, qualifying footnotes, and other distractions that disrupt the flow of the material. Students remain uncertain about when or if such segregated elements should be read. In contrast, this book has a natural flow. Each chapter opens with a few questions aimed at stimulating interest, then tells a compelling story, using logical sections and subsections. Qualifying footnotes are used sparingly, and parenthetical explanations are used hardly at all. Moreover, case studies are not boxed off but appear in the natural sequence of the chapter. Students can thus read each chapter smoothly from the opening questions to the conclusion and summary. I also employ a "just-in-time" approach to introduce material just as it is needed to develop an argument. Overall, the Fifth Edition is a bit leaner, economic jargon has been reduced, and many tables have been converted to charts and graphs.

In most textbooks, the page design—the layout of the page and the use of color—is an afterthought, conceived without regard to how students learn. No element in the design of this book is wasted, and all elements work together for the maximum pedagogical value.

**Page Design.** By design, all elements of each chapter have been carefully integrated. Every effort has been made to present students with an open, readable page design. The size of the typeface, the length of the text line, and the amount of "white space" were all chosen to make learning easier. Graphs are uncluttered and are accompanied by captions explaining the key features. These features are all optimal for students encountering college textbooks for the first time.

**Use of Color.** Color is used systematically within graphs, charts, and tables to ensure that students quickly and easily see what's going on. Throughout the book, demand curves are blue and supply curves are red. In comparative statics

examples, the curves determining the final equilibrium point are lighter than the initial curves. Color shading distinguishes key features of many graphs, such as measures of economic profit or loss, tax incidence, consumer and producer surplus, and the welfare effects of tariffs and quotas. In short, color is more than mere face entertainment—it is employed consistently and with forethought to help students learn.

#### THE FIFTH EDITION

I build on the success of earlier editions to make the material even more student-friendly through concrete examples, more questions along the way, and additional summaries as each chapter unfolds. And by making the material both more personal and more natural, I try to draw students into a collaborative discussion. I have also built on the success of the Fourth Edition's Internet support to make the use of technology even more innovative and helpful. This edition features an even tighter integration of text and technology.

**Introductory Chapters** Basic material on macroeconomics and microeconomics is covered in the first four chapters. Limiting the introductory material to four chapters saves precious class time.

**Microeconomics Core** My approach to microeconomics underscores the role of time and information in production and consumption. For example, both time and information are scarce resources and, as such, are valued by consumers and producers. The microeconomic presentation also reflects the growing interest in the economic institutions that underpin impersonal market activity. More generally, I try to convey the intuition that most microeconomic principles operate like gravity: Market forces work whether or not individual economic actors understand them.

At every opportunity, I turn the abstract into the concrete. For example, rather than talking in terms of an abstract monopolist, the monopoly chapter focuses throughout on the De Beers diamond monopoly. New material in this edition includes discussions of antitrust moves against Microsoft, the economics of tobacco legislation, winner-take-all labor markets, intellectual property, and welfare reform. To streamline the presentation of resource markets, I combine material on labor markets and on labor unions into a single chapter. And the chapter that had covered public choice now includes much more on public goods.

International Chapters This edition reflects the growing impact of the world economy on U.S. economic welfare. International issues are introduced early and discussed often. For example, the rest of the world is introduced in Chapter 1 and comparative advantage and the production possibilities frontier are each discussed from a global perspective in Chapter 2. International coverage is woven into the text. For example, students gain a better perspective about such topics as unionization trends, antitrust laws, pollution, environmental laws, tax rates, and the distribution of income if the U.S. experience is compared with that of other countries around the world.

New international material includes discussions of the euro, "crony capitalism," declining fertility rates around the world, and the painful progress of transitional economies. Although international references are scattered throughout the book, including a number of case studies, the final three chapters focus exclusively on international trade, international finance, and developing and transitional economies, respectively.

Case Studies. Some books use case studies as boxed-off asides to cover material that otherwise doesn't quite fit. I use case studies as real-world applications that reinforce ideas in the chapter and demonstrate the relevance of economic theory. My case studies are different enough to offer variety in the presentation yet are integrated enough into the flow of the chapter to let students know they should be read. This edition distinguishes among four categories of case studies: (1) "The World of Business" offers students a feel for the range of choices confronted by business decision makers today; (2) "The Information Economy" underscores the critical role of information in the new economy, from the computer revolution to the value of intellectual property; (3) "Other Times, Other Places" involves applications either from economic history or from other economies around the world; and (4) "Public Policy" cases highlight the tradeoffs in the public sector. All case studies are supported by references and relevant Web addresses and are tied to further analysis on the Web with questions, navigation tips, and other information that can be accessed through the McEachern Interactive Study Center at http://mceachern.swcollege.com.

**Net Bookmarks** Each chapter includes a Net Bookmark. These margin notes identify interesting Web sites that illustrate real-world examples of chapter topics, giving students the opportunity to explore some of those sites and build their economic research skills. And they are extended on the Web with additional information on resources as well as step-by-step navigation hints. They can be accessed through the McEachern Interactive Study Center at http://mceachern.swcollege.com.

The Wall Street Journal Edition The Fifth Edition makes it easy to bring the real world into the classroom. This Wall Street Journal Edition provides numerous opportunities to relate economic concepts to late-breaking news stories. A special Preface guides students in their use of the Wall Street Journal. And there is a question at the end of each chapter that asks students to read and analyze information from the Wall Street Journal.

**Experiential Exercises** New to this edition are end-of-chapter questions that encourage students to develop their research and critical thinking skills. These Experiential Exercises ask students to apply what they have learned to real-world, hands-on economic analysis. Most of these exercises involve the Internet, the *Wall Street Journal*, or other media resources.

#### The Internet

As mentioned already, we devoted careful attention to capitalizing on the vast array of economic resources and alternative learning technologies the Internet can deliver. I gave much thought to two basic questions: What can this

technology do that a textbook cannot do? And how can Web-based enhancements be employed to bring the greatest value to teaching and learning?

It's clear that students learn more when they are involved and engaged. The Internet provides a way to heighten student involvement while keeping the introductory economics course as current as today's news. With these ideas in mind, we have undertaken a major upgrading of our Web site to more tightly integrate the book and the Internet. We have done this in a way that exploits the comparative advantage of each medium, and in a structure that optimizes both teaching and learning experiences.

The McEachern Interactive Study Center (http://mceachern.swcollege.com) Through McEachern Interactive, students benefit from the best textual presentation as well as the most innovative on-line experience. This edition offers a structured approach to the Internet, providing a comprehensive chapter-by-chapter on-line study guide that includes graphical support, interactive quizzes, a glossary, updated and extended applications from the text, and numerous other features. Some highlights include:

Over 100 Examples and Exercises The Internet-enhanced text features such as Net Bookmarks, Case Studies, and end-of-chapter Experiential Exercises are tied to the Study Center where students will find clear links to relevant Web sites. These applications are interesting and easy-to-use. All of the in-text features that are extended on the Web are indicated by a special McEachern Interactive icon. (Shown at left).

On-Line Graphing Tutorials Key graphs from the text—also indicated by the McEachern Interactive icon—are brought to life as students explore interactive graphing tutorials that feature helpful audio explanations.

**Interactive Quizzes** These multiple-choice on-line quizzes provide a perfect review resource and solid exam preparation. They feature detailed feedback for right and wrong answers as well as the option of e-mailing quiz results to the instructor.

It is important to note that none of these features requires detailed knowledge of the Internet. Nor are they required for a successful classroom experience if an instructor wants to assign only the materials contained within the text. The on-line enhancements simply offer optional paths for further study and exploration—new ways for students to employ their individual learning styles and new ways for instructors to experiment with technology and a wider range of assignment materials.

#### THE SUPPORT PACKAGE

The teaching and learning support package that accompanies *Economics: A Contemporary Introduction* provides instructors and students with focused, accurate, and innovative supplements to the textbook.

#### Student Supplements

**Study Guide** The *Study Guide* was written by John Lunn of Hope College. Each chapter of the *Study Guide* corresponds to a chapter in the text and offers:



(1) an introduction; (2) a chapter outline, with definitions of all terms; (3) a discussion of the chapter's main points; (4) a *lagniappe*, or bonus, which supplements material in the chapter and includes a "Question to Think About"; (5) a list of key terms; (6) a variety of true-false, multiple-choice, and discussion questions; and (7) answers to all these questions. Visit the McEachern Interactive Study Center at http://mceachern.swcollege.com. for more details.

**Graphing Primer** One of the most difficult challenges for many introductory economics students is working with graphs. The *Graphing Primer* is a print supplement that helps students create, interpret, and understand graphs.

**McEachern Interactive CD-ROM** This CD-ROM provides a powerful collection of electronic study tools:

**PowerPoint Lecture Review Slides** Students can visually review key concepts and exhibits from each chapter, and print the slides to use as note-taking guides during class lectures.

**South-Western Economics Tutorial Software** James T. Doak has developed tutorial software compatible with Microsoft Windows. It is organized around key topics, and correlated to relevant text chapters. Each topic provides a series of interactive graphing exercises that help students test their understanding of key concepts. Students can also track and record their progress.

**McEachern Interactive Graphing Tutorials** The graphing tutorials found at the McEachern Study Center are also included on this CD-ROM.

**Economics Guide Tutorial Software** Robert Brooker, of Gannon University, has developed this economics tutorial software, compatible with Microsoft Windows. Through the use of a sophisticated testing engine, it presents students with an unlimited supply of quizzes over the topics covered in each chapter. Students are able to track and record their progress throughout the course. *Economics Guide* software is perfect for review or for test preparation

Microeconomics Alive! CD-ROM—Interactive Study Guide The Microeconomics Alive! CD-ROM, created by Willie Belton, Richard Cebula, and John McLeod, Jr. of the Georgia Institute of Technology, is compatible with Microsoft Windows and with the Apple Macintosh. This multimedia CD-ROM combines interactive lessons, graphing tools, and simulations to bring microeconomic concepts to life. To learn more about these CDs, visit the Economics Alive! Web site at http://econalive.swcollege.com.

The McEachern Web Site The McEachern Web Site at http://mceachern. swcollege.com. offers a variety of learning tools. In addition to the helpful tools available at the McEachern Interactive Study Center, students can also find summaries of current news stories, review current and historical economic data, keep up-to-date through current examples and policy applications, access information about saleable supplements, correspond with me, and take advantage of many other benefits.

#### Instructor Supplements

**Instructor's Manual** The *Instructor's Manual*, revised by Dorothy Siden of Salem State College, is keyed to the text. For each text chapter, it includes (1) a

detailed lecture outline and brief overview; (2) a summary of main points; (3) pedagogical tips that expand on points raised in the chapter; and (4) suggested answers to all end-of-chapter questions and problems. New to this edition is a set of classroom economic experiments developed by Michael Haupert of the University of Wisconsin, La Crosse and Noelwah Netusil of Reed College. Each experiment comes with an abstract, an overview, a clear set of instructions for running the experiment, and forms for recording the results.

Teaching Assistance Manual I have revised my Teaching Assistance Manual to provides additional support beyond the Instructor's Manual. It is especially useful to new instructors, graduate assistants, and teachers interested in generating more class discussion. This manual offers: (1) overviews and outlines of each chapter; (2) chapter objectives and quiz material; (3) material for class discussion; (4) topics warranting special attention; (5) supplementary examples; and (6) "What if?" discussion questions. Appendices provide guidance on (a) presenting material; (b) generating and sustaining class discussion; (c) preparing, administering, and grading quizzes; and (d) coping with the special problems confronting foreign graduate assistants.

**Test Bank** Thoroughly revised for currency and accuracy, the *Microeconomics Test Bank* contains over 4,200 questions in multiple-choice and true-false formats. All multiple choice questions have five possible responses, and each is rated by degree of difficulty. For this edition, Nathan Eric Hampton of St. Cloud State University has thoroughly reworked the *Test Bank* and has grouped all questions according to chapter subheadings. This makes it easy to find just the questions you want and to make sure your questions are representative of material you teach in class.

Testing Tools—Computerized Testing Software Testing Tools is an easy-to-use test creation software package that is available in versions compatible with Microsoft Windows and with the Apple Macintosh. It contains all of the questions in the printed Test Banks. Instructors can add or edit questions, instructions, and answers, and select questions by previewing them on the screen and then choosing them by number, or at random. Instructors can also create and administer quizzes on-line, either over the Internet, through a local area network (LAN), or through a wide area network (WAN).

Microsoft PowerPoint Lecture Slides Tables and graphs from the text, as well as additional instructional materials, are available as PowerPoint slides to enhance lectures and help integrate technology into the classroom.

**Transparency Acetates** Most of the tables and graphs from this text are reproduced as full-color transparency acetates.

**CNN Economics Video** The CNN Economics Video provides a variety of brief video clips, taken from Cable News Network (CNN) programs, that illustrate various aspects of economics.

On-line Course Creation and Delivery Systems South-Western College Publishing now makes taking your course to the Web as easy as typing. Visit ITP Electronic Learning at http://www.itped.com to learn about simple-touse options for creating an on-line course or a Web site for your traditional course.

The Teaching Economist For nearly a decade, I have edited *The Teaching Economist*, a newsletter aimed at making teaching more interesting and more fun. The newsletter discusses imaginative ways to present topics—for example, how to "sensationalize" economic concepts, useful resources on the Internet, economic applications from science fiction, and more generally, ways to teach just for the fun of it. A regular feature of *The Teaching Economist*, "The Grapevine," offers teaching ideas suggested by colleagues from across the country. The latest issue—and back issues—of *The Teaching Economist* are available on-line at http://mceachern.swcollege.com.

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To practice what I preach, I relied on the division of labor based on comparative advantage to help put together the most complete teaching package on the market today. John Lunn of Hope College authored the *Study Guide*, which has been quite popular. Dorothy Siden of Salem State College authored the *Instructor's Manual*. And Nathan Eric Hampton of St. Cloud State University undertook a major reworking of the *Test Bank*. I thank them for their imagination and discipline.

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