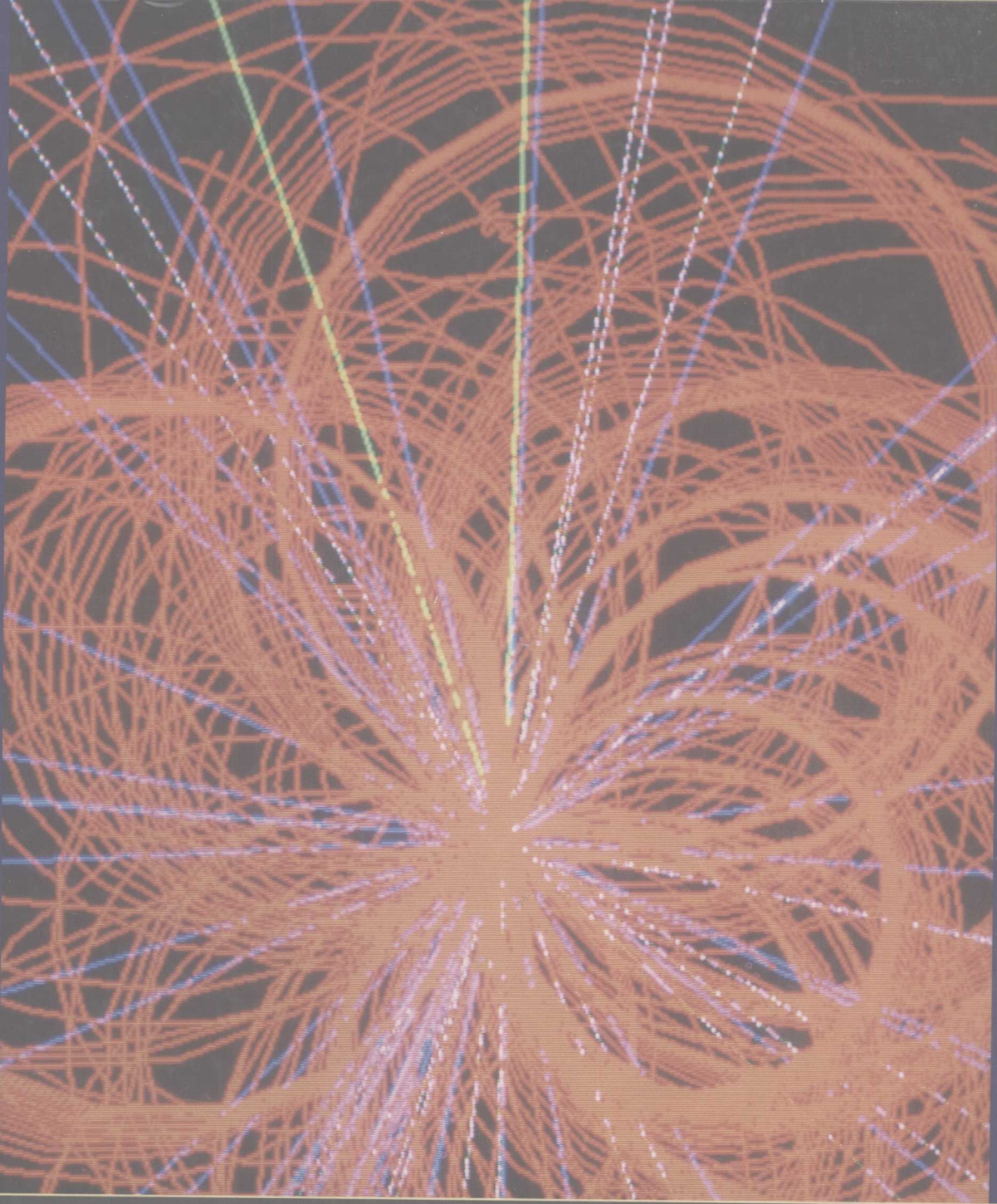
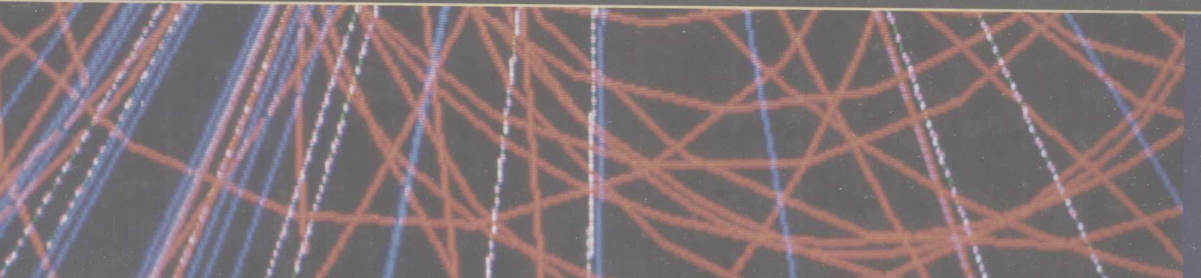


TENTH EDITION



THE MICRO ECONOMY TODAY

BRADLEY R. SCHILLER



THE MICRO ECONOMY TODAY

Tenth Edition

BRADLEY R. SCHILLER

American University



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THE MICRO ECONOMY TODAY

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Cover image: © David Parker/Photo Researchers, Inc./Description: Simulated detection of Higgs boson. Computer simulation of an event in which the decay of a Higgs boson particle produces four muons. Two of these muons are seen here (green tracks). The muons, along with countless other particles (red and blue tracks), are produced in a head-on collision between two protons. The Higgs boson is a localized clustering in the Higgs Field. This field permeates space, and local distortions of the Higgs Field are thought to be the way that particles gain mass. This image shows how the Higgs boson might be seen in the CMS detector on the Large Hadron Collider at CERN, the European particle physics laboratory.

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ABOUT THE AUTHOR

Bradley R. Schiller has over three decades of experience teaching introductory economics at American University, the University of California (Berkeley and Santa Cruz), and the University of Maryland. He has given guest lectures at more than 300 colleges ranging from Fresno, California, to Istanbul, Turkey. Dr. Schiller's unique contribution to teaching is his ability to relate basic principles to current socioeconomic problems, institutions, and public policy decisions. This perspective is evident throughout *The Micro Economy Today*.

Dr. Schiller derives this policy focus from his extensive experience as a Washington consultant. He has been a consultant to most major federal agencies, many congressional committees, and political candidates. In addition, he has evaluated scores of government programs and helped design others. His studies of discrimination, training programs, tax reform, pensions, welfare, Social Security, and lifetime wage patterns have appeared in both professional journals and popular media. Dr. Schiller is also a frequent commentator on economic policy for television, radio, and newspapers.

Dr. Schiller received his Ph.D. from Harvard in 1969. He earned a B.A. degree, with great distinction, from the University of California (Berkeley) in 1965. He is now a professor of economics in the School of Public Affairs at American University in Washington, D.C.

THE 24/7 ECONOMY

24/7. That's the way the economy works. While you're sleeping, workers at the Texas Instrument plant in Kuala Lumpur are assembling the electronic circuits that will instruct your alarm clock to go off, relay the news via satellite TV or radio, enable video presentations in class or at remote locations, and help retrieve music files on the iPod you carry around. Venezuelan oil workers are pumping oil that will fuel your drive to class. Ethiopian farmers are harvesting the coffee beans that will help keep you alert. Traders in London, Hong Kong, and Tokyo are pushing the value of the dollar up or down, changing the cost of travel and trade. In an increasingly globalized economy, the economy truly never sleeps. It's in motion 24 hours a day, 7 days a week.

All of this perpetual motion makes teaching economics increasingly difficult. The parameters of the economy are constantly changing. Interest rates are up one day, down the next. The same with oil prices. Inflation looks worrisome one month and benign the next. Job growth looks great one month, then dismal the next. Even such famous prognosticators as Alan Greenspan have trouble keeping track of all these (changing) data, much less divining the implied direction of the economy.

At the micro level, incessant changes in the economy create similar problems. Market structures are continuously evolving. Products are always changing. With those changes, even market boundaries are on the move. Is your local cable franchise really a monopoly when satellite and Internet companies offer virtually identical products? Will Apple Computer, Inc., with a 70 percent market share in the portable MP3-player market, behave more like a monopolist or like a perfect competitor? With the Internet creating *global* shopping malls, how should industry concentration ratios be calculated? The Federal Trade Commission and the Antitrust Division of the U.S. Justice Department are vexed by ever-changing market boundaries and structures.

Coping with Change

So how do we cope with all this flux in the classroom? Or, for that matter, in a textbook that will be in print for three years? We could ignore the complexities of the real world and focus exclusively on abstract principles, perhaps "enlivening" the presentation with fables about the Acme Widget Company or the Jack and Jill Water Company. That approach not only bores students, but it also solidifies the misperception that economics is irrelevant to their daily life. Alternatively, we could spend countless hours reporting and discussing the economic news of the day. But that approach transforms the principles course into a current-events symposium.

The Micro Economy Today pursues a different strategy. I am convinced that economics is an exciting and very relevant field of study. I have felt this way since I attended my first undergraduate principles course. Despite an overbearing, boring textbook and a super-sized class (over 1,000 students!), I somehow discerned that economics could be an interesting topic. All it needed was a commitment to merging theoretical insights with the daily realities of shopping malls, stock markets, global integration, and policy development. Whew!

What Makes Economies Tick

How does this lofty ambition translate into the nuts and bolts of teaching? It starts by infusing the textbook and the course with a purposeful theme. Spotlighting scarcity and the necessity for choice is not enough; there's a much bigger picture. It's really about why some nations prosper while others languish. As we look around the world, how can we explain why millionaires abound in the United States, Hong Kong, the United Kingdom, and Australia, while 2.8 *billion* earthlings live on less than \$2 a day? How is it that affluent consumers in developed nations carry around videophones while one-fourth of the world's population has never made a phone call? Surely, the

way an economy is structured has something to do with this. At the micro level, Adam Smith taught us long ago that the degree of competition in product markets affects the quantity, quality, and price of consumer products.

At the aggregate level, we've also seen that macro structure matters. Specifically, we recognize that the degree of government intervention in an economy is a critical determinant of its performance. The Chinese Communist Party once thought that central control of an economy would not only reduce inequalities but also accelerate growth. Since decentralizing parts of its economy, freeing up some markets, and even legalizing private property (see World View, p. 17), China has become the world's fastest-growing economy. India has heeded China's experience and is also pursuing a massive privatization and deregulation strategy (World View, p. 11).

This doesn't imply that *laissez faire* is the answer to all of our economic problems. What it does emphasize, however, is how important the choice between market reliance and government dependence can be.

We know that the three core questions in economics are WHAT, HOW, and FOR WHOM to produce. Instead of discussing them in a political and institutional void, we should energize these issues with more real-world context. We should also ask who should resolve these core questions, the governments or the marketplace? Where, when, and why do we expect market failure—suboptimal answers to the WHAT, HOW, and FOR WHOM questions. Where, when, and why can we expect government intervention to give us better answers—or to fail? This theme of market reliance versus government dependence runs through every chapter of *The Micro Economy Today*.

Within the two-dimensional framework of three core questions and markets-versus-governments decision making, *The Micro Economy Today* pursues basic principles in an unwavering real-world context. The commitment to relevance is evident from the get-go. At the outset, the very serious trade-offs between arms spending and food production in North Korea (pp. 8–9) put the concept of opportunity costs into a meaningful context. Chapter 1 pursues the nature of opportunity cost into the future by examining the earthbound sacrifices we'll have to make for the proposed Lunar and Martian settlements (Chapter 1's "Economy Tomorrow" section, pp. 19–20). These kinds of concrete, page-one examples motivate students to learn *and retain* core economic principles.

Chapter 2 gives students a quick economic tour of the world. It shows how different nations have resolved the WHAT, HOW, and FOR WHOM questions. Students see how rich the USA is—and how poor other nations are (see World Views, pp. 28 and 29). They also see that inequality is not an ailment unique to "rich" nations (e.g., World View, p. 41). This chapter gives students an empirically based global perspective on economic outcomes that can spark a motivated search for explanations, that is, economic theory.

The Micro Economy Today emphasizes real world applications. Nowhere is this more evident than in the discussion of market structure. Chapter 7 offers the typical depiction of the perfectly competitive firm in static equilibrium (albeit illustrated with real-world catfish farmers). Then comes a *second* chapter on perfect competition which turns the spotlight on the competitive dynamics that power market-based economies. The reality of market structures is that they typically evolve—sometimes at lightening speed. In 1977, Apple Computer, Inc., had a virtual monopoly on personal computers; in 2001 it had a lock on portable, digital music players (iPods). In both cases, a swarm of wannabes transformed the market into more competitive structures. In the process, the products improved, sales volumes increased, and prices fell at extraordinary rates of speed. By emphasizing the *behavior* of a competitive market rather than just the *structure* of static equilibrium, Chapter 8 injects excitement into the discussion of market structures. The "Economy Tomorrow" section at the end of Chapter 8 explains

Markets vs. Government

Real-World Concerns

Micro Realities

why iPods are likely to cost only \$49 within a few years. Understanding how competitive markets make this happen is probably the most important insight in microeconomics. By building on student experience with music downloads and MP3 players, *The Micro Economy Today* helps students acquire that insight.

The central theme of government dependence versus market reliance is particularly evident in Chapter 12, “(De)Regulation.” When the lights went out in California and later in the Midwest, a lot of people blamed “power pirates.” They wanted the government to more closely regulate electricity markets. Others protested that government regulation (e.g., price controls, environmental standards) had *caused* the brownouts and blackouts. They advocated *less* government intervention and more reliance on the market mechanism. Chapter 12 uses the experience of (de)regulation in the rail, air, electricity, and telecommunications industries to highlight unique features of natural monopoly and the possibilities of both market and government failure.

The FOR WHOM question is one of the three core issues in economics, but it typically gets scant treatment in a principles course. *The Micro Economy Today* tries to remedy this shortfall with companion chapters on taxes (Chapter 18) and income transfers (19). The chapters emphasize the key economic concepts (e.g., marginal tax rates, tax elasticity of labor supply, moral hazard) that are common to both sides of the tax-transfer redistribution system. By examining President George W. Bush’s 2003 tax return (p. 380) students see the distinction between nominal and effective tax rates. By reviewing trends in aging and labor-force participation (pp. 396–401), they may realize how Social Security alters work incentives and behavior.

International Realities

International chapters (20 and 21) not only explain the core concepts of comparative advantage and exchange-rate determination but also assess the *resistance* to free trade and flexible exchange rates. By identifying the vested interests that resist trade, *The Micro Economy Today* bridges the gap between free-trade models and real-world trade disputes. Students see not only why trade is desirable but also how and why we pay for trade barriers. This is a lot more interesting than simply reciting the mathematics of comparative advantage in cloth and wine.

The bottom line here is simple and straight forward: *by infusing the presentation of core concepts with a unifying theme and pervasive real-world application*, *The Micro Economy Today* offers an exciting and motivated introduction to micro economics. As the accompanying News confirms, this is the kind of reality-based instruction today’s students want.

IN THE NEWS

Real World 101

Colleges Scramble to Serve Students Looking for Classes That Elucidate Current Events

Who knew that the University of Nebraska houses American academia’s only Afghanistan studies center? Or that a top-notch geography department would put Southwest Texas State University in San Marcos on the map for CIA recruiters? Before September 11, such specialties attracted scant attention

and few students. But the speed with which colleges nationwide have raced to accommodate the stampede of undergraduates suddenly interested in war-related subject areas has stunned even seasoned educators (and turned scores into celebrity-experts).

—Mary Lord

Source: *U.S. News & World Report*, November 5, 2001. Reprinted with permission. www.usnews.com

Analysis: Real-world events and issues spark student interest in academic courses. No text brings the real world into the economics course as much as *The Micro Economy Today*.

EFFECTIVE PEDAGOGY

Despite the abundance of real-world applications, this is at heart a *principles* text, not a compendium of issues. Good theory and interesting applications are not mutually exclusive. This is a text that wants to *teach microeconomics*, not just increase awareness of policy issues. To that end, *The Micro Economy Today* provides a logically organized and uncluttered theoretical structure for macro, micro, and international theory. What distinguishes this text from others on the market is that it conveys theory in a lively, student-friendly manner.

Student comprehension of core theory is facilitated with careful, consistent, and effective pedagogy. This distinctive pedagogy includes the following features:

Graphs are *completely* labeled, colorful, and positioned on background grids. Because students often enter the principles course as graph-phobics, graphs are frequently accompanied by synchronized tabular data. Every table is also annotated. This shouldn't be a product-differentiating feature but, sadly, it is. Putting a table in a textbook without an annotation is akin to writing a cluster of numbers on the board, then leaving the classroom without any explanation.

Clean, Clear Theory

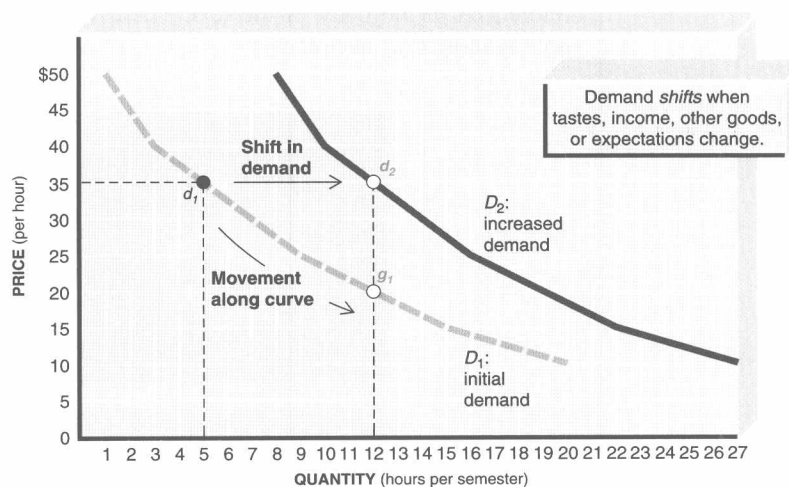
Concept Reinforcement

Self-Explanatory Graphs and Tables

FIGURE 3.3
Shifts vs. Movements

A demand curve shows how a consumer responds to price changes. If the determinants of demand stay constant, the response is a *movement* along the curve to a new quantity demanded. In this case, the quantity demanded increases from 5 (point d_1), to 12 (point g_1), when price falls from \$35 to \$20 per hour.

If the determinants of demand change, the entire demand curve *shifts*. In this case, an increase in income increases demand. With more income, Tom is willing to buy 12 hours at the initial price of \$35 (point d_2), not just the 5 hours he demanded before the lottery win.



	Price (per hour)	Quantity Demanded (hours per semester)	
		Initial Demand	After Increase in Income
A	\$50	1	8
B	45	2	9
C	40	3	10
D	35	5	12
E	30	7	14
F	25	9	16
G	20	12	19
H	15	15	22
I	10	20	27

Key terms are defined in the margin when they first appear and, unlike in other texts, redefined as necessary in subsequent chapters. Web site references are directly tied to the book's content, not hung on like ornaments. End-of-chapter discussion questions use tables, graphs, and boxed news stories from the text, reinforcing key concepts.

Reinforced Key Concepts

Boxed and Annotated Applications

In addition to the real-world applications that run through the body of the text, *The Micro Economy Today* intersperses boxed domestic (In the News) and global (World View) case studies. Although nearly every text on the market now offers boxed applications, *The Micro Economy Today's* presentation is distinctive. First, the sheer number of In the News (70) and World View (35) boxes is unique. Second, and more important, *every* boxed application is referenced in the body of the text. Third, *every* News and World View comes with a brief, self-contained explanation. Fourth, the News and World View boxes are the subject of the end-of-chapter Discussion Questions and Student Problem Set exercises. In combination, these distinctive features assure that students will actually read the boxed applications and discern their economic content. The *Test Bank* and *DiscoverEcon with Paul Solman videos* also provide subsets of questions tied to the News and World View boxes so that instructors can confirm student use of this feature.

Photos and Cartoons

The text presentation is also enlivened with occasional photos and cartoons that reflect basic concepts. The photos on page 40 are much more vivid testimony to the extremes of inequality than the data in Figure 2.6 (p. 39). The contrasting photos of the original Apple I (p. 180) and the iMac (p. 189) underscore how the “animal spirits” of competitive markets spur innovation. The cartoon on page ix reminds students that not all economists are of the same mind. Every photo and cartoon is annotated and referenced in the body of the text. These visual features are an integral part of the presentation, not diversions.



© Alan Schein Photography/CORBIS



© Wolfgang Spunberg/Photo Edit

Analysis: The market distributes income (and, in turn, goods and services) according to the resources an individual owns and how well they are used. If the resulting inequalities are too great, some redistribution via government intervention may be desired.

Readability

The one adjective invariably used to describe *The Micro Economy Today* is “readable.” Professors often express a bit of shock when they realize that students actually enjoy reading the book. (Well, not as much as a Stephen King novel, but a whole lot better than most textbooks they’ve had to plow through.) The writing style is lively and issue-focused. Unlike any other textbook on the market, every boxed feature, every graph, every table, and every cartoon is explained and analyzed. Every feature is also referenced in the text, so students actually learn the material rather than skipping over it. Because readability is ultimately in the eye of the beholder, you might ask a couple of students to read and compare an analogous chapter in *The Micro Economy Today* and in another text. This is a test *The Micro Economy Today* usually wins.

I firmly believe that students must *work* with key concepts in order to really learn them. Weekly homework assignments are *de rigueur* in my own classes. To facilitate homework assignments, I have prepared the *Student Problem Set*, which includes built-in numerical and graphing problems that build on the tables, graphs, and boxed material in each chapter. Grids for drawing graphs are also provided. Each chapter's problem set is detachable and includes answer boxes that facilitate grading. (Answers are available in the *Instructor's Resource Manual*, in print, or in downloadable form on the book's Web site). The *Student Problem Set* is behind the tab at the end of this book.

All of these pedagogical features add up to an unusually supportive learning context for students. With this support, students will learn and retain more economic concepts—and maybe even enjoy the educational process.

DISTINCTIVE MICRO

The Micro Economy Today focuses on the performance of specific companies and government programs to showcase the principles of market structure, labor-market functioning, redistribution, and regulation.

The real power of the market originates in competitive forces that breed innovation in products and technology. Other texts treat the competitive firm as a lifeless agent buffeted by larger market forces, but this book provides a very different perspective. *The Micro Economy Today* is the only principles text that has two chapters on perfect competition: Chapter 7 on firm behavior and Chapter 8 on industry behavior. Chapter 8 traces the actual evolution of the computer industry from the 1976 Apple I to the iMac. It gives students a real-world sense of how market structure changes over time and lets them see how dynamic, even revolutionary, competitive markets can be. The rise and fall of “dot.coms” and the ongoing plunge in MP3 player (iPod) prices reinforce the notion that competitive markets move with lightning speed to satisfy consumer demand.

As mentioned earlier, Chapter 12 focuses on the (de)regulation of private industry. The chapter first examines the qualities of natural monopoly and the rationale for regulating its behavior. The trade-offs inherent in any regulatory strategy are highlighted in the review of the railroad, cable TV, airline, telephone, and electricity industries. As in so many areas, the choice between imperfect markets and imperfect regulation is emphasized.

The Micro Economy Today offers parallel chapters on taxes and transfers. Chapters 18 and 19 emphasize the central trade-offs between equity and efficiency that plague tax and transfer policies. The varying distributional effects of specific taxes and transfers are highlighted. Examples are drawn from the Bush tax-cut packages of 2001–2004, President Bush's own 2003 tax return (p. 380), as well as the tax and benefit sides of Social Security. Taken together, the two chapters underscore the government's role in reshaping the market's answer to the FOR WHOM question.

Chapter 17 emphasizes the *economic* rather than the institutional role of financial markets, a topic rarely found in competing texts. The stock and bond markets are viewed as arbiters of risk and mechanisms of resource allocation. The mechanisms of present value discounting are also covered. The chapter starts with the financing of Columbus's New World expedition and ends with a look at the role today's venture capitalists play in promoting growth and technology.

Although real-world content is a general attribute of *The Micro Economy Today*, the level of detail in the micro section is truly exceptional. Table 10.2 (p. 220) offers concentration ratios for specific *products* (e.g., video game consoles), not the abstract industries

Student Problem Set



Analysis: There are different theories about when and how the government should “fix” the economy. Policymakers must decide which advice to follow in specific situations.

Competitive Market Dynamics

(De)Regulation

Taxes and Transfers

Financial Markets

Real Companies, Real Products

 IN THE NEWS
The President's Taxes

President and Mrs. Bush received over \$800,000 of income in 2003. Taxable income was reduced by deductions, however. Their \$227,494 tax bill represented 31.3 percent of *taxable* income (the *nominal* tax rate) but only 27.7 percent of *total* income (the *effective* rate).

Income	
Wages	\$397,264
Interest	401,803
Dividends	23,471
Capital gain (loss)	1-3,000
Partnership gain	2,588
Adjusted gross income	\$822,126

Deductions	
Charitable contributions	68,360
Investment expenses	22,990
Tax preparation fee	2,820
Other deductions	873
Total deductions	\$ 95,043
Taxable income	\$727,083
Tax	\$227,494

Source: The White House. www.whitehouse.gov

Analysis: Taxes are levied on *taxable* income, not total income. Various deductions and exemptions reduce taxable income and *effective* tax rates.

(e.g., electronic equipment) that inhabit other texts. No other text provides such specific data, though this is the kind of detail that students can relate to. The oligopoly chapter (10) reviews a slew of recent price-fixing cases (music CD's, laser eye surgery, auction houses) and mergers. The chapter on monopolistic competition (11) starts with an examination of Starbucks and ends with a look at the growing market for "branded" bottled waters. Students will recognize these names and absorb the principles of market structure. Baseball fans will gain a greater appreciation of labor-demand principles after examining the multimillion-dollar salary of New York Yankees third baseman Alex Rodriguez.

DISTINCTIVE INTERNATIONAL

The global economy runs through every chapter of *The Micro Economy Today*.

World Views

The most visible evidence of this globalism is in the 35 World View boxes that are distributed throughout the text. As noted earlier, these boxed illustrations offer specific global illustrations of basic principles. To facilitate their use, every World View has a brief caption that highlights the theoretical relevance of the example. The *Test Bank* and Student Problem Set also offer questions based on the World Views.

Vested Interests

Consistent with the reality-based content of the entire text, the discussions of trade and finance theory go beyond basic principles to policy trade-offs and constraints. It's impossible to make sense of trade policy without recognizing the vested interests that battle trade principles. Chapters 20 and 21 emphasize that there are both winners and losers associated with every change in trade flows or exchange rates. Because vested interests are typically highly concentrated and well organized, they can often bend trade rules and flows to their advantage. Trade disputes over Mexican trucks, "dumped" steel, and sugar quotas help illustrate the realities of trade policy. The ongoing protest against the World Trade Organization is also assessed in terms of competing interests.

DISTINCTIVE WEB SUPPORT

The tenth edition of *The Micro Economy Today* continues to set the pace for Web applications and support of the principles course.

A mini Web site directory is provided in each chapter's marginal WebNotes. These URLs aren't random picks; they were selected because they let students extend and update adjacent in-text discussions.

The Micro Economy Today's Web site now includes even more features that both instructors and students will find engaging and instructive. The Online Learning Center is user-friendly. Upon entering the site at www.mhhe.com/economics/schiller10, students and instructors will find three separate book covers: one for *The Economy Today*, one for *The Macroeconomy Today*, and one for *The Microeconomy Today*. By clicking on the appropriate cover, users will link to a specific site for the version of the book they are using.

Proceeding into the Student Center, students will find lots of brand-new interactive study material. Diane Keenan of Cerritos College has prepared 15 self-grading multiple-choice and five true-or-false questions per chapter, which are ideal for self-quizzing before a test. Solomon Namala, also of Cerritos College, has created a supplementary Student Problem Set for the site. Professors can assign the additional five problems per chapter as homework or students can access them for additional skills practice. Answers can be found on the password-protected Instructor's Edition of the Web site. Mark Maier of Glendale College has created two Web Activities per chapter and 15 Collaborative Activities, unique to the site. On top of all that, students have access to my periodic NewsFlashes, a User's Manual for the site, and links to Econ Graph Kit, *DiscoverEcon with Paul Solman* videos, Economics on the Web, and Career Opportunities. They will also have the option of purchasing PowerWeb access with their book, which supplies them with three to five news articles per week on the topics they are studying.

The password-protected Instructor Center includes some wonderful resources for instructors who want to include more interactive student activities in their courses. The downloadable *Instructor's Manual* and PowerPoints, auxiliary Student Problem Set and answers, and Instructor's Notes for the Collaborative Activities and Web Activities are available to provide guidance for instructors who collect these assignments and grade them. John Min of Northern Virginia Community College has created Online Lecture Launchers. These interactive PowerPoint presentations highlight current events relevant to key macro, micro, and international topics. They serve as excellent "jumping-off points" for in-class discussion and lectures and will be updated quarterly to provide the most current information.

(www.mhhe.com/schiller10.com/discoverecon) A video and software program, this student online tutorial with accompanying videos is provided with every new copy of the tenth edition of *The Micro Economy Today*. It contains a fully updated and enhanced version of Discover-Econ, developed by Gerald C. Nelson of the University of Illinois at Urbana-Champaign, featuring new learning opportunities for the students and easy integration into existing courses for the instructor. The software is like an interactive text: software chapters parallel text chapters and software pages include specific page references to the text. With Discover-Econ's e-submission, professors can manage the Discover-Econ exercise results of their students electronically. These results are available at anytime to the student and the instructor can easily set up a course management site to make this information available to them. The program provides links to related videos for key topics on the accompanying Web-streamed videos. Paul Solman, economics correspondent for the *Newstour with Jim Lehrer* is the creator of the video component, which consists of over 250 minutes of video, broken down into segments ranging from 7 to 10 minutes in length. These video segments

WebNotes

www.mhhe.com/economics/schiller10

DiscoverEcon with Paul Solman Videos

explain the key economic ideas such as economic growth, elasticity, and production possibilities in a memorable, accessible way.

Opportunities for active learning abound. All DiscoverEcon chapters contain a multiple-choice quiz, discussion questions with online links, and match-the-terms exercises. Interactive graphs, animated charts, and live tables let your students manipulate variables and study the outcomes. Links to the glossary and text references clarify key concepts, and Web-based exercises give students a direct link to the site in question. With the addition of a new syllabus development tool, instructors can create interactive syllabi by linking DiscoverEcon exercises, special Web sites, and Solman videos to their class syllabus. Access to DiscoverEcon is available online, via a password code card supplied with each new book. Link to *DiscoverEcon with Paul Solman* videos at www.mhhe.com/schiller10/discoverecon.

WHAT'S NEW IN THE TENTH

To previous users of *The Micro Economy Today*, all of its distinctive features have become familiar—and hopefully, welcome. For those instructors already familiar with *The Micro Economy Today*, the more urgent question is, What's new? The answer is *a lot*. By way of brief summary, you may want to note the following:

New "Economy Tomorrow"s

The chapter-ending "Economy Tomorrow" sections continue to challenge students with future-looking applications of core concepts. In Chapter 1, the "Journey to Mars" highlights opportunity costs. In Chapter 2, the new "A Better Tomorrow" ponders the prospects of fulfilling the World Bank's ambitious Millennium Declaration. In Chapter 6, the threat of "Outsourcing Jobs" is confronted. Chapter 8 explains why iPods are likely to cost only \$49 in a very short time.

New In the News

There are at least 20 all-new In the News applications in *The Micro Economy Today*. These cover everything from Google's August 2004 IPO (p. 362) to the 2004 Supreme Court rejection of regulated network-access fees for the Baby Bells (pp. 267–268).

New World Views

World Views have also been updated throughout the text of the new World Views. New World Views include the EU's antitrust pursuit of Microsoft (p. 215), OPEC price hikes (p. 230), and urban pollution (p. 278).

Built-in Student Problem Set

The Micro Economy Today's set of arithmetic and graphing problems has proven to be an extremely valuable tool for homework and quizzes. In fact, it has become so widely used that it is now packaged in the text itself, at the back. As before, it offers quantitative and graphing problems (with grids!) explicitly tied to the text, including each chapter's figures, tables, In the News, and World Views. There are 45 new problems, as well as improvements to old ones. Answers are in the print *Instructor's Resource Manual*, also available on the password-protected instructor's section of the Web site.

New Questions for Discussion

There are at least 20 new end-of-chapter Questions for Discussion. As always these draw explicitly on the content of their respective chapters, including boxed applications and figures.

New Data on Endcovers

The data displayed on the inside cover pages and immediately preceding the Problem Sets have not only been updated but refocused as well. Tables now include series on household income and poverty status by race (1980–2003); productivity and related data (1959–2003); stock and bond prices and yields (1969–2003); corporate profits (1959–2003); and international transactions (1946–2002).

New WebNotes

Previous WebNotes have been checked for currency and edited as needed, and a score of new WebNotes have been added as well. These are designed to enable students to update and extend in-text discussions.

Besides all these salient updates, the entire text has been rendered up-to-date with the latest statistics and case studies. *This unparalleled currency is a distinctive feature of The Micro Economy Today.*

Thorough Updating

NEW AND IMPROVED SUPPLEMENTS

Test Bank. Linda Wilson and Jane Himarios of the University of Texas at Arlington have thoroughly revised the *Test Bank* for the tenth edition. This team assures a high level of quality and consistency of the test questions and the greatest possible correlation with the content of the text as well as the *Study Guide*, which was prepared by Linda Wilson with Mark Maier. All questions are coded according to level of difficulty and have a text-page reference where the student will find a discussion of the concept on which the question is based. The computerized *Test Bank* is available in Brownstone Diploma, a flexible and easy-to-use electronic testing program. Diploma systems can produce high-quality graphs from the test banks and feature the ability to generate multiple tests, with versions “scrambled” to be distinctive. This software will meet the various needs of the widest spectrum of computer users. Both the print and computerized test banks are offered in micro and macro versions, each of which contains nearly 4,000 questions including over 200 essay questions.

PowerPoint Presentations. Anthony Zambelli of Cuyamaca College created new presentation slides for the tenth edition. Developed using Microsoft PowerPoint software, these slides are a step-by-step review of the key points in each of the book’s 36 chapters. They are equally useful to the student in the classroom as lecture aids or for personal review at home or the computer lab. The slides use animation to show students how graphs build and shift.

Overhead Transparencies. All of the text’s tables and graphs have been reproduced as full-color overhead transparency acetates.

Instructor’s Resource Manual. Mark Maier of Glendale College has prepared the *Instructor’s Resource Manual* as well as much of the original content for the Web site. This has allowed him to integrate the two in a way that will make online Web resources easier than ever for instructors to use in class.

The *Instructor’s Resource Manual* is available in book form or online, and it includes chapter summaries and outlines, “lecture launchers” to stimulate class discussion, and media exercises to extend the analysis. New features include a section that details common misconceptions regarding the material in a particular chapter; an annotated outline of the chapter; and answers to the Questions for Discussion and the Student Problem Sets. Rae Jean Goodman of the United States Naval Academy has worked with Mark to update the debate projects found in the *Instructor’s Resource Manual*. In addition, there is a photocopy-ready Print Media Exercise for each chapter.

News Flashes. As up-to-date as *The Micro Economy Today* is, it can’t foretell the future. As the future becomes the present, however, I write two-page News Flashes describing major economic events and relating them to specific text references. These News Flashes provide good lecture material and can be copied for student use. Adopters of *The Micro Economy Today* have the option of receiving News Flashes via fax or mail. They’re also available on the Schiller Web site. Four to six News Flashes are sent to adopters each year. (Contact your local McGraw-Hill/Irwin sales representative to get on the mailing list.)

At the instructor’s discretion, students have access to the News Flashes described above. In addition, the following supplements can facilitate learning.

Instructor Aids

Student Aids

Built-in Student Problem Set. The built-in *Student Problem Set* is found at the back of every copy of *The Micro Economy Today*. Each chapter has 8 to 10 numerical and graphing problems tied to the content of the text. Graphing grids are provided. The answer blanks are formatted to facilitate grading and all answers are contained in the *Instructor's Resource Manual*. For convenience, the *Student Problem Set* pages are also perforated.

Study Guide. The new *Study Guide* has been completely updated by Linda Wilson and Mark Maier. The *Study Guide* develops quantitative skills and the use of economic terminology, and enhances critical thinking capabilities. Each chapter includes a Quick Review which lists the key points in an easy-to-read bulleted format, Learning Objectives for the chapter, a crossword puzzle using key terms, 10 true-false questions with explanations, 20 multiple-choice questions, problems and applications that relate directly back to the text, and common student errors. Answers to all problems, exercises, and questions are provided at the end of each chapter.

A NOTE ABOUT THE COVER

The tenth edition cover image is a theoretical representation of the Higgs boson. Dubbed the “God Particle” by Nobel Prize-winning physicist Leon Lederman, the Higgs boson is an, as yet, undiscovered elementary particle. Scientists believe that Higgs particles generate a thick firmament through which other particles move, distorting the field and picking up drag that constitutes that particle’s mass.

Scientists have spent years and millions of dollars in their quest to isolate the “God Particle”. Perhaps the most ambitious of labs is the Centre Européen de Recherche Nucléaire (CERN), where they are constructing a \$3 billion Large Hadron Collider (LHC). Two hundred feet under ground, the LHC sends particles zooming around its 17-mile circumference, smashing them into one another to create dozens of tinier particles whose data is calculated by the LHC’s large computer grid system.

The LHC Computing Grid, created to process the 12-14 PetaBytes of data generated by the LHC each year (equivalent to 20 million CDs), incorporates over 200 scientists in 36 countries into a massive virtual computing organization. The Grid has the capacity to revolutionize the way we use the Internet, making it a more reliable way to quickly transmit large quantities of data. While the discovery of the Higgs boson could be years away, the LHC’s computer grid has already provided real-world improvements for the economy today and a glimpse of the effects it could have on the economy tomorrow.

ACKNOWLEDGMENTS

This tenth edition is unquestionably the finest edition of *The Micro Economy Today*, and I am deeply grateful to all those people who helped develop it. Paul Shensa, my editor for the last thirty years, again picked a first-rate team and supported it well with budgets cajoled from Gary Burke, the economics publisher. The stand-out player was Becca Hicks, who as Development Editor not only kept the whole package together but also made many independent contributions to the text’s content and style. Harvey Yep, the Project Manager, did an exceptional job in assuring that every page of the text was visually pleasing, properly formatted, error-free, and timely produced. The design team, led by Kami Carter, created a lively palette of colors and features that enhanced *The Micro Economy Today*’s readability. My thanks to all of them and their supporting staff. I also expect to be eternally grateful to Martin Quinn, who is in charge of marketing *The Micro Economy Today*. I trust he is already out knocking on office doors and setting new sales records.

I also want to express my heartfelt thanks to the professors who have shared their reactions (both good and bad) with me. Direct feedback from these users and reviewers has been a great source of continuing improvements in *The Micro Economy Today*:

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Finally, I'd like to thank all the professors and students who are going to use *The Micro Economy Today* as an introduction to economics principles. I welcome any responses (even the bad ones) you'd like to pass on for future editions.

—Bradley R. Schiller