8TH EDITION

The Micro Economy Today

THE WALL STREET

mart Money

BRADLEY R. SCHILLER

The Micro Economy Today

McGraw-Hill Higher Education 22

A Division of The McGraw-Hill Companies

The Micro Economy Today

Copyright © 2000, 1997, 1994, 1991, 1989, 1986, 1983, 1980 by The McGraw-Hill Companies, Inc. All rights reserved. Printed in the United States of America. Except as permitted under the United States Copyright Act of 1976, no part of this publication may be reproduced or distributed in any form or by any means, or stored in a data base or retrieval system, without the prior written permission of the publisher.

This book is printed on acid-free paper.

234567890 WCK WCK 09876543210

P-E7544E-70-0 NBZI

ISBN 0-07-366274-7 (Wall Street Journal edition)

Editorial director: Mike Junior Publisher: Gary Burke Executive editor: Paul Shensa

Development editors: Marilea Fried; Miller Murray

Marketing manager: Nelson Black Project manager: Eva Strock Production supervisor: Rich DeVitto

Supplements coordinators: Louis Swaim, Florence Fong, Becky Szura

Designer: Amanda Kavanagh Cover designer: Amanda Kavanagh Compositor: York Graphic Services, Inc.

Typeface: Times New Roman Printer: World Color Book Services

Cover illustration by Valerie Sinclair. Copyright © 1993 Dow Jones & Company, Inc. All rights reserved.

Reprinted with the permission of Dow Jones & Company.

Library of Congress Cataloging-in-Publication Data

Schiller, Bradley R., 1943-

[Economy today. Selections]

The micro economy today / Bradley R. Schiller.—8th ed.

p. cm

Together with the macro economy today comprises a 2 vol. ed. of:

The economy today. 8th ed.

Includes index.

ISBN 0-07-366273-9 (alk. paper) 1. Microeconomics. I. Title.

HB172.S3625 1999

338.5—dc21

99-16176

CIP

ABOUT THE AUTHOR

Bradley R. Schiller has over three decades of experience teaching introductory economics at The American University, the University of California (Berkeley and Santa Cruz), and the University of Maryland. He has given guest lectures at nearly 100 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. His B.A. degree, with great distinction, was completed at the University of California (Berkeley) in 1965. He is now a professor of economics in the School of Public Affairs at The American University.

PREFACE

Everyone has high expectations for the twenty-first century. Many people expect the emerging information highway, built of fiber-optic cables and satellite transmitters, to transform the way we communicate, travel, work, and play. Educators foresee virtual classrooms and electronic books replacing college campuses and paper books. Remote access, video conferencing, and distant learning may eventually eliminate the need for classroom interactions, office hours, and even bathing. Everyone wants to jump on the Cyber Express before it leaves the station.

As we embark on a new milennium, however, we should assess not just the *medium* of education but also the *message*. What do we want economics students to learn in the twenty-first century? Is there a twenty-first century paradigm that will make twentieth-century principles as obsolete as analog television (scheduled for extinction in 2006; see Chapter 8)? Or will we discover, as has the burgeoning cable industry, that *content* doesn't evolve as fast as transmission technology? Are any of the economic principles Adam Smith first enunciated back in 1776 relevant in the twenty-first century? Do the lessons of the Great Depression still offer insights for averting macro failures in the new milennium? Has e-commerce obliterated or reinforced the foundations of competitive markets?

The structural revolutions occurring around the world reflect the continuing search for core principles. Nations are shedding ideology in favor of pragmatism. Countries that once looked to central planners to choose the mix of output, production methods, and distribution of income are placing their bets on freer markets and spreading capitalism. In China, the old collective farms now have de facto property rights. Since 1978, the share of farm output sold on the open market has jumped from 8 percent to over 80 percent. In Russia, more than 70 percent of GDP is now generated in the private sector. In Cuba, after a 40-year hiatus, Fidel Castro not only reinstated Christmas, he is now embracing foreign investments and permitting limited entrepreneurship (see WORLD VIEW in Chapter 22). Despite some back sliding toward "recentralization" in China, Russia, and Cuba, the commitment to greater reliance on the market mechanism is irreversible. Thus economic principles, not ideology, are driving most of the world into the twenty-first century.

The increased commitment to economics is also evident on college campuses. As the accompanying IN THE NEWS reports, enrollments in economics classes are surging. There is both a cyclical component and a long-term trend to this surge. As Yale professor Merton Peck observed in the article, "Now that the Cold War is over, economic issues have become the central core of policy debates." The "hot" issue is no longer whether capitalism or communism is more "just," but which mix of market signals and government directives will best promote growth, reduce poverty, and protect the environment.

CENTRAL FOCUS

The practical and policy applications of economic principles have always been the central focus of *The Micro Economy Today*. This book has never discussed widgets or Robinson Crusoe fables. Instead, *The Micro Economy Today* lives up to its title by identifying and analyzing the salient policy issues that concern Main Street, Wall Street, Capitol Hill, and other world capitals. These issues range from the Microsoft antitrust case to the dilemma of budget surpluses and the threat of global warming. Every chapter directly links basic economic principles to headline-capturing issues, enlivening student interest and enhancing the retention of learning.

Policy Focus

IN THE NEWS

Economics Enjoys A Bull Run at Colleges Once Perplexing Subject Is a Top Major for Students

NEW YORK—The dismal science is in vogue again on campus.

After years of trailing history, English and biology as the top undergraduate major, economics is enjoying a surge in popularity with college students, especially at the nation's most elite institutions.

Reasons Behind Trend Why so much interest in a discipline that has been known to induce bouts of nausea in befuddled undergraduates? According to academics, interest in economics as a major has traditionally risen and fallen with the health of the finance industry, the major employer of economics graduates. And with a booming stock market leaving investment bankers, stock pickers and securities analysts among the highest paid professionals in the nation, some college students are hoping to use economics as an entry to Wall Street.

But the swelling ranks of economics majors also reflects more subtle trends, including a sharp reduction in the age at which economics is first introduced to students, stronger mathematical skills among college freshman and heightened interest among all Americans in economic ideas and their impact on everything from wage rates to the price of an airline ticket. . . .

To students of past generations, the ascent of economics up the ivory tower may come as something of a shock. Decades ago, left-leaning scholars held the moral high ground, and the study of markets, commerce and currencies was regarded by many as a less noble, less meaningful pursuit than deconstructing paradigms of power such as race, class or gender.

But for the class of 2002, the Cold War is nothing more than a quickly retreating childhood memory, the questions of military conflict over ideological differences practically moot. If not liberal capitalism, then what? "Now that the Cold War is over, economic issues have become the central core of policy debates," said Yales's Prof. Peck. . . .

"Economics, as it is taught at Yale, is not an ideological subject," he said. "We don't talk about whether capitalists are greedy but rather about the benefits of, say, a fixed exchange rate."

-Tristan Mabry

The Wall Street Journal, Nov. 30, 1998, p. A2. Reprinted by permission of The Wall Street Journal, © 1998 Dow Jones & Company, Inc. All Rights Reserved Worldwide. www.wsj.com

Analysis: The resurgent interest in economics reflects both cyclical factors and longer-term structural changes. Worldwide, people are looking to the market mechanism for better economic performance.

The Three Core Issues

To emphasize the universal elements in these many policy debates, the three core issues of WHAT, HOW, and FOR WHOM are identified at the very outset of the book and serve as an organizing framework. Chapter 2 gives students a graphic overview of how these issues have been resolved in the United States and other countries. In all subsequent chapters, salient policy issues are explicitly discussed within the WHAT, HOW, and FOR WHOM context.

This emphasis on the three core issues is very different from approaches that emphasize a finite set of core principles or topical applications, approaches which are subjective and necessarily incomplete. More importantly, any list of topical applications is ultimately a collection of variants of the three core issues that command universal acceptance. It's more important that students recognize core content than memorize any particular list of applications.

Who Decides—Markets or Government?

This book also emphasizes the importance of the decision mechanisms we use to resolve the core issues. This is the "markets vs. government" debate. Should we let Adam Smith's "invisible hand" steer the economy, or should the government intervene to alter market outcomes? Should nations intervene to "protect" their currencies, or should they let the financial markets alone set international exchange rates? Rather than answering these questions, *The Micro Economy Today* emphasizes the importance of decision mechanisms for our economic welfare. Right up front in Chapter 1, the poten-

tial for *market* failure as well as *government* failure is recognized. No panacea is offered, just a scientific way of thinking about how markets work and why we so often depend on them yet at other times reject them.

As important as the core issues and decision mechanisms are, they won't impress students unless they're taught in a user-friendly and productive way, which is why pedagogy has always been a central concern of this text. In fact, the one adjective invariably used to describe *The Micro Economy Today* is "readability." Professors often express a bit of shock when they realize that students actually enjoy reading the book. (Well, not as much as a steamy 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, and every cartoon is explained and analyzed. Because every feature is also referenced in the text, students actually learn the material rather than skipping over it.

Graphs are *completely* labeled, colorful, and positioned on background grids. Because students often enter the principles course as graph phobics, most graphs are accompanied by synchronized tabular data. Key terms are defined in the margin when they first appear and 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.

As in previous editions, the back of the book includes built-in numerical and graphing problem sets that build on features in each chapter. Grids for drawing graphs are also provided. Each entire problem set is detachable and includes answer boxes that facilitate grading.

NEW TO THIS EDITION

Besides the more explicit definition and more thorough integration of core issues, this eighth edition includes substantial changes.

One of the most visible changes in this edition is a new array of cyber features.

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

- URLs for Highlighted Material Internet addresses are also provided for the IN THE NEWS and WORLD VIEW features. Professors and students can use these URLs to pursue policy issues in more depth.
- Internet Problems The end of each chapter includes two Web Activities that send students to the Internet for data or issues to use in real-world applications of key concepts.
- Web-Based Exercises Although not physically within the text, but directly tied to
 it, a new Web site offers additional exercises and applications. This cyber tutor is
 available only on the Web and supplements the paperback Study Guide and the
 CD-based DiscoverEcon tutorial.

Chapters 17 and 19 are completely new to this edition.

Financial Markets. 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' New World expedition and ends with a look at today's venture

User-Friendly Pedagogy

Cyber Features

New Chapters

capitalists. This chapter can be shrink-wrapped with *The Macro Economy Today* paperback if desired.

Income Transfers. Chapter 19, covering Social Security and welfare programs, is a complement to Chapter 18, which examines tax systems. Emphasis is on the equity vs. efficiency dilemma that lies at the core of the tax-and-transfer system. Implicit marginal tax rates, labor supply elasticities, and moral hazard are featured concepts.

Extensively Revised

In addition to new Chapters 17 and 19, extensive revisions and new developments in technology and policy greatly transform the other chapters.

Cyber Commerce. The growing impacts of cyber commerce can't be ignored; we now have to rethink concepts of market structure and entry barriers. Accordingly, the new Economy Tomorrow section in Chapter 7 explores how cyber retailers and virtual malls are intensifying competition.

Globalization of Markets. Cyber retailing extends the virtual mall beyond national boundaries, broadening the scope for competition. The trend toward a unified global market is also being accelerated by global (WTO) and regional (NAFTA, EU) pacts that reduce trade barriers. Chapter 20 (International Trade) and Chapter 21 (International Finance) emphasize these phenomena.

Deregulation. Yes, competitive electricity rates are coming to a socket near you. Chapter 12 discusses how the interconnection of regional power plants with high-voltage transmission lines has transformed the structure of the electric utility industry. The chapter also examines how technology, deregulation, and new competition are transforming telecommunications services and prices.

Pollution and Global Warming. Chapter 13, "Environmental Protection," now takes a detailed look at how pollution permits are priced and why they reduce clean-up costs. New material on benefit/cost appraisals highlights the concept of optimal pollution. The concluding The Economy Tomorrow section assesses the unique externality problem associated with global warming.

More Applications

Real-world applications rather than fanciful illustrations have long been a differentiating feature of *The Micro Economy Today*. This edition extends that model with scores of new domestic and global applications. Chapter 1 sets the tone by linking North Korea's food shortage to its massive military expenditures, a modern-day guns versus butter tradeoff. The broader question of decision mechanisms is illustrated via the 1999 Heritage "freedom" rankings of the world's nations, Cuba's nascent small business sector, and the Microsoft antitrust case. But that's just for starters; later chapters cover everything from the recent creation of the euro currency to the use of the federal budget surplus to "save" Social Security. These real-world applications are within the body of the text itself, in highlighted IN THE NEWS and WORLD VIEW features, in discussion questions, and in the end-of-book problem sets. A special section of the Test Bank provides questions on the boxed applications.

PROVEN FEATURES FROM PRIOR EDITIONS

Distinctive Chapters

The Micro Economy Today offers full-chapter coverage of many topics that some texts omit completely and no other text offers in their entirety. These distinctive chapters include the following.

xiii

Profile of the Economy. Most students are woefully ignorant of the dimensions of the U.S. economy, so we professors have an obligation to teach some of the underlying facts of economic life as well as theory. Chapter 2 fulfills this responsibility with a descriptive overview of major economic outcomes, organized around the core issues of WHAT, HOW, and FOR WHOM. Numerous global comparisons highlight the unique features of the U.S. economy.

Competitive Market Dynamics. 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 very different coverage. *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 (see photo page 173) to the 1998 iMac (see photo page 182). 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 Farm Economy. Perhaps because less than 2 percent of the population still farms, many texts have eliminated discussion of the farm economy. Yet the farm sector is a critical source of U.S. exports and affects prices across a range of related industries. Moreover, the Asian crisis set off another recession for U.S. farms in 1998–1999. The farm sector provides great illustrations of competitive markets and the moral hazards that often accompany government aid.

As noted earlier, *The Micro Economy Today* teaches real-world economics. As the core issues are woven into the narrative, they are enhanced and supported by authentic examples.

IN THE NEWS. These boxed applications focus on domestic hard news events that illustrate key concepts. All the features are annotated and explicitly referenced in the text. Favorites in micro include the 1998 tobacco settlement (page 95), Pepsi's antitrust suit against Coke (page 199), JNCO's "teen cool" jeans (page 236), President Clinton's year 2000 minimum wage proposal (page 317), and Disney CEO Michael Eisner's \$771 million compensation package (page 321).

WORLD VIEWS. The WORLD VIEWS add a global dimension to the real-world applications. Chapter 1 sets the tone with three WORLD VIEWs covering North Korea's guns versus butter trade-off (page 10), the Heritage Foundation's Index of Economic Freedom (page 14), and Cuba's small business sector (page 16). Later favorites include cigarette smuggling (page 96), OPEC's continuing quest to wring monopoly profits out of the oil industry (page 221), the Rolling Stones' decision to skip England on their 1998–1999 world tour so as to escape high taxes (page 367), and the economic implications of an aging world (page 390). As do the IN THE NEWS boxes, all WORLD VIEWS include explanatory captions and are discussed within the body of the text.

The Economy Tomorrow. Every chapter ends with an Economy Tomorrow capsule that challenges students to assess the implications of core economic ideas. Chapter 1 considers the wisdom of both macro (Federal Reserve rate setting) and micro (Microsoft antitrust suit) intervention. Chapter 2 challenges the student to decide whether the market or the government can best resolve the residue of problems in our otherwise prosperous economy. In the international section, Chapter 20 assesses how and why the global market is becoming more integrated, and Chapter 21 considers the limitations of future currency bailouts.

Great Applications







www.mhhe.com/ economics/schiller

The Micro Economy Today's Web site has been expanded to include even more features that both instructors and students will find engaging and instructive. An Online Learning Center is set up in an easily accessible chapter-by-chapter format. Each chapter in the Learning Center includes a self-quiz with instant grading, a set of Frequently Asked Questions, a chapter summary and the key terms and definitions from the text, and PowerPoint slides.

The Learning Center also includes links to chapter-related articles in the popular online press, the text's Web Activities, and WWWebEcon/, Web-based collaborative projects relevant to each chapter and/or section in the text. Two questions per chapter make use of the EconGraph kit, a tool that lets a student create a graph online and e-mail it to the instructor.

Inside the Beltway includes links to Web sites that complement the text's policy orientation. The Email the Author section enables students to contact me electronically. We'll also use the Web site to post periodic News Flashes and a compendium of links to online economics news sources. In addition to all the above features, the password-protected Instructor's area of the Web site includes the Instructor's Resource Manual and information on McGraw-Hill Economics-related software and supplementary material.

Be sure to consult the Web site frequently for new URLs and policy updates.

.

NEW AND IMPROVED SUPPLEMENTS

Test Bank. Linda Wilson (University of Texas at Arlington) and Tom Anderson (Montgomery College, Maryland) expanded and completely updated the Test Bank. Materials released as a supplementary test bank to the last edition are included, and over one-third of the questions are completely new. All questions are coded by complexity and correlate to the text. The computerized Test Bank is available in Brownstone's Diploma 97, sophisticated test-making software that ensures maximum flexibility in test development, including the reconfiguration of graphing exercises. Both the print and computerized Test Banks will be offered in micro and contain over 3000 questions.

PowerPoint Presentations. Anthony Zambelli of Cuyamaca College created new presentation slides for the eighth edition. Developed using Microsoft PowerPoint software, these slides are a step-by-step review of the key points in each of the book's 22 chapters. They are equally useful to the student at home or in the computer lab. The more than 3000 slides are offered in the split format for greatest convenience.

Overhead Transparencies. Approximately 200 of the *The Economy's Today*'s key tables and graphs have been reproduced as full-color overhead transparency acetates.

Instructor's Resource Manual. Kevin Klein of Illinois College revised the Instructor's Resource Manual. It offers a capsule summary and outline of each chapter, "lecture launchers" to stimulate class discussion, and media exercises to extend the analysis. New features include a section that details common misconceptions students hold regarding the material in a particular chapter, Internet exercises, and a ready-to-use quiz of 15 multiple-choice and true/false questions. The IRM also includes answers to all the text discussion questions and problems.

Issue Modules. For instructors who want to expand beyond the book's contents, we also offer chapter-length (20–30 pages) modules on topics of special interest. The modules look like text chapters but are individually bound and can be made available at no cost to students if ordered in conjunction with the book. Modules currently available include

- Welfare: Too Much or Too Little?
- Social Security: The Economics of an Aging Population

Instructor Aids

- Budget Deficits: Outcomes, Process, Theory
- Financial Markets: The Links to Economics Questions
- The California Economy Today
- Poverty in America
- The Economics of Discrimination
- Social Justice in the Political Economy
- The Texas Economy Today

These modules can be ordered shrink-wrapped with the text or can be incorporated into a bound custom-designed book. Ask your local McGraw-Hill sales representative for details.

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, the author writes 2-page News Flashes describing major economic events and relating them to specific text references. These items provide good lecture material and can be copied for student use. Adopters of the *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.

At the instructor's discretion, students may directly use the Issue Modules and News Flashes described above. In addition, the following supplements can facilitate learning.

Study Guide. Linda Wilson and Tom Anderson, the same authors who produced our test banks, revised the Study Guide, which offers extensive self-study exercises with succinct explanations of key points. Each chapter contains Quick Review, Learning Objectives, Using Key Terms, True or False and Multiple Choice questions, Problems and Applications, Common Errors, and Answers. Approximately half the content in each chapter is new. The Study Guide is available in macro and micro splits as well as in the full-text version.

Student Software. The DiscoverEcon software, developed by Gerald Nelson of the University of Illinois at Urbana—Champaign, is an exciting complement to the text, 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 a page reference in the text. Opportunities for active learning abound. All chapters contain a multiple-choice quiz, essay questions with online links, and match-the-terms exercises. Most chapters have numerous opportunities for playing with key concepts presented in the text.

Interactive graphs, animated charts, and live tables let you and your students explore ideas, experiment with alternatives, and test your knowledge. Links to the glossary and text references clarify key concepts, and Web-based exercises give students a direct link to the site in question. Exercises are graded immediately, and the results can be submitted to the instructor either on paper or electronically. The software comes on a single CD that can be installed on and run over a network.

ACKNOWLEDGMENTS

Once again I am indebted to the many people who cajoled, motivated, and helped me to develop another edition of *The Micro Economy Today*. I am especially grateful to my collaborators on the package of supplementary aids. Linda Wilson, Tom Anderson, Anthony Zambelli, Gerald Nelson, and Kevin Klein all developed supplements that facilitate both teaching and learning. Diane Keenan and Mark Maier wrote the end-of-chapter Web activities and created the content for WWWebEcon/. I am also indebted

Student Aids

to the many instructors who took the time to review and critique the seventh edition or draft versions of this eighth edition. The reviewers include:

Steve Abid

Grand Rapids Community College

Peter Barth

University of Connecticut

Suzanne Boyles

California State University, Fresno

Lawrence Daellenbach

University of Wisconsin, LaCrosse

Diane Flaherty

University of Massachusetts, Amherst

Roger Frantz

San Diego State University

Linda Ghent

East Carolina State University

Barry Harwoth

University of Louisville

Dave Hickman

Frederick Community College

Diane KeenanCerritos College

Jennifer Long

Keene State University

Carol McDonough

University of Massachusetts, Lowell

Stephen McGary Ricks College

Frank Murtaugh
Norwich University

Melinda Nish

Salt Lake Community College

Jeffrey Rous

University of North Texas

Dawn Saunders
University of Vermont
Ted Scheinman

Mount Hood Community College

David Sisk

San Francisco State University

Frederica Shockley

California State University, Chico

Mike Walsh

Kellogg Community College

Ken Woodward
Saddleback College

This eighth edition also benefitted from the efforts of the first-rate team at Irwin/McGraw-Hill. Paul Shensa, the executive editor, and I have worked well together for 20 years, prodding each other to go the extra mile. The development editors, Marilea Fried and Miller Murray; the project manager, Eva Strock; the production supervisor, Pam Auguspurger, all kept this eighth edition on track. Amanda Kavangh deserves mention for her attractive design. To all these individual I offer my heartfelt appreciation.

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

Bradley R. Schiller

ECONOMICS ON THE WORLDWIDE WEB

IN GENERAL

Bob Parks' A Random Walk Around Economics on the Net

wuecon.wustl.edu/~bob/econwalknet.html

Paul Krugman

http://web.mit.edu/Krugman

NetEc netec.wustl.edu/local/NetEc.html

Nicolas Economides' The Economics of Networks

http://raven.stern.nyu.edu/networks

Resources for Economists on the Internet

econwpa.wustl.edu/EconFAQ/Econ.FAQ.html

Dismal Sciences www.dismal.com

Hal R. Varian's The Information Economy

http://sims.berkelev.edu/resources/infoecon

The Mining Company economics.miningco.com

Brad DeLong's Economic Book Reviews

http://econ161.berkeley.edu

Classroom Expernomics

www.marietta.edu/~delemeeg/expernom.html

Jokes About Economists and Economists

www.etla.fi/pkm/JokEc

Computer Aided Instruction in Economics

userwww.sfsu.edu/~bjblecha/cai.htm

The Economist

www.economist.com

Economic Education, EcEdWeb

http://ecedweb.unomaha.edu

Econ Teaching Resources

woodrow.mpls.frb.fed.us/econed/class/econsite.html

The Wall Street Journal

www.wsi.com

AmosWorld amos.bus.okstate.edu

Economics Working Paper Archive (EconWPA)

econwpa.wustl.edu/wpawelcome.html

The Financial Times

www.ft.com

Journal of Economic Literature and EconLit (JEL)

www.econlit.org

The Brookings Institute

www.brookings.org

CARL's UnCover uncweb.carl.org

sci.finance.abstracts

www.public.iastate.edu/~arnie/sci-finance-abstracts.htm

Economics Research Network (ERN) (part of SSRN)

www.ssrn.Com

Student Economic Review www.bess.tcd.ie/ser.html

IDEAL (Academic Press)

www.apnet.com/www/ap/aboutid.htm

Forbes Magazine

www.forbes.com

Applied Economics www.chapmanhall.com/ae

B>Quest (Business Quest) www.westga.edu/~bquest

Roland's Overview of Conferences and Meetings on

Economic Theory

www.wiwiss.fu-berlin.de/w3/w3bester/roland/econ_co.htm

Economics Departments, Institutes and Research Cen-

ters in the World (EDIRC)—Associations and Societies

www.er.uqam.ca/nobel/rl4160/economics/assocs.html

American Economic Association (AEA)

www.vanderbilt.edu/AEA

History of Economics Society

es.muohio.edu/~HisEcSoc/other_resources.shtml

History of Economics Internet References

cfec.vub.ac.be/cfec/hope.htm

"Win Ben Stein's Money"

www.comcentral.com/bstein

Regional Science Association (RSA)

gopher://olymp.wu-wien.ac.at:70/11/.inst/.iir/.rsa

International Economics and Philosophy Society

www.bath.ac.uk/Centres/Ethical/ieps.htm

Association for Evolutionary Economics

www.cba.unl.edu/additional/ecafee.html

American Law and Economics Association (ALEA)

webserver.law.yale.edu/alea/alea.htm

Southern Economic Association (SEA)

bubba.ucc.okstate.edu/economics/journal/south1.html

Job Openings for Economists

www.eco.utexas.edu/joe

Eastern Economic Association

www.iona.edu/orgs/eea.htm

Western Economic Association International

www.weainternational.org

National Association of Business Economists (NABE)

www.nabe.com

MACRO

EconData

www.inform.und.edu:8080/EdRes/Topic/Economics/

EconData

Barter Is Frugal

http://frugalliving.miningco.com/msubbar.htm?pid~2714&

Bureau of Economic Analysis www.bea.doc.gov

NBER's Macro-Historical Database

www.nber.org/databases/macrohistory/contents/index.html

National Economic Research & Data Services (NERDS)

www.econ-line.com

^{*}Web addresses change often. Consult our Web site (www.mhhe.com/economics) for timely updates.

Centre for Policy Modelling www.fmb.mmu.ac.uk/cpm Country and City Databooks, Interactive Data Resources, University of Virginia Social Sciences Data Center

www.lib.virginia.edu/socsci/ccdb

Economic Time Series Page

bos.business.uab.edu/data/data.htm

WEFA Group www.wefa.com

Panel Study on Income Dynamics

www.umich.edu/~psid

Economic History Services Operated By the Cliometric

Society cs.muohio.edu

Society of Italian Economic Historians

italia.hum.utah.edu/gruppo/vasta/welcome.htm

Board of Governors of the Federal Reserve System

www.bog.frb.fed.us

All Other Federal Reserve Banks

www.bog.frb.fed.us/otherfrb.htm

Central Bank Resource Center

www.patriot.net/users/bernkopf

Banking on the WWW

www.wiso.gwdg.de/ifbg/banking.html

Federal Deposit Insurance Corporation (FDIC)

www.fdic.gov

World Bank www.worldbank.org

Inter-American Development Bank www.iadb.org

Bank of Japan www.boj.or.jp/en/index.htm

FINWeb www.finweb.com

NETworth networth.galt.com

Market Broadcasting Corporation—Real Time FX,

Fixed Income, and Money Market Data

www.petrader.com

Financial Data Finder at Ohio State

www.cob.ohio-state.edu/dept/fin/osudata.htm

Wall Street Research Net www.wsrn.com

Briefing by Charter Media www.briefing.com

Security APL QuoteServer www.secapl.com/cgi-bin/qs

New Zealand Investment Center www.nzinvest.com

Iowa Electronic Markets www.biz.uiowa.edu/iem

The Virtual Stock Market Game

virtualstockexchange.com

Dr. Ed Yardeni's Economics Network www.yardeni.com

Economic Growth Resources

www.nuff.ox.ac.uk/Economics/Growth

UK Chapter of the Society for the Advancement of So-

cioeconomics (SASE)

www.bath.ac.uk/Centres/BUCEP/SASE

Centre for Economic Performance (CEP), London

School of Economics cep.lse.ac.uk

IKE Group (Aalborg University, Denmark)

www.business.auc.dk/ike/ike.html

The Quantitative Macroeconomics and Real Business

Cycle Home Page www.er.uqam.ca/noble/r14160/rbc

Economic Chart Dispense

bos.business.uab.edu/charts.htm

ESRC Macroeconomic Modelling Bureau (U.K.)

www.csv.warwick.ac.uk/~mbras

FAIRMODEL fairmodel.econ.yale.edu

MICRO

Economic Science Association

www.econlab.arizona.edu/esa

Merrill Lynch

www.merrilllynch.com

Inter-university Consortium for Political and Social

Research (ICPSR) www.icpsr.umich.edu

Centre for Economic Learning and Social Evolution

(ELSE) ada.econ.ucl.ac.uk

Pool Listing Service in Game Theory

fismat.dima.unige.it/citg/citg.htm

Economic Science Laboratory, Univ. of Arizona

www.econlab.arizona.edu

Morgan Stanley

www.ms.com/gef.html

Center for Rationality www.ma.huji.ac.il/~ranb

Openair-Market Net: The World Wide Guide to Farmers' Markets, Street Markets, Flea Markets and Street

Vendors

www.openair.org

Vanderbilt University Antitrust Policy

www.Antitrust.org

Bureau of Labor Statistics (LABSTAT)

stats.bls.gov/blshome.html

Model User Group International (CGE Modeling)

watarts.uwaterloo.ca/~mug/index.html

Communications for a Sustainable Future

csf.colorado.edu

Microsoft

www.microsoft.com

FEDSTATS www.fedstats.gov

The Federal Web Locator www.law.vill.edu/fed-agency

EDGAR (SEC) www.sec.gov/edgarhp.htm

U.S. Department of Commerce (STAT-USA)

www.stat-usa.gov

Government Information Sharing Project

govinfo.kerr.orst.edu

Economic Statistics Briefing Room (ESBR)—White

House

www.whitehouse.gov/fsbr/esbr.html

CIA Publications and Handbooks

www.odci.gov/cia/publications/pubs.html

U.S. Department of Justice

www.usdoj.gov

National Transportation Statistics www.bts.gov

Energy Resources Board (DOE)

www.eia.doe.gov/energy

U.S. Census Bureau www.census.gov

AFL-CIO

www.aflcio.org

Integrated Public Use Microdata Sample (IPUMS)

www.hist.umn.edu/~ipums

International Society for Ecological Economics

kabir.umd.edu/ISEE/ISEEhome.html

Centre for Economic and Social Studies for the Environment (CESSE) www.ulb.ac.be/ceese/french/ceese.html Antitrust Policy: An online resource linking economic

research, policy issues, and cases www.antitrust.org

USDA Economics and Statistics System (Cornell University) usda.mannlib.cornell.edu/usda

Agricultural Economics Virtual Library

www.aeco.ttv.edu/aecovl

Food and Agricultural Organization of the UN www.fao.org

American Agricultural Economics Association (AAEA) www.aaea.org

USDA Agriculture Economic Research Service

www.econ.ag.gov

Australian Agricultural and Resource Economics Society Inc. (AARES)

varra.vicnet.net.au/~archa/aares/aares.htm

Social Security Administraton (OSS-IS) www.ssa.gov

The Health and Retirement Study (HRS) and Asset and Health Dynamics Among the Oldest Old (AHEAD)

www.umich.edu/~hrswww

INTERNATIONAL

The Office of the United States Trade Representative

www.ustr.gov

NAFTAnet Services

www.nafta.net

United States International Trade Commission (USITC)

www.usitc.gov

International Monetary Fund (IMF) www.imf.org **PACIFIC Exchange Rate Service Retrieval Interface**

pacific.commerce.ubc.ca/xr

The China Council for the Promotion of International Trade (CCPIT)

www.ccpit.org

Getting Around the Planet

www.olsen.ch/cgi-bin/exmenu/pathfinder

International Trade & Business WWW Reference Pages

pacific.commerce.ubc.ca/trade

The Global Trade Analysis Project (GTAP)

www.agecon.purdue.edu/gtap/index.htm

U.S. Census Bureau, Foreign Trade Division

www.census.gov/ftp/pub/foreign-trade/www

Global Financial Data www.globalfindata.com

OuoteCom Data Service www.quote.com

Statistics Canada www.statcan.ca

Canadian Economics Association (CEA)

economics.ca

AmchamNet—American Chamber of Commerce-

Brazil

www.amcham.com.br

Organisation for Economic Co-operation and Develop-

ment

www.oecd.org

Bank of Hawaii Economic Research Center

www.boh.com/econ

Australian Bureau of Statistics www.statistics.gov.au

New Zealand Treasury www.treasury.govt.nz

InTechTra's Hong Kong Stocks Reports

www.asiawind.com/pub/hksr

Turkish Economics Page

www.siue.edu/~itanris/econtr.html

Israel Central Bureau of Statistics

www.cbs.gov.il/engindex.htm

Finnish Society for Economic Research

www.hkkk.fi/~fecons

Nouriel Roubini

www.stern.nyu.edu/~nroubini/asia/AsiaHomepage.html

The Research Institute of the Finnish Economy

(ETLA)

www.etla.fi

Eurostat europa.eu.int/eurostat.html

European Economic Association

www.hec.unil.ch/prague/eea/premier.htm

Euro Internet fgr.wu-wien.ac.at/nentwich/euroint2.htm

Carolina Population Center (UNC—Chapel Hill)

www.cpc.unc.edu

Central European Regional Research Organization

(CERRO) gopher://olymp.wu-wien.ac.at:70/11/.cerro.ind

German Frederal Statistical Office

www.statistik-bund.de/e home.htm

REESweb: Russian and East European Studies-

Business, Economics, and Law Resources

www.pitt.edu/~cjp/rees.html

CONTENTS IN BRIEF

Preface vii

CHAPTER 1	Economics: The Core Issues 1	
	APPENDIX: USING GRAPHS 21	
CHAPTER 2	The U.S. Economy: A Global View	26
CHAPTER 3	Supply and Demand 42	
CHAPTER 4	The Public Sector 65	

PART 1 PRODUCT MARKETS: THE BASICS 85

CHAPTER 5 The Demand for Foods 86

APPENDIX: INDIFFERENCE CURVES 110

CHAPTER 6 The Costs of Production 117

PART 2 MARKET STRUCTURE 143

CHAPTER 7 The Competitive Firm 144
CHAPTER 8 Competitive Markets 168
CHAPTER 9 Monopoly 187
CHAPTER 10 Oligopoly 208
CHAPTER 11 Monopolistic Competition 234

PART 3 REGULATORY ISSUES 247

CHAPTER 12 (De)regulation of Business 248 **CHAPTER 13** Environmental Protection 268 **CHAPTER 14** The Farm Problem 286

PART 4 FACTOR MARKETS: BASIC THEORY 301

CHAPTER 15 The Labor Market 302
 CHAPTER 16 Labor Unions 324
 CHAPTER 17 Uncertainty, Risk, and Financial Markets 342

PART 5 DISTRIBUTIONAL ISSUES 361

CHAPTER 18 Taxes: Equity vs. Efficiency 362CHAPTER 19 Transfer Payments: Welfare and Social Security 379

PART 6 INTERNATIONAL ECONOMICS 395

CHAPTER 20 International Trade 396
 CHAPTER 21 International Finance 419
 CHAPTER 22 The New Capitalist Revolutions: Russia, China, Cuba 438

Glossary G-1 Index I-1 Problem Set P-1