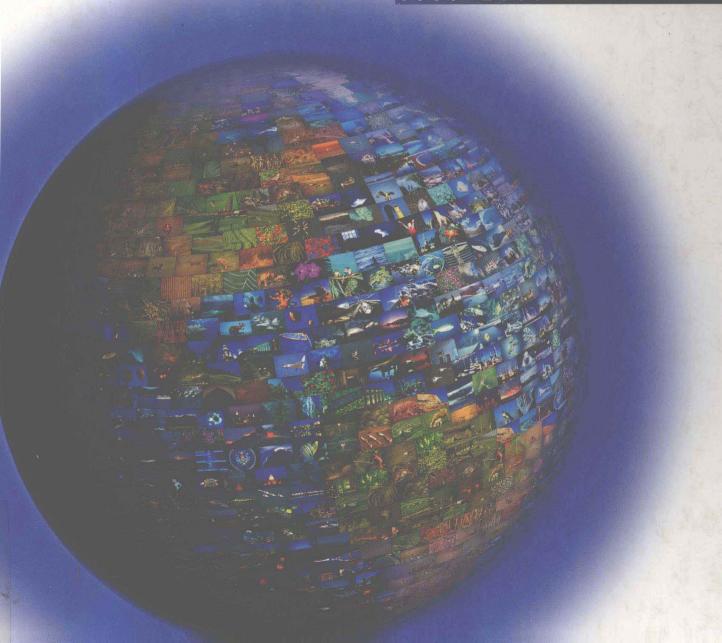
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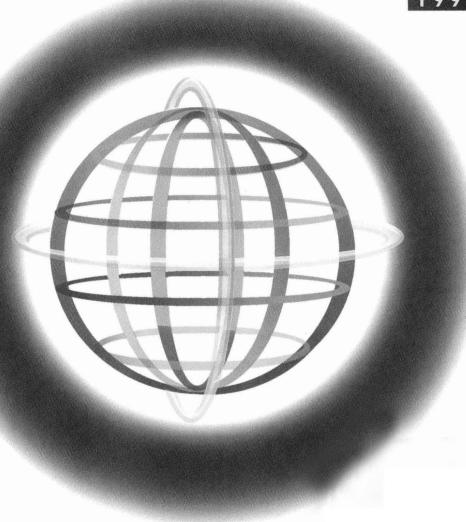
# Economics Today

1999-2000 EDITION



# **Economics Today**

1999-2000 EDITION



ROGER LEROY MILLER

INSTITUTE FOR UNIVERSITY STUDIES, ARLINGTON, TEXAS



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## FROM THE AUTHOR

The 1999–2000 Edition of *Economics Today* presents economic principles within the context of sweeping changes occurring in the economic landscape. These changes, including the "wiring" of the economy, have prompted me to revise this market-leading textbook in two years instead of the usual three. Alongside changes in the economy are the dramatic new approaches to teaching and learning introductory economics. The 1999–2000 Edition responds to these changes with significant revisions to the text and supplements.

In the textbook you will find all new contemporary issues presented in a hallmark feature, Issues and Applications, at the start and end of each chapter. Because economic problems are being influenced by today's "wired world," I have also added new Cyberspace Examples throughout the text and a new Chapter 35, "Cybernomics." In addition, every chart, table, and graph has been revised to reflect the most recent data available.

This new edition also responds to the latest teaching methods to enhance your lectures and aid student learning. Many of you have been asking for PowerPoint slides. Accompanying this text is a comprehensive, dynamic PowerPoint Lecture Presentation system of key terms and concepts and animated graphs from the text. In addition, the 1999–2000 Edition is accompanied by a rich variety of economic experiments to involve students in testing economic theory.

To explore economic theory and real-world applications, students will receive the Economics in Action, 1999–2000 Edition, CD-ROM with every purchase of a text. This interactive software uses dynamic graphs, sound effects, and step-by-step tutorials to guide students in their understanding of economic concepts.

In addition, Internet exercises and a Web site featuring practice quizzes will get students on line to test and expand their knowledge.

I am grateful for the extensive feedback received from reviewers, focus groups, and students, which continues to shape and enhance *Economics Today*. You may reach me at **www.econtoday.com** to share your feedback and suggestions for improving the text and supplements package.

Roger LeRoy Miller

Sandra Rahman John Rapp Gautam

Raychaudhuri
Ron Reddall
Mitchell Redlo
Charles Reichhelu
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Ray C. Roberts
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Alex Yguado
Alex A. Yguado
Paul Young
Shik Young
Mohammed Zaheer
Ed Zajicek
William J. Zimmer Jr.

No author alone can complete a new large-scale revision of a textbook. I was helped by a hard-working group of people, from start to finish. My editor at Addison Wesley, Denise Clinton, provided assistance in all aspects of this project. My developmental editor, Mary Draper, helped me make many important decisions about the direction of this revision. She also managed many of the new supplements and the revisions of old. Deborah Kiernan saw to the production details for each and every print supplement, as did Melissa Honig for all of the multimedia supplements, including the major task of getting the CD-ROM out on time and without errors. My production editor, Nancy Fenton, probably spent more time talking, faxing, and e-mailing me than she would have preferred, but the results are certainly worth all of her efforts, I believe. My long-time copy editor, Bruce Emmer, came through again and made my prose as smooth as possible. To the above-mentioned Addison-Wesley team members and all of the others who have helped me, I thank you and look forward to working with you again.

Many of my colleagues worked with me intimately in redoing or providing new important supplements. Dan Benjamin updated the *Internet Activities* as well as added ones for each of the 35 new *Issues and Applications*. David VanHoose worked tirelessly on the new interactive CD-ROM and finished it on time in the face of time-consuming technical issues. Andy Dane again made masterful changes in the *Instructor's Manual* and the *Lecture Outlines with Transparency Masters*. Steve Smith, Jeff Caldwell, and Mark Mitchell came up with an incredibly useful PowerPoint presentation system for this edition. Randall Parker worked tirelessly on new test questions and revisions of old. Denise Hazlett provided a state-of-the-art active learning guide to go along with this edition. To these professors I extend a special note of appreciation.

As always, I wish to thank Sue Jasin of K&M Consulting for her expert manuscript preparation as well as camera-ready copy for some of the supplements.

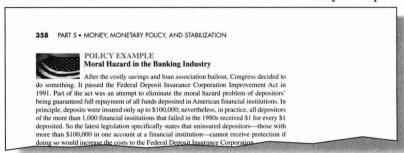
Keeping with the cyberage, and because I always enjoy reading suggestions about what to do in future editions, you and your students can contact me directly via my Web site at: www.econtoday.com

Roger LeRoy Miller

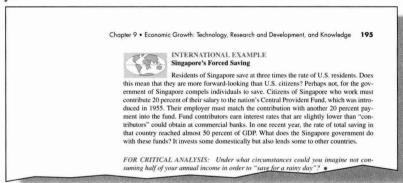
# From cover to cover, you'll find current, provocative examples that expand your students' understanding of economic principles and problems.

**Thinking Critically About the Media.** Thinking Critically About the Media offers a twist on typical news reporting and encourages students to think critically about what they hear reported in the news. These boxed features also keep students abreast of recent newsmaking issues. See page 48.

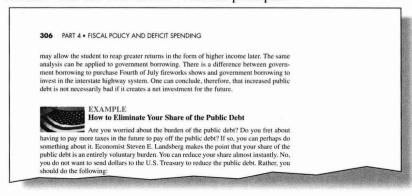
**Policy Examples.** Many of the economic discussions presented by the media involve important policy issues. In the 1999–2000 Edition, students are exposed to important policy questions on both the domestic and international fronts in over 30 Policy Examples.



**A World Of Global Examples.** Over 50 international examples emphasize today's global economy.



**Examples Closer to Home.** More than 50 thought-provoking and relevant examples highlight U.S. current events and demonstrate economic principles.

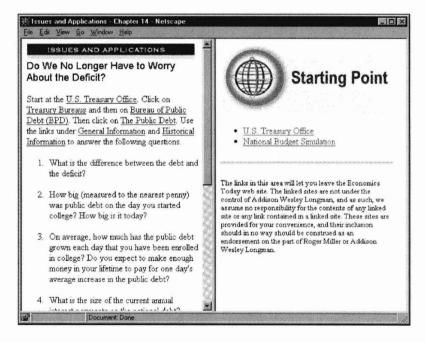


The 1999—2000 Edition of *Economics Today* highlights the dramatic changes technology has made to the economic landscape. Fresh, new examples throughout the chapters bring relevance to the changing world of economics.

**Current Data.** Every chart, table, and graph in the book has been updated to reflect the most recent data available.

**NEW!** www.econtoday.com. The *Economics Today* web site provides on-line access to innovative teaching and learning tools.

- The Weekly Student Quiz tests students' understanding of key concepts. After completing each multiple-choice quiz, students quickly receive quiz results and are guided to appropriate sections of the text if they need further study.
- The Practice Exam is designed to test students' readiness for a midterm or final exam.
   The Practice Exam offers immediate test results and suggestions for students on how to improve their grades.
- Nearly 100 Internet Activities, organized by chapter and referenced with an icon in the
  margins of the text, will build students' research skills and reinforce key concepts. The
  Internet Activities can be accessed from the PowerPoint Lecture Presentations for inclass or group discussion.
- Ask the Author gives professors and students immediate access to Roger L. Miller to ask questions and give feedback on the text or supplements.
- All the URLs from Interacting with the Internet are kept current and organized by chapter.

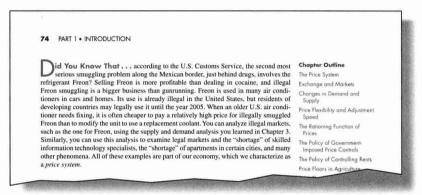


### PEDAGOGY WITH PURPOSE

The 1999-2000 Edition of Economics Today is loaded with time-tested pedagody that helps students apply what they learn.

**For Critical Analysis.** At the end of each example, students are asked to "think like economists" and answer the "For Critical Analysis" questions. The answers to all questions are found in the Instructor's Manual. See page 53.

**Did You Know That...?** Each chapter starts with a provocative question to engage students and lead them into the content of the chapter.



**Preview Questions.** On the first page of each chapter, several questions are posed and then fully answered at the end of the chapter. See page 733.

**Graphs.** Articulate and precise, the four-color graphs illustrate key concepts.

**Key Terms.** Key terms are printed in bold type and defined in the margin of the text the first time they appear.

**Concepts in Brief.** At the end of each major section, Concepts in Brief summarizes the main points of the section to reinforce and test learning.

**Chapter Summary.** Every chapter ends with a concise but thorough summary of the important ideas of the chapter.

**Problems.** A variety of problems support each chapter, and answers for all odd-numbered problems are provided at the back of the textbook.

# The 1999—2000 Edition is at the forefront of teaching with a broad spectrum of support, from traditional materials to the latest integrated classroom technologies.

**Lecture Outlines with Transparency Masters.** Prepared by Andrew J. Dane of Angelo State University, this lecture system features more than 500 pages of lecture outlines and text illustrations, including numerous tables taken from the text. Its pages can be made into transparencies or handouts to assist student note taking.

**Four-color Overhead Transparencies.** One hundred of the most important tables and graphs from the textbook are reproduced as full-color transparency acetates. Many contain multiple overlays.

**Test Bank One.** This test bank provides over 3,000 multiple-choice questions with answers. It has been developed by Susan G. Mason. The questions have been extensively classroom-tested for a number of years. Randall Parker of East Carolina University enhanced each of the three test banks with questions that cover the new Cybernomics chapter.

**Test Bank Two.** John Lunn of Hope College developed Test Bank Two, which includes over 3,000 multiple-choice questions. These questions have been class-tested by many professors, including Clark G. Ross, coauthor of the National Competency Test for economics majors for the Educational Testing Service in Princeton, New Jersey.

**Short Essay Test Bank.** As an alternative to the multiple-choice questions presented in the Test Banks One and Two, this completely separate test bank, developed by John Lunn of Hope College, provides short-answer essay questions.

NEW! Computerized Test Banks. The test banks are also available in Test Generator Software (TestGen-EQ with QuizMaster-EQ). Fully networkable, this software is available for Windows and Macintosh. TestGen-EQ's friendly graphical interface enables instructors to easily view, edit, and add questions; transfer questions to tests; and print tests in a variety of fonts and forms. Search and sort features let the instructor quickly locate questions and arrange them in a preferred order. QuizMaster-EQ automatically grades the exams, stores results on disk, and allows the instructor to view or print a variety of reports. Ask your publisher's representative for information about our test preparation service.

**Economic Video Series.** A series of micro and macro videotapes are available based on the award-winning MacNeil/Lehrer business reports. Each segment is reported by Paul Solman, MacNeil/Lehrer's special business correspondent.

#### The macroeconomics videotapes include

- Numbers Crunching
- Balance Act
- · Productivity: Man or Machine
- · Boom or Bust
- Budget Scoring
- The S&L Crisis: In Irreverent History
- · Making Sense of the Sanctum
- European Currency Crisis
- · Steering the Course
- What's the Dollar Worth: The Pros and Cons of Devaluation

#### The microeconomics videotapes include

- Trade-Off: NAFTA
- Heated Up
- Second Look: Prices and Profits
- Taxing or Energizing?
- Beer Wars?
- Special Delivery: Attempt to Unionize Bicycle Messengers in New York
- Factory Fight
- Tax Cutters: Report on Middle Income Americans
- · A Fish Story

**Additional Homework Problems.** For each chapter of the text, more than 20 additional homework problems are provided for homework or in-class assignments in two separate and distinct sets of reproducible homework assignments, Set A and Set B. Many problems involve working with graphs. Written by Eirik Evenhouse and Siobhan Reilly, both of Vanderbilt University, each homework problem is accompanied by suggested answers and is three-hole-punched for insertion into the Instructor's Binder.

**Regional Case Studies for the East Coast, Texas, and California.** Additional case studies, available in either East Coast, Texas, or California versions, can be used for inclass team exercises or for additional homework assignments.

#### FOR THE STUDENT

**NEW!** Student Study Notes for PowerPoint Lecture Presentation. Developed by Jeff Caldwell of Rose State College, the Student Study Notes provide students with an individualized note-taking and study device designed to be used in conjunction with the PowerPoint Lecture Presentation.

**Study Guide.** Available in micro, macro, and complete versions, the Study Guide has been written by the author and includes the following sections:

- Putting the chapter into perspective
- · Learning objectives
- Chapter outlines
- · Key terms
- · Key concepts
- · Completion questions
- True-or-false questions
- · Multiple-choice questions
- · Problems
- Matching questions
- Further notes on working with graphs
- · Case studies
- Glossary of terms defined exactly as in the textbook
- · Answers to problems and questions

**Your Economic Life.** This free booklet is provided with every purchase of *Economics Today*. It is a student guide to economics' practical applications. In this guide, the author takes students through practical problems in the world today to help them see the application of economics to everyday life and to help them analyze economic news.

**ET Computer-Assisted Instruction.** Prepared by Daniel K. Benjamin of Clemson University, this free student software presents additional problems and learning modules for nearly all chapters in the text. The software contains interactive problems and computer-assisted instruction as indicated by the following icon in each chapter. Check out **www.econtoday.com** for more details.



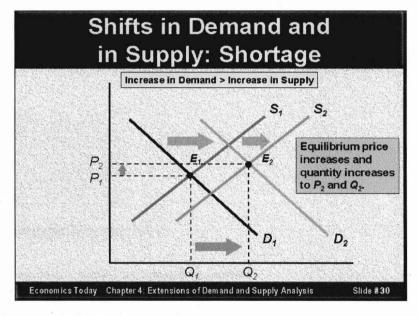
# EXPANSIVE, INNOVATIVE TEACHING/LEARNING PACKAGE

#### FOR THE INSTRUCTOR

NEW! Instructor's Resource Disk (IRD) with PowerPoint Lecture Presentation. The PowerPoint Lecture Presentation is available for Windows 95 and Macin-

tosh computers—all on one IRD. The Power-Point Lecture Presentation was developed by Jeff Caldwell, Steve Smith, and Mark Mitchell of Rose State College. With nearly 100 slides per chapter, the PowerPoint Lecture Presentation animates graphs from the text; outlines key terms, concepts, and figures; and provides direct links to www.econtoday.com for in-class Internet Activities. The IRD also includes the Instructor's Manual in a Word file.

NEW! Economic Experiments in the Classroom. These economic experiments were developed by Denise Hazlett of Whitman College to involve students in actively testing economic theory. In addition to providing a variety of micro and macro experiments, this new supplement offers step-by-step guidelines for successfully running experiments in the classroom.



**NEW!** www.econtoday.com. The *Economics Today* Web site provides on-line access to innovative teaching and learning tools. The Weekly Student Quiz and Practice Midterm Exams test students' understanding of key concepts and directs them to appropriate sections of the text for further study. Students and professors have instant access to the author to share feedback, offer suggestions, and ask questions. Internet Activities, organized by chapter, are designed to build student research skills and reinforce key concepts.

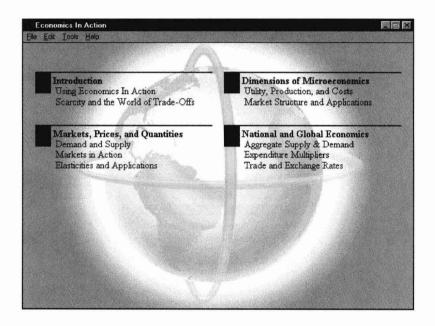
**Pocket Guide to Economics Today for Printed and Electronic Supplements.** This pocket guide is designed to coordinate the extensive teaching/learning package that accompanies the 1999–2000 Edition of *Economics Today*. For each chapter heading, the author has organized a list of print and electronic ancillaries with page references to help organize lectures, develop class assignments, and prepare examinations.

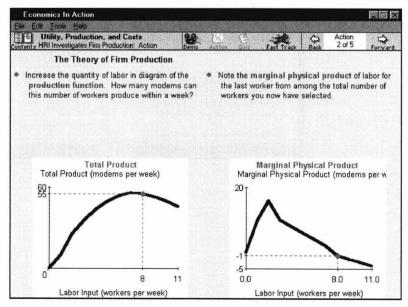
**Instructor's Manual.** Prepared by Andrew J. Dane of Angelo State University, the Instructor's Manual provides the following instructor materials, three-hole-punched for easy insertion into the Instructor's Binder.

- · Chapter overviews, objectives, and outlines
- Points to emphasize for those who wish to stress theory
- · Answers to Issues and Applications critical thinking questions
- Further questions for class discussion
- · Answers to even-numbered end-of-chapter problems
- Detailed step-by-step analysis of end-of-chapter problems
- Annotated answers to selected Student Learning Questions
- · Selected references

**NEW!** Economics in Action 1999–2000 CD-ROM. This interactive tutorial software has been developed by Michael Parkin and Robin Bade of the University of Western Ontario and adapted by David VanHoose of the University of Alabama for use with *Economics Today*. Already used by thousands of introductory economics students, Economics in Action uses dynamic graphs, sound effects, and step-by-step tutorials to guide students in their discovery of relationships between economic theory and real-world applications.

- Graphs from the textbook are re-created for more in-depth exploration and analysis.
- Economic data are presented in shifting curves and dynamic graphical output.
- Detailed, customizable quizzes help students prepare for exams and test their knowledge.





## What's New in the 1999-2000 Edition?

ALL NEW! Issues and Applications. Continuing a hallmark tradition, the 1999–2000 Edition of *Economics Today* includes 35 new Issues and Applications features, one at the end of each chapter. These features encourage students to apply economic concepts and to think critically about how they apply those concepts in everyday life. Each is supported by new suggested Internet Activities that will permit students to continue their exploration.

**NEW!** Full Chapter on Cybernomics. How do technological innovations change economic theory? The new Chapter 35, beginning on page 775, explores how the Information Age affects our study of economics.

**NEW!** Internet Activities. In every chapter, students have the option of going online to build research skills and reinforce their understanding of economics concepts. The Internet Activities were written by Daniel K. Benjamin of Clemson University. When you see this icon in the margin of the text, go to **www.econtoday.com** to gain more insights into related issues.

**NEW!** Cyberspace Examples. Today's "wired" students learn and benefit from advances in technology. New Cyberspace Examples demonstrate the significant impact of technology on our economic choices.



Exercise 7.2
Visit www.econtoday.com for more about the CPI.

#### 334 PART 5 • MONEY, MONETARY POLICY, AND STABILIZATION

7. The Fed regulates the money supply. Perhaps the Fed's most important task is its ability to regulate the nation's money supply. To understand how the Fed manages the money supply, we must examine more closely its reserve-holding function and the way in which depository institutions aid in expansion and contraction of the money supply. We will do this in Chapter 16.

#### FORCED INTO ELECTRONIC BANKING BY THE GOVERNMENT

The federal government is making cyberbanking, or at least a small part of it, a reality for millions of Americans. In an attempt to save on transaction costs, it is trying to force all recipients of federal funds to receive payments electronically, rather than by paper checks. For example, it is attempting to force military contractors who receive millions of dollars, as well as Social Security recipients who receive only thousands of dollars, to have those deposits made directly into their bank accounts. The goal is to eliminate all paper checks, at an estimated savings of over \$500 million during the period 1999 to 2004.

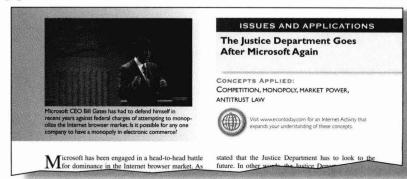
Consider that the federal government makes over 850 million individual payments a year. Until recently, about half were made with paper checks, which cost 42 cents each to process, compared to electronic direct deposits, which cost only 2 cents. To achieve some of these savings, the federal government is turning to the E-Pay network of Visa U.S.A. Companies that receive federal payments must install software that they obtain from Visa. When many companies have the same software, they will surely start settling private them.

### **ECONOMIC PRINCIPLES IN PRACTICE**

**Chapter-Opening Issues.** Each Chapter-Opening Issue motivates student interest in the key chapter concepts with student-friendly examples.

#### **CHAPTER 26** REGULATION AND ANTITRUST POLICY By now, most of you reading this text will PREVIEW QUESTIONS have used a Web browser on the Internet There are basically two competing Web 1. What is a natural monopoly, and how does one browsers today: one developed by arise) 2. If natural monopolies are required to price at Netscape Communications Corporation, marginal cost, what problem emerges? called Navigator, and the other developed 3. What are some means of regulating a natural by Microsoft Corporation, called Internet Explorer. A few years ago, when Netscape 4. Why have economists been reevaluating the government's role as an economic regulator? practically "owned" the Internet browser market, Microsoft decided to compete. The initial versions of Internet Explorer were not so good as Navigator. Little by little, though, Microsoft began to catch up, resulting in two browsers that are more or less equally easy to use and have similar features. Most of the world's computers use the Microsoft-owned Windows operating system. If Microsoft decided to "bundle" a new version of its Internet Explorer with its Windows operating system, could that destroy competition in the browser market? Before you answer this question, you need to know about regulation and antitrust policy.

**Issues and Applications.** Each Issues and Applications feature is linked to the Chapter-Opening Issue and is designed to encourage students to apply economic concepts and think critically about those concepts. Each begins with the concepts being applied and is followed by several critical thinking questions that may be used to prompt in-class discussion. You will find suggested answers to the critical thinking questions in the Instructor's Manual.



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### **ACKNOWLEDGMENTS**

I feel that I am one of the luckiest textbook writers around, for I get the benefit of continuous feedback from professors who use *Economics Today*. I am grateful for the constructive criticisms that you continue to send me. Below I list those of you who generously offered your time to participate in the reviewing process for this edition. Please accept my sincere appreciation.

Mohammed Akacem, Metropolitan State College

John Allen, Texas A&M University Ann AlYasiri, University of Wisconsin, Platteville

Abraham Bertisch, Nassua Community College

Steffany Ellis, University of Michigan–Dearborne

Sandy Evans, St. John's River Community College

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