

Ninth Edition

ECONOMICS TODAY ROGER LeROY MILLER

INSTITUTE FOR UNIVERSITY STUDIES, ARLINGTON, TEXAS

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F0 423 To Dan Benjamin,

Thanks for your many years of encouragement, help, and support in economics and all of the rest. How about three decades more?

R.L.M.

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EXAMPLES

INTERNATIONAL EXAMPLES

Why Are There So Many Brush Fires in Corsica?

The True Cost of the Military Draft in France

Consumption Versus Capital Goods in the United States and Japan

Why Foreign Graduate Students Specialize When Studying in the United States

Cross-Border Shopping in Europe

The Slump in Worldwide Sales of Cigars

Changing Technology and the Supply of Salmon

Mexico's Price Freeze and the Shopping Cops

Rent Controls in Bombay

Are Lighthouses a Public Good?

Chile's Privatized Social Security System

A Booming Business in Facelifts by Russian Plastic Surgeons

A Tale of Two Countries

China Eliminates Saturday Work

Rising Joblessness Worldwide

Hyperinflation

Deflation and Real Interest Rates in Japan

Purchasing Power Parity Comparisons of World Incomes

Growth Rates Around the World

How Does U.S. Productivity Stack Up?

Why Do the Japanese Save So Much?

Innovation in the Japanese Auto Industry

High Interest Rates and Loan Sharks in Naples

Islam and Supply-Side Economics

Public Debt Around the World

Pension Liabilities Around the World

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The Choice Between Cash and Savings Accounts in Colombia

Inflation and Money Growth Throughout the World

The Price Elasticity of Demand for Newspapers

A Pricing Decision at Disneyland Paris

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The Global Coal Market

"We're Just Trying to Keep the Market Stable"

Fuji Film Price Discrimination

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European Merchant Guilds, the Original Craft Unions

Europe's Management-Labor Councils

One Consequence of Privatizing Italian Banks: Loan Sharking

Viager, or Betting on an Early Death (Someone Else's)

Relative Income Inequality Throughout the Richest Countries

Poverty Worldwide and How to Cure It: Suggestions from the UN Summit

Deterioration in the United Kingdom's National Health Care System

The Black Sea Becomes the Dead Sea: The Results of Externalities

Agriculture and an Effective Interest Group

The Importance of International Trade in Various Countries

International Trade and the Alphabet

The Importation of Priests into Spain

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The World Bank and the Development of Poor Nations (or Lack Thereof)

International Policy Examples

Who Should Pay the High Cost of a Legal System?

Measuring Household Production in France and Norway

French Policymakers Ignore Crowding-out Effects

Will the European Union Have Its Way?

Belgium's Diminishing Policy Options

Will the Japanese Bail Out Their Banks?

Can European Policymakers Exploit the Phillips Curve?

Should Ivory Imports Be Banned Worldwide?

Can Citizens Recycle Too Much? The Case of Germany

Should School Tuition Vouchers Be Used in Developing Countries?

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When It Is Rational Not to Learn New Technology

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Garth Brooks, Used CDs, and the Law of Demand

The Future of College Teaching

Dinosaurs and the Price of Amber

Technology and the Death of Middlemen

Ph.D.s Need Not Apply

The Most Progressive Tax System of All: College Financial Aid

No-Fault Divorce and Increased Female Labor Force Participation

The CPI, New Products, and Breakfast Cereals

Correcting GDP for Price Level Changes, 1985-1995

What If the United States Had Grown a Little Bit Less or More Each Year?

Technology and Light

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The U.S. Record over the Past Few Decades

Changes in Investment and the Great Depression

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The U.S. Natural Rate of Unemployment

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Making Executives Own a Share of the Company

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Should Public Libraries Be Shut Down?

Can "Three Strikes" Laws Reduce Crime?

Can the Government Cure Market Failure Due to Asymmetric Information, or Are Lemons Here to Stay?

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Can the FCC Effectively Regulate Cable TV?

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Should Baseball Be Exempt from Antitrust Laws?

Should the Minimum Wage Be Raised to Help Young People?

Should Rent-to-Own Stores Be Regulated?

How Should Antidumping Laws Be Administered?

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Are the Antinatalists Right?

THINKING CRITICALLY ABOUT THE MEDIA

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International Trade

The Real Price of Stamps

Water "Rationing"

Social Security

Taking Russia's Pulse

268 Million Chinese Unemployed

Rich Industrial Nations—Really?

Declining Job Security?

Overworked Americans

Super Bowl Advertising

Avoiding GDP Mania

Productivity as a Prerequisite for International Competitiveness

Do New Technologies Signal the End of Work?

Can Recessions Be Good for the Economy?

The Real Price of Gas

What Will Interest Rates Be Tomorrow?

Small Businesses and New Jobs

Tax Rates and Tax Revenues

Government Cutbacks

Proposed Government Spending "Cuts"

A Return to Barter?

Bailouts That Cost Taxpayers Billions

Pity Those Poor Printing Presses

High Interest Rates and "Tight" Monetary Policy

It's Priceless!

"If They Doubled the Price, We'd Still Drink Coffee"

For Addicts, Price Does Not Matter

Heard on the Street

Profits Increase by \$500 Million!

"They" Just Raised Their Prices

Price Increases Everywhere

The "Big Three"

Deregulation of Airlines and Safety

Capital Substitution Threatens Jobs

A \$25 Million Contract—or Is It?

Those Astronomical Interest Rates

Increasing Income Inequality and Working Spouses

Bad News—and Plenty of It

The Difference Between Medical Care Expenditures and Medical Care Costs

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We Are Running Out of Everything!

Population Outgrowing Farmland

Foreigners' Productivity Improvements

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Perhaps the Trade Situation Isn't So Bad After All

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The Dark Side of the PC Revolution

ISSUES AND APPLICATIONS

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Risk Reduction and the Value of a Human Life

How Higher Education Has Responded to Changes in Supply and Demand

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Should We Switch to a Flat Tax?

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The Policy Effects of Changes in the CPI

The Worldwide Underground Economy

Democracy and Prosperity: Cause or Effect?

The Ultimate Aggregate Supply Shock: The Kobe Earthquake

High European Unemployment, or Keynes Revisited?

Can Professional Baseball Have a Multiplier Effect?

The Real-World Political Constraints on Fiscal Policy

Would a Balanced-Budget Amendment Make a Difference?

Watch Out for E-Cash

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Is the Fed Independent, and If Not, Does It Matter?

Does the Political Business Cycle Cause a Fed Bias Toward Inflation?

Contingent Valuation: Pricing the "Priceless"

Beer, Taxes, and Teenage Highway Deaths

What Does the Dow Jones Industrial Average Really Measure?

The Play Must Go On—but Should It Be on Broadway?

Wal-Mart Versus the Small Shopkeepers

The Right to Develop Drugs Based on Genetic Data

Game Theory: The New Business Tool in Telecommunications

Should Microsoft Be Broken Up?

Are Immigrants Pushing Down U.S. Wages?

Pro Sports Means Big Bucks

A Million-Dollar Jackpot Doesn't Make a Millionaire

Making Sense of Welfare Reform

Technology to the Rescue of Dwindling Fish Stocks

Big Sugar's Sweet Deal

Waging the Second War on Japan

Should We Worry About the Weak Dollar?

Can PCs Bridge the Gap Between Less Advanced and More Advanced Economies?

In a sense, part of our work as educators is being done for us by politicians whose every economic pronouncement, regardless of its accuracy, is duly reported by the media. Our students are constantly bombarded by differing economic views of the world. One of our jobs is to teach these very same students to distinguish truth from fiction and fact from opinion. As professional economists, most of us are quite convinced that an understanding of the economic way of thinking provides a powerful engine of analysis for today's students so that they can in fact separate the "chaff" from the "wheat." One of the key new features in this ninth edition of *Economics Today* explicitly addresses the media.

THINKING CRITICALLY ABOUT THE MEDIA

At least once, and sometimes two or three times, in a chapter there is a set-off feature titled "Thinking Critically About the Media" with an appropriate subheading. Each topic has been selected so as to highlight a newsworthy event and to go beyond the media's coverage of it, often with surprising results. The topics are listed on page xxii.

DID YOU KNOW THAT ...?

To entice your students further, each chapter begins with a provocative and often significant set of facts, introduced in the form of a question: "Did You Know That . . . ?" Your students cannot fail to be intrigued.

THE CUTTING EDGE—TODAY'S TECHNOLOGY

What's new in telecommunications, computers, digital sound and imaging, and other marvels of the world of electronics is perhaps more familiar to students than to many professors. So it is not by chance that I use cutting-edge high-tech examples throughout the text to illustrate the basic principles of economics. Your students demand a modern look and feel in their study materials—and that is what they get in the ninth edition of *Economics Today*.

A WORLD OF GLOBAL EXAMPLES

High-speed telecommunications coupled with the opening up of the former Soviet Union and Eastern Europe, as well as increased trade with Latin America, Asia, and a booming mainland China, dictates a globalization of the principles of economics text. The ninth edition is truly global in scope. In every chapter, your students are exposed to economic principles demonstrated in set-off features, preceded by a globe, called simply "International Example." There are more than 50 international examples in this edition. You can see the full list on page xx.

Examples Closer to Home

Of course, the United States has its share of relevant and exciting examples that can be used to demonstrate economic principles. In this edition, there are 55 new domestic examples, A full list is presented on page xxi.

Policy Matters

Many of the economic discussions presented by the media involve important policy issues. In the ninth edition, your students are explicitly exposed to important policy questions both on the domestic and international fronts. There are 10 international and 21 domestic policy examples. A full list appears on pages xx-xxi.

ISSUES AND APPLICATIONS

It has been a tradition in all editions of Economics Today to present at the end of each chapter a section titled "Issues and Applications." The 35 "Issues and Applications" are all new. Their format is designed to encourage your students to apply economic concepts and to think critically about how they have applied those concepts. To this end, each "Issues and Applications" section has a list of concepts applied at the beginning and is followed by two or three critical-thinking questions titled "For Critical Analysis." You will find suggested answers to these critical-thinking questions in the Instructor's Resource Binder. The titles of the new "Issues and Applications" features for the ninth edition are found on page xxxiii.

Critical Thinking Throughout

In addition to the set-off features concerning the media, your students are exposed to further critical-thinking exercises at the end of each example. The questions following each example are headed "For Critical Analysis." They attempt to get your students to take the analysis one step further to develop their critical-thinking skills. Essentially, the students are asked to "think like economists." The answers to all "For Critical Analysis" questions are found in the Instructor's Manual.

As stated earlier, two or three additional critical-thinking questions appear at the end of each "Issues and Applications" section.

PEDAGOGY WITH A PURPOSE

You and your students will notice how carefully the pedagogy in each chapter fits together as a whole. My purpose continues to be to guide your students in their study of our science with a positive approach. The result is what I believe to be state-of-the-art motivational, conceptual, and review pedagogy:

- A chapter-opening issue that relates directly to the "Issues and Applications" section at the end of that chapter
- A list of preview points and completely self-contained answers
- · A chapter outline
- · Marginal definitions, with important terms boldfaced when first introduced in the text
- · Concepts in brief summarized at the end of major sections

- A point-by-point end-of-chapter summary
- Problems, with answers for every odd-numbered problem provided at the back of the book
- A session in computer-aided instruction for each chapter, available on a free diskette

Interacting with the Internet

The number of Internet users, as well as the number of World Wide Web sites, is growing daily. To help your students use this increasingly valuable resource, I have put together a chapter-ending feature called "Interacting with the Internet." In Chapter 1, your students will get a brief introduction to using the Internet. In appropriate chapters throughout the rest of the text, Internet addresses are provided so that your students can obtain additional information about material covered in the chapter.

The Core of Economics: Theory, Theory, and More Theory

While your students will have their interest piqued by the myriad new examples in this ninth edition, all of those examples serve one basic purpose—to drive home the application of the theory just presented. You will find the latest theoretical concepts in this ninth edition, presented in a logical manner for ease of understanding.

For more specific details on the presentation of theory, see the listing at the end of this preface under the heading "What's New in the Ninth Edition."

Complete Teaching Flexibility

One of the keys to the success of *Economics Today* is that it is suitable for many teaching styles. Instructors who wish to stress theory can do so. Those who wish to stress applications and examples can do that. Furthermore, chapters that are often skipped in shorter courses are placed at the ends of units. The numerous supplements for both instructors and students allow for even further flexibility.

THE REMAINDER OF THE TEACHING AND LEARNING PACKAGE

As you will discover, the ninth edition of *Economics Today* has the most comprehensive, usable, and effective teaching and learning package ever developed for a principles of economics text.

Printed Materials for Students

- Extended-Coverage Topics—free booklet
- · Reproducible homework assignments—two separate versions
- Your Economics Life: The Practical Applications of Economics—free with every new copy
- Student Learning Guide

Computer Software for Students

- ET9 Computer-Assisted Instruction
- · Graphing Tutorial
- Economics Tutor—12 "games" that teach theory
- Macro Simulation
- · Micro Tutorial

Multimedia for Your Students

Not only are the examples in *Economics Today* on the cutting edge, but so are the supplementary materials for classroom presentation and individual study. They include the following:

Videos

To go with this edition, Addison-Wesley offers Economics at Work, a package of 11 short videos of five to seven minutes each, free to adopters, including such titles as Cigarettes. Addiction, and Elasticity; Working with Macroeconomics: A Talk with Investment Bankers; and Stock Answer: A Guide to the Market.

Printed Materials for Instructors

- Test Banks 1, 2, and 3—almost 8,000 multiple-choice questions and 500 short-essay questions available on three separate test banks, fully classroom-tested
- Instructor's Resource Binder—complete with reproducible supplementary information
- · Instructor's Manual
- Instructor's Course Planning Guide and Media Handbook
- Economics Todav newsletter

Software for Instructors

- TestMaster—in a flexible format
- QuizMaster-TM
- Computerized Instructor's Manual

Transparencies and Acetates

- LOTS: Lecture Outline and Transparency System
- · Full-color acetates and acetate overlays
- Transparency masters

WHAT'S NEW IN THE NINTH EDITION

- Chapter outline at the beginning of each chapter
- Chapter opening "Did You Know That . . . ?"
- · "Thinking Critically About the Media" feature
- · "Interacting with the Internet" feature
- 35 new "Issues and Applications" sections
- 55 new domestic examples
- 51 new international examples
- 31 new international and domestic policy examples
- · New videos
- · A new videodisc
- Economics Today CD-ROM

Changes throughout the Body of the Text

- Marginal definitions all coincide with in-text definitions.
- The link between the preceding theory text and all examples is consistently made clear.

Part 1: Introduction

Chapter 1

The role of incentives is stressed.

Chapter 2

- Human capital is explicitly mentioned as a separate factor of production.
- Comparative advantage in trade is introduced early.

Chapter 3

More examples of shifts in supply and demand curves are presented.

- · A discussion of transactions costs and intermediaries is now included.
- An expanded discussion of alternative rationing systems is presented.
- Price supports and minimum wages are now used as examples.

Chapter 5

 There is a complete discussion of correcting for externalities as well as an explicit discussion of property rights.

Chapter 6

- The chapter has been renamed "Economies in Transition" to reflect the worldwide movement toward market systems.
- The role of incentives is further expanded in this chapter, which now includes the four faces of capitalism and a discussion of the transitional phase, called *frontier capitalism*, including the development of the legal system and privatization as well as political opposition to it.
- There is the latest information on Russia and China, as well as where future economic power shifts will lie.

Part 2: Introduction to Macroeconomics and Economic Growth

• The macro section has been reorganized into four parts, with the chapter on economic growth moved forward to reflect increased interest in this important subject.

Chapter 7

- A graphical representation of the determination of unemployment, including job departures and job finders, as well as an expanded presentation of the difference between stocks and flows, is now included.
- There is a new discussion of wage rigidity and wait unemployment.
- There is a full discussion of the problems with the measurement of the Consumer Price Index.
- An explanation of external shocks in the business cycle is new.

Chapter 8

- There is an explanation and analysis of the new chain-weighted measure of the growth in real GDP.
- Purchasing power parity has been added here.

Chapter 9

- An expanded discussion of productivity growth and its determinants appears here.
- New growth theory is introduced, including growth in technology, R&D, and innovation
 and knowledge; the importance of human capital; and the effects of an open economy.
- · Population and immigration as they affect economic growth are discussed.
- Property rights and entrepreneurship are examined.

Part 3: National Income Determination

Chapter 10

- The graphs have been rationalized and simplified.
- New tables are presented on the determinants of aggregate demand and aggregate supply.
- More examples are given of the effects of shifts in the aggregate demand and aggregate supply curves.

- A better contrast is made between the classical and Keynesian models.
- Open economy analysis is explained with AD-AS analysis.

Chapter 12

• The presentation of consumption, income, and the multiplier within the Keynesian framework has been streamlined, as has the presentation of the relationship between aggregate demand and the C + I + G + X curve.

Part 4: Fiscal Policy and Deficit Spending

Chapter 13

- Empirical evidence is given with respect to the Ricardian equivalence theorem.
- A complete discussion of the federal government budget cycle and how a bill becomes law is undertaken.
- A fuller explanation of automatic stabilizers, as well as the long-run "soothing" effect of Keynesian fiscal policy, is provided.

Chapter 14

- The chapter, completely reorganized, now makes clear the difference between deficits and the public debt.
- More information on the twin deficits—budget and trade—is presented.

Part 5: Money, Monetary Policy, and Stabilization

Chapter 15

- Discussion of the degrees of liquidity has been expanded.
- · A discussion of e-cash has been added.

Chapter 16

- A new discussion of the origins of fractional reserve banking is provided.
- There is an expanded pictorial demonstration of the money multiplier.
- More information on the federal funds rate is given.
- Risk taking by bank managers and moral hazard are discussed.

Chapter 17

A thorough discussion of the independence of the Fed is presented.

Chapter 18

- There is more information on the distinction between active and passive policymaking, as well as more coverage of the natural rate of unemployment.
- An explanation of the nonaccelerating inflation rate of unemployment (NAIRU) is provided.
- There is more on menu costs theory and on the efficiency wage model.
- There is a discussion of stabilization policy versus the new growth theorists.

Part 6: Dimensions of Microeconomics

Chapter 19

- The origins of utility theory are explained.
- · The explanation of marginal utility has been made clearer.
- The principle of substitution and the real-income effect have been added.

• The explanation of how to calculate elasticity has been made easier.

Chapter 21

- A new table presents the difference between stocks and bonds.
- · Primary and secondary markets are discussed.
- How to read the financial press is fully explained.
- Problems in corporate governance are reviewed, including asymmetric information, adverse selection, and moral hazard.

Part 7: Market Structure, Resource Allocation, and Regulation

Chapter 22

 A simpler explanation of average and marginal physical product is provided, as well as a better example of diminishing returns.

Chapter 23

Constant reminders are provided that the average and total cost curves include a normal rate of return on investment.

Chapter 24

- The rise of natural monopolies is explained more fully.
- There is more material on cartels.

Chapter 25

- The topic of advertising as signaling behavior is discussed.
- A new discussion is provided of efficiency and resource allocation with oligopoly.
- · Game theory is applied to pricing strategies.
- · Opportunistic behavior is discussed.

Chapter 26

- The feedback effects of regulation are explored.
- There is more on the costs of regulation.
- The market-share test and the enforcement of antitrust laws are now covered.

Part 8: Productive Factors, Poverty, the Environment, and Interest Groups

• Discussion of public choice and the economics of interest groups has been moved to the end of the unit (Chapter 32).

Chapter 27

- · Explanation of the determinants of demand elasticity for inputs has been simplified.
- The topics of efficiency wages and insiders versus outsiders are now discussed in relation to wage determination.

Chapter 28

- There is more on the current status of labor unions.
- Discussion of the upward-sloping supply curve for a monopsonist has been expanded.

Chapter 29

· A clearer explanation of economic rents is provided.

- Specific examples are given of economic rents to labor and why they are not useless.
- The long-run effects of taxing away economic rents are discussed.

- There is more on the distribution of total wealth in the United States.
- · Equality and its trade-off with efficiency are discussed.
- Household incomes and household spending are compared.
- The earned income tax credit program (EITC) is now covered.
- A more economic-theoretic explanation is provided of the rise in health care spending.
- Moral hazard and deductibles analysis are used to explain the quantity of medical care demanded.
- Moral hazard as it affects physicians and hospitals is discussed.
- The topic of medical savings accounts (MSAs) is introduced.

Chapter 31

• Wild species, common property, and trade-offs are analyzed.

Chapter 32

- Agricultural subsidies are examined as an example of the economics of interest groups.
- A detailed analysis of the difference between market and collective decision making is provided.
- · The iron triangle is discussed.
- · Political rent seeking is explained more fully.

Part 9: Global Economics

Chapter 33

- Exhausting mutual gains from exchange is explained.
- The transmission of ideas is presented as an additional benefit from international trade.
- There is more on the cost of protecting American jobs.
- Graphical explanation of the effects of quotas and of tariffs has been simplified.
- Voluntary quotas, including voluntary restraint agreements (VRAs) and voluntary import expansion (VIEs), are discussed.
- The World Trade Organization is covered.

Chapter 34

 A more complete explanation of the mirror image relationship between the capital account and the current account is provided.

Chapter 35

- The importance to economic development of an open economy and an educated population is emphasized.
- The commission of Type II errors because of protectionism is explained.
- The topic of creative destruction is introduced.
- The relationship between population growth and economic development is explored.
- The consequences of foreign aid are analyzed.

ACKNOWLEDGMENTS

For many years now, I have had the good fortune of receiving numerous comments and criticisms from users of *Economics Today*. All of you who have continued to support my work will see the results of your comments in the ninth edition. Specifically, I would like to thank the following reviewers who went beyond the call of duty to help me improve the manuscript of the ninth edition:

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If you or your students have comments, be sure to write to me. I am always eager to find ways to improve this text.

R. L. M.