

NARIMAN BEHRAVESH

ECONOMICS

8th Edition

USA



Economics USA

Eighth Edition

Economics USA

Eighth Edition

NARIMAN BEHRAVESH

IHS Global Insight

W. W. Norton & Company has been independent since its founding in 1923, when William Warder Norton and Mary D. Herter Norton first published lectures delivered at the People's Institute, the adult education division of New York City's Cooper Union. The firm soon expanded its program beyond the Institute, publishing books by celebrated academics from America and abroad. By midcentury, the two major pillars of Norton's publishing program—trade books and college texts—were firmly established. In the 1950s, the Norton family transferred control of the company to its employees, and today—with a staff of four hundred and a comparable number of trade, college, and professional titles published each year—W. W. Norton & Company stands as the largest and oldest publishing house owned wholly by its employees.

Copyright © 2014, 2005, 2001, 1998, 1995, 1992, 1989, 1986 by W. W. Norton & Company, Inc.

All rights reserved
Printed in Canada

Editor: Jack Repcheck
Project Editor: Rachel Mayer
Editorial Assistant: Theresia Kowara
Manuscript Editor: Janet Greenblatt
Managing Editor, College: Marian Johnson
Managing Editor, College Digital Media: Kim Yi
Production Manager: Ashley Horna
Media Editor: Cassie del Pilar
Associate Media Editor: Carson Russell
Assistant Media Editor: Michelle Salyga
Marketing Manager, Economics: Janise Turso
Design Director: Rubina Yeh
Photo Editor: Stephanie Romeo
Permissions Manager: Megan Jackson
Composition: Cengage® Publisher Services
Manufacturing: TransContinental

Permission to use copyrighted material is included in the credits section of this book, which begins on page 703.

ISBN: 978-0-393-91969-1

W. W. Norton & Company, Inc., 500 Fifth Avenue, New York, NY 10110-0017
wwnorton.com

W. W. Norton & Company Ltd., Castle House, 75/76 Wells Street, London W1T 3QT

1 2 3 4 5 6 7 8 9 0

Contents in Brief

PART ONE Introduction to Economics

- PROLOGUE** Economic Problems: A Sampler 5
 - CHAPTER 1** What Is Economics? 12
 - CHAPTER 2** Markets and Prices 38
-

PART TWO Economic Decision Making: The Firm, the Consumer, and Society

- CHAPTER 3** The Business Firm: Organization, Motivation, and Optimal Input Decisions 71
- CHAPTER 4** Getting behind the Demand and Supply Curves 92
- CHAPTER 5** Market Demand and Price Elasticity 122
- CHAPTER 6** Economic Efficiency, Market Supply, and Perfect Competition 143
- CHAPTER 7** Monopoly and Its Regulation 164
- CHAPTER 8** Monopolistic Competition, Oligopoly, and Antitrust Policy 192
- CHAPTER 9** Pollution and the Environment 216

PART THREE The Distribution of Income and the Role of
Government in Markets

- CHAPTER 10** The Supply and Demand for Labor 239
- CHAPTER 11** Interest, Rent, and Profit 262
- CHAPTER 12** Poverty, Income Inequality, and Discrimination 281
- CHAPTER 13** Economic Growth 306
- CHAPTER 14** Public Goods and the Role of the Government 329
-

PART FOUR National Income and Output

- CHAPTER 15** National Income and Product 361
- CHAPTER 16** Business Fluctuations and Unemployment 382
- CHAPTER 17** The Determination of National Output and the
Keynesian Multiplier 409
- CHAPTER 18** Fiscal Policy and National Output 436
- CHAPTER 19** Inflation 462
-

PART FIVE Money, Banking, and Stabilization Policy

- CHAPTER 20** Money and the Banking System 483
- CHAPTER 21** The Federal Reserve and Monetary Policy 506
- CHAPTER 22** Supply Shocks and Inflation 526
- CHAPTER 23** Productivity, Growth, and Technology Policy 544

- CHAPTER 24** Surpluses, Deficits, Public Debt, and the Federal Budget 563
- CHAPTER 25** Monetary Policy, Interest Rates, and Economic Activity 587
- CHAPTER 26** Controversies over Stabilization Policy 618
-

PART SIX

International Economics

- CHAPTER 27** International Trade 645
- CHAPTER 28** Exchange Rates and the Balance of Payments 666

Glossary 693

Photo Credits 703

Index 705

Contents

Preface xxiii

PART 1

Introduction to Economics

PROLOGUE Economic Problems: A Sampler 5

- Financial Crises 5
- Unemployment and Inflation 7
- Labor Productivity and Rising Standard of Living 8
- Challenges Facing Emerging Market Economies 9
- Eliminating Poverty 10
- Looking Ahead 11

CHAPTER 1 What Is Economics? 12

- What Is Economics? 12
- Opportunity Cost: A Fundamental Concept 15
- CASE STUDY 1.1:** *Land Use in Alaska* 16
- The Impact of Economics on Society 19
- CASE STUDY 1.2:** *Eliminating Brown Lung Disease* 20
- The Methodology of Economics 21
- The Tasks of an Economic System 25
- CASE STUDY 1.3:** *Adam Smith, Father of Modern Economics* 26
- CASE STUDY 1.4:** *Producing Both Guns and Butter, 1939–1941* 31

CHAPTER 2 Markets and Prices 38

- Consumers and Firms 39
- Markets 39
- The Demand Side of a Market 40
- The Supply Side of a Market 45

Equilibrium Price	47
Actual Price	49
How the Price System Determines What Is Produced	50
CASE STUDY 2.1: <i>Low-Cost Homes after World War II</i>	51
How the Price System Determines How Goods Are Produced	51
How the Price System Determines Who Gets What	52
CASE STUDY 2.2: <i>Why Do Some Sports Stars Earn More Than the President of the United States?</i>	53
The Price System and Economic Growth	54
The Circular Flow of Money and Products	54
Limitations of the Price System	56
CASE STUDY 2.3: <i>The Food Stamp Program and the Allocation of Resources</i>	57

CROSS CHAPTER CASE: PART 1 The Key Role of Saving and Investment in Raising Per Capita Income 65

PART 2

Economic Decision Making: The Firm, the Consumer, and Society

CHAPTER 3 The Business Firm: Organization, Motivation, and Optimal Input Decisions 71

General Motors: A Study	72
CASE STUDY 3.1: <i>Studebaker and the Low-Volume Trap</i>	74
U.S. Firms, Large and Small	75
CASE STUDY 3.2: <i>The Collapse of Enron and the Importance of Corporate Governance</i>	78
Motivation of the Firm	79
Technology, Inputs, and the Production Function	80
Types of Inputs	81
The Short Run and the Long Run	82
Average Product and Marginal Product of an Input	82
The Law of Diminishing Marginal Returns	84
CASE STUDY 3.3: <i>To Offshore or Not? That Is the Question</i>	85
The Optimal Input Decision	86

CHAPTER 4 Getting behind the Demand and Supply Curves 92

- The Demand Curve 93
- Consumer Expenditures 93
- A Model of Consumer Behavior 96
- The Equilibrium Market Basket 98
- The Consumer's Demand Curve 100
- Deriving the Market Demand Curve 102
- The Supply Curve 103
- What Are Costs? 103
- CASE STUDY 4.1:** *Conserving Water in a California Drought* 104
- Short-Run Cost Functions 105
- Average Costs in the Short Run 109
- CASE STUDY 4.2:** *Oil Price Swings and Drilling Activity* 110
- Marginal Cost in the Short Run 111
- Long-Run Average Cost Function 116
- Returns to Scale 116

CHAPTER 5 Market Demand and Price Elasticity 122

- Market Demand Curves 123
- Price Elasticity of Demand 125
- Determinants of the Price Elasticity of Demand 128
- Price Elasticity and Total Money Expenditure 130
- CASE STUDY 5.1:** *Instability of Farm Prices and the Price Elasticity of Demand* 131
- Industry and Firm Demand Curves 132
- Income Elasticity of Demand 134
- Cross Elasticity of Demand 134

CHAPTER 6 Economic Efficiency, Market Supply, and Perfect Competition 143

- Market Structure and Economic Performance 144
- Perfect Competition 146
- The Output of the Firm 146
- The Market Supply Curve 152
- Price and Output: The Short Run 154
- Price and Output: The Long Run 155

The Allocation of Resources under Perfect Competition: A More Detailed View 157

CASE STUDY 6.1: *Price Ceilings and Price Supports* 158

CASE STUDY 6.2: *Starting from Scratch: The Transition from Communism to Capitalism* 160

CHAPTER 7 Monopoly and Its Regulation 164

Causes of Monopoly 165

Demand Curve and Marginal Revenue under Monopoly 166

Price and Output: The Short Run 169

Price and Output: The Long Run 173

Perfect Competition and Monopoly: A Comparison 174

The Case against Monopoly 176

CASE STUDY 7.1: *John D. Rockefeller and Standard Oil of Ohio* 177

Public Regulation of Monopoly 179

CASE STUDY 7.2: *Network Effects and the Case against Microsoft* 182

The Deregulation Movement 184

CASE STUDY 7.3: *The Saga of AT&T* 186

CHAPTER 8 Monopolistic Competition, Oligopoly, and Antitrust Policy 192

Monopolistic Competition and Oligopoly: Their Major Characteristics 193

Monopolistic Competition 193

Price and Output under Monopolistic Competition 194

Oligopoly 197

The Theory of Games 197

Collusion and Cartels 199

Barriers to Collusion 201

CASE STUDY 8.1: *The Electrical Conspiracy* 202

Price Leadership 204

Nonprice Competition 205

CASE STUDY 8.2: *How Ford Became Number Two and General Motors Became Number One* 206

Comparing Oligopoly with Perfect Competition 207

The Antitrust Laws 208

CASE STUDY 8.3: *Airline Deregulation: Success or Failure?* 209

The Role of the Courts 210

The Role of the Justice Department 211
The Effectiveness of Antitrust Policy 212

CHAPTER 9 Pollution and the Environment 216

Our Environmental Problems 217
The Important Role of External Diseconomies 217
CASE STUDY 9.1: *Reserve Mining: The Price of Cleaner Water* 218
Economic Growth and Environmental Pollution 220
Public Policy toward Pollution 221
CASE STUDY 9.2: *The Uphill Battle to Ratify the Kyoto Climate Treaty
and Cap-and-Trade Legislation in the United States* 222
Pollution Control Programs in the United States 223
How Clean Should the Environment Be? 224
CASE STUDY 9.3: *Dolphin-Safe Tuna* 228

CROSS CHAPTER CASE: PART 2 What Should Be Done about
Global Warming? 232

PART 3

The Distribution of Income and the Role of
Government in Markets

CHAPTER 10 The Supply and Demand for Labor 239

The Labor Force and the Price of Labor 240
Wage and Employment Determination under Perfect Competition 242
The Market Demand Curve for Labor 244
The Market Supply Curve for Labor 244
Equilibrium Price and Quantity of Labor 246
Labor Unions 247
The U.S. Labor Movement 248
CASE STUDY 10.1: *The Battle between Walmart and Labor Unions* 251
How Unions Increase Wages 252
Collective Bargaining 254
CASE STUDY 10.2: *The Closing of the Herald Tribune* 255
Recent Trends 256
CASE STUDY 10.3: *Why Was Europe's Unemployment Rate Higher Than
America's in the 1990s?* 257

CHAPTER 11 Interest, Rent, and Profit 262

- The Nature of Interest 263
- Determining the Interest Rate 263
- CASE STUDY 11.1:** *Anti-Usury Laws and Mortgage Activity* 265
- Functions of the Interest Rate 267
- Capitalization of Assets 268
- The Present Value of Future Income 270
- Rent: Nature and Significance 271
- Profit 273
- CASE STUDY 11.2:** *Are Drug Company Profits Too High?* 274
- The Functions of Profit 275
- CASE STUDY 11.3:** *eBay: The Story of a Successful Internet Company* 276

CHAPTER 12 Poverty, Income Inequality, and Discrimination 281

- How Much Inequality of Income? 281
- Some Causes of Inequality? 282
- How the Tax Structure Affects Income Inequality 283
- Factors Behind the Recent Rise in Inequality 284
- Income Inequality: The Pros and Cons 286
- The Tradeoff between Equality and Efficiency 288
- What Is Poverty? 289
- Social Insurance 291
- CASE STUDY 12.1:** *Job Training Programs and the War on Poverty* 293
- Antipoverty Programs 294
- CASE STUDY 12.2:** *Is Welfare Reform Working?* 295
- The Problem of Discrimination 297
- CASE STUDY 12.3:** *Inequality of Outcomes versus Inequality of Opportunities* 300
- CASE STUDY 12.4:** *Equal Pay for Work of “Comparable Worth”* 302

CHAPTER 13 Economic Growth 306

- What Is Economic Growth? 307
- Economic Growth as a Policy Objective 307
- Thomas Malthus and Population Growth 308
- David Ricardo and Capital Formation 312
- CASE STUDY 13.1:** *The Club of Rome’s “Limits to Growth” Report* 313

Capital Formation and Economic Growth	316
The Role of Human Capital	318
The Role of Technological Change	318
CASE STUDY 13.2: <i>Computer-Assisted Design and Manufacture at Boeing Aircraft</i>	319
Endogenous Technological Change	320
Entrepreneurship and the Social Environment	321
The Gap between Actual and Potential Output	322
CASE STUDY 13.3: <i>The Ford Assembly Line</i>	323
CASE STUDY 13.4: <i>Technology and the Rapid Rise in Living Standards</i>	325

CHAPTER 14 Public Goods and the Role of the Government 329

What Functions Should the Government Perform?	330
Establishing the “Rules of The Game”	331
Redistribution of Income	332
Providing Public Goods	333
CASE STUDY 14.1: <i>The Case of 9/11—Why Airports Can Be Privatized, But Airport Security Cannot</i>	334
Externalities	335
The Theory of Public Choice	337
CASE STUDY 14.2: <i>The Tennessee Valley Authority</i>	338
Principles of Taxation	340
The Personal Income Tax	341
The Property Tax and the Sales Tax	342
CASE STUDY 14.3: <i>Proposition 13</i>	343
Tax Incidence	344

CROSS CHAPTER CASE: PART 3 U.S. Health Care Reform: The Twin Challenges of Universal Coverage and Cost Control 351

National Income and Output

CHAPTER 15 National Income and Product 361

CASE STUDY 15.1: *GDP, GNP, and Other Measures of Economic Activity* 363

Measuring Gross Domestic Product 363

Adjusting GDP for Price Changes 365

CASE STUDY 15.2: *Understanding the New Estimates of GDP* 366

Using Value Added to Calculate GDP 370

The Limitations of GDP 371

Two Approaches to GDP 372

CASE STUDY 15.3: *Using GDP Estimates in World War II* 373

The Expenditures Approach to GDP 373

The Income Approach to GDP 376

CHAPTER 16 Business Fluctuations and Unemployment 382

Business Fluctuations 383

Aggregate Supply and Demand 386

National Output and the Price Level 391

Unemployment 393

CASE STUDY 16.1: *Unemployment: The Classical View* 395

CASE STUDY 16.2: *Karl Marx on Unemployment* 396

The Costs of Unemployment 398

CASE STUDY 16.3: *John Maynard Keynes and the Great Depression* 399

CASE STUDY 16.4: *A New (and Old) Way of Looking at Booms and Busts* 400

CHAPTER 17 The Determination of National Output and the Keynesian Multiplier 409

The Consumption Function 410

The Saving Function 414

Determinants of Investment 416

The Investment Decision	416
The Equilibrium Level of Gross Domestic Product	417
Aggregate Flows of Income and Expenditure	418
Reconciling Aggregate Demand and Supply Curves with Income-Expenditure Analysis	422
Changes in Equilibrium Output	423
The Volatility of Investment	424
Effects of Changes in Intended Investment	425
CASE STUDY 17.1: <i>Keynes's Criticisms of the Classical View</i>	426
The Multiplier	427
CASE STUDY 17.2: <i>Investment and a Great Crash</i>	428

CHAPTER 18 Fiscal Policy and National Output 436

Government Expenditure and Gross Domestic Product	436
Taxation and Gross Domestic Product	439
Fiscal Policy: Aggregate Demand and Supply Curves	442
Makers of Fiscal Policy	446
CASE STUDY 18.1: <i>The Employment Act of 1946</i>	447
Automatic Stabilizers	448
CASE STUDY 18.2: <i>President Eisenhower and Automatic Stabilizers</i>	449
Discretionary Fiscal Policy	450
Size and Nature of Government Activities	451
CASE STUDY 18.3: <i>President Kennedy and the Tax Cut of 1964</i>	452
CASE STUDY 18.4: <i>The Obama Fiscal Stimulus of 2009</i>	453

CHAPTER 19 Inflation 462

What Is Inflation?	462
Measuring Inflation	464
The Impact of Inflation	466
Demand-Side and Supply-Side Inflation	468
CASE STUDY 19.1: <i>Demand-Side Inflation and the Tax Surcharge of 1968</i>	470
The Phillips Curve	471
CASE STUDY 19.2: <i>What Is the Nairu?</i>	472

CROSS CHAPTER CASE: PART 4 The Treasury Launches a New Type of Security 477

Money, Banking, and Stabilization Policy

CHAPTER 20 Money and the Banking System 483

- What Is Money? 484
- The Money Supply, Narrowly Defined 485
- The Money Supply, Broadly Defined 487
- Commercial Banks in the United States 488
- How Banks Operate 488
- CASE STUDY 20.1: *The Failure of the Knickerbocker Trust in 1907* 489
- The Balance Sheet of an Individual Bank 490
- Fractional Reserve Banking 492
- The Safety of the Banks 494
- CASE STUDY 20.2: *Comparing the U.S. Savings and Loan Crisis and the Japanese Banking Crisis* 495
- CASE STUDY 20.3: *Financial Reregulation after the Financial Crisis of 2008–2009* 497
- How Banks Can Create Money 498

CHAPTER 21 The Federal Reserve and Monetary Policy 506

- The Aims of Monetary Policy 506
- Makers of Monetary Policy 508
- The Federal Reserve System 508
- Functions of the Federal Reserve 510
- The Federal Reserve Banks: Their Consolidated Balance Sheet 511
- Open Market Operations 512
- Changes in the Legal Reserve Requirements 514
- CASE STUDY 21.1: *The Independence of the Federal Reserve* 516
- Changes in the Discount Rate 517
- CASE STUDY 21.2: *Crisis Management by the Fed* 521

CHAPTER 22 Supply Shocks and Inflation 526

- Supply-Side Inflation 527
- Difficulties in Distinguishing Supply-Side from Demand-Side Inflation 528

The Instability of the Phillips Curve	528
CASE STUDY 22.1: <i>Stagflation</i>	530
The Transitory Nature of the Tradeoff Between Inflation and Unemployment	531
CASE STUDY 22.2: <i>How Serious of a Threat Is Deflation?</i>	532
The Importance of Expectations	533
How the Phillips Curve Self-Destructs: An Example	534
Wage and Price Controls	536
Incomes Policies	537
CASE STUDY 22.3: <i>The Steel Price Increase: Incomes Policy in Action</i>	539

CHAPTER 23 Productivity, Growth, and Technology Policy 544

Growth of Per Capita Output in the United States	545
The Productivity Slowdown and Its Consequences	548
Causes of Productivity Swings	549
Has There Been a Decline in the U.S. Innovation Rate?	550
Mechanisms for Federal Support of Civilian Technology	551
CASE STUDY 23.1: <i>Positive Externalities and the Role of the Government in Encouraging Innovation</i>	552
Importance of Investment in Plant and Equipment	553
CASE STUDY 23.2: <i>Asian Growth: Miraculous or Not?</i>	554
CASE STUDY 23.3: <i>How Widespread Was the Productivity Boom of the Late 1990s?</i>	556
Importance of the General Economic Climate	557
CASE STUDY 23.4: <i>Supply-Side Economics and Tax Cuts</i>	558

CHAPTER 24 Surpluses, Deficits, Public Debt, and the Federal Budget 563

How Big Are U.S. Budget Surpluses or Deficits?	564
Controversies over Deficits	565
The Structural Deficit	569
The National Debt: Size and Growth	571
The Political Economy of Budget Deficits	573
Alternative Philosophies Regarding the Federal Budget	574
CASE STUDY 24.1: <i>Can We Afford Social Security and Medicare?</i>	577
CASE STUDY 24.2: <i>What Happened to the Federal Budget Surplus?</i>	578

The Federal Budgetary Process	579
The Federal Tax Legislative Process	580
Recent U.S. Experience with Fiscal Policy and Deficits	581
CASE STUDY 24.3: <i>Rising National Debt Levels Are Unsustainable</i>	583

CHAPTER 25 Monetary Policy, Interest Rates, and Economic Activity 587

The Value of Money	588
Inflation and the Quantity of Money	590
Unemployment and the Quantity of Money	590
Determinants of the Quantity of Money	591
The Demand for Money	591
How Changes in the Money Supply Affect the National Output	594
The Monetarists	600
The Velocity of Circulation of Money	600
The Equation of Exchange	601
The Crude Quantity Theory of Money and Prices	602
CASE STUDY 25.1: <i>The Velocity of Circulation of Money and the Fed's 1975 Decision</i>	604
When Is Monetary Policy Tight or Easy?	604
Should the Fed Pay More Attention to Interest Rates or to the Money Supply?	606
Problems in Formulating Monetary Policy	607
CASE STUDY 25.2: <i>How Much Attention Should the Fed Pay to the Stock Market (and House Prices)?</i>	609
Should the Fed Be Governed by a Rule?	610
CASE STUDY 25.3: <i>Evaluating the Fed's Performance Before and After the Financial Crisis of 2008–2009</i>	612

CHAPTER 26 Controversies over Stabilization Policy 618

Monetarists versus Keynesians: The Central Debate of the 1960s and 1970s	619
Supply-Side Economists	620
The New Classical Macroeconomists	620
CASE STUDY 26.1: <i>Inflation Targeting by Central Banks</i>	621
Unemployment and Business Fluctuations	622
CASE STUDY 26.2: <i>Recession as a Means to Stop Inflation in 1982</i>	624
Real Business Cycle Models	625

The New Keynesians	628
Menu Costs and Sticky Prices	629
Long-Term Labor Contracts and Sticky Wages	631
Implicit Contracts	632
Policy Activism: Pros and Cons	632
Policy Rules and Time Inconsistency	633
CASE STUDY 26.3: <i>The Troubled Asset Relief Program (TARP)</i>	634
The New Keynesian Response	635
Divergent Political Beliefs	636

CROSS CHAPTER CASE: PART 5 The Debate over Post-Crisis
Fiscal Austerity 640

PART 6

International Economics

CHAPTER 27 International Trade 645

Specialization and Trade	646
Absolute Advantage	647
Comparative Advantage	649
The Terms of Trade	652
CASE STUDY 27.1: <i>The Maquiladora Program—How the Impact of International Investment Is very Similar to the Impact of International Trade</i>	653
International Trade and Individual Markets	653
Tariffs and Quotas	656
Arguments for Tariffs and Quotas	659
CASE STUDY 27.2: <i>Restrictions on U.S. Imports of Japanese Autos</i>	660
CASE STUDY 27.3: <i>NAFTA: “Jobs, Jobs, Jobs” or a “Giant Sucking Sound”?</i>	661

CHAPTER 28 Exchange Rates and the Balance of
Payments 666

International Transactions and Exchange Rates	666
Exchange Rates under the Gold Standard	667
The Foreign Exchange Market	668
Fixed Exchange Rates	673

Balance of Payments Deficits and Surpluses	674
Exchange Rates: Pre–World War II Experience	677
The Gold Exchange Standard	678
CASE STUDY 28.1: <i>The Abandonment of the Gold Standard</i>	679
Fixed versus Flexible Exchange Rates	680
CASE STUDY 28.2: <i>Are Currency Speculators to Blame for the Volatility in International Financial Markets?</i>	681
How Well Have Floating Exchange Rates Worked?	682
CASE STUDY 28.3: <i>The Rise and Fall of the Bretton Woods System</i>	683
CASE STUDY 28.4: <i>The Euro: Europe’s Single Currency</i>	684
Should the Value of the Dollar Be Stabilized?	686

CROSS CHAPTER CASE: PART 6 **Should We Be Worried
about the Rise of China, India, and Other Emerging
Markets? 690**

Glossary 693

Photo Credits 703

Index 705

Preface

The approach used in this text is to teach introductory economics by using actual economic events to motivate the study of the fundamental ideas of the field. I believe, and the numerous instructors who use this text confirm, that this is the best way to help students understand the complex and dynamic American economy.

Based on feedback from instructors who have used this book in the past, there have been some major changes between the 7th and 8th editions. First, the chapters on microeconomics have been moved to the first half of the book, and the chapters on macroeconomics have been moved to the second half of the book. Second, new case studies have been added. Third, new material has been developed (both in the text and in the cross-chapter case studies) on the important topics of the 2008–2009 financial crisis, health care, and climate change.

This book has been prepared as both a stand-alone text and one that accompanies the Annenberg Lerner multimedia, distance-learning course entitled *Economics U\$A: 21st-Century Edition*. The Annenberg distance-learning course is designed to use economic events in America and the world, present and past, to teach the core principles of economics. More information about this course can be found at <http://www.learner.org/series/econusa/>.

I am grateful to the following teachers, who commented in detail on the manuscript: Robert C. Augur, Pasadena City College; Carlos Aguilar, El Paso Community College; Gary Arbogast, Glenville State College; Susan Bell, Seminole State; David Black, University of Toledo; Clifton Chow, Massachusetts Bay; James E. Clark, Wichita State University; Curtis Clarke, Eastfield College; Peter Dorman, Evergreen State College; Dorsey Dyer, Davidson County Community College; Clinton Greene, University of Missouri–St. Louis; Paul Grimes, Mississippi State University; Dan Harrison, Murray State University; Ralph F. Lewis, Economics Research, Inc.; Chuck Nugent, Pima Community College; Doborah Paige, Santa Fe Community College; James Phillips, Cypress College; Tom Porebski, Triton University; Victor H. Rieck, Miami-Dade Community College;

Preface

Larry Ross, University of Alaska; Steve Smith, Rose State College; John Somers, Portland Community College; and Michael Vaughan, Weber State College. In addition I would like to thank my editor, Jack Repcheck, along with Ashley Horna, Theresia Kowara, Rachel Mayer, and Carson Russell of Norton for their efficient handling of the publishing end of the work.

Lexington, MA

N.B.

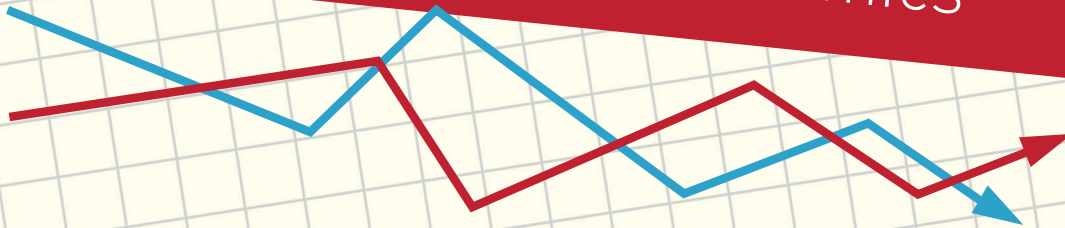
Economics USA

Eighth Edition

A bar chart with approximately 30 vertical bars of varying heights, colored in a light brown or tan shade, positioned at the top of the page.

PART ONE

Introduction to Economics



A Sampler

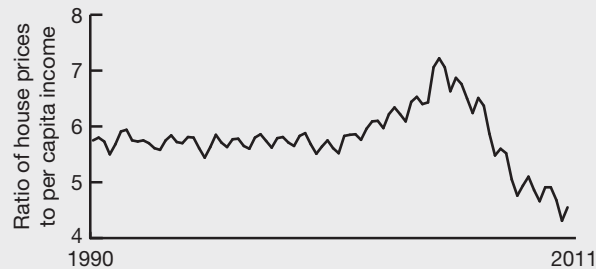
George Bernard Shaw, the great playwright, once said, “The only time my education was interrupted was when I was in school.” Fortunately, economics, if properly presented, can contribute mightily to your education—and you can learn it without leaving school. To help you understand the pervasive importance of economics, we begin by looking at a sample of the major problems economists deal with. Each of these problems can have a big effect on your life. More generally, economic and market forces will determine what types of jobs will be open to you, what kinds of choices you can make about where and how you live, what you do with your leisure time, and what you own.

Financial Crises

Most Americans are painfully aware that in 2008–2009, the United States suffered through a major financial crisis and economic downturn, the likes of which had not been seen since the Great Depression of the 1930s. The unemployment rate rose from 4.4 percent in March 2007 to 10.1 percent in October 2009. House prices in some cities (for example, Las Vegas and Phoenix) dropped by 50 to 60 percent. Roughly \$17 trillion in household wealth was wiped out, including retirement and college savings. Families found it very difficult to qualify for home mortgages, car loans, and student loans.

Our first example of an economic problem is this: *What causes financial crises, and what can be done to prevent them?* Unfortunately, financial crises are nothing new. In the words of the late economic historian Charles Kindleberger, they are a “hardy perennial,” occurring on a regular basis over the past several hundred years. In each case, there is a fairly predictable sequence of events. Optimism about future increases in the prices of certain assets (such as real estate and stocks) encourages a large number of people to invest in those assets. Prices go up and more people invest. Many people borrow the funds to make these investments. Eventually, prices get so high that they are no longer justified by market “fundamentals”

FIGURE 1
Evidence of a U.S.
Housing Bubble



(supply, demand, people’s incomes, and so on). At some point, market sentiment turns, and people worry that prices are no longer going to rise but are likely to fall. They start to sell. Panic sets in and the vast majority of investors try to unload their assets. For those who borrowed the money to invest, the depressed value of the assets is often less than the value of the loan. For some investors, this can mean bankruptcy.

The U.S. housing bubble of the 2000s was a classic case in point. A lot of families were caught up in the euphoria, expecting that house prices would rise forever. Many people who had never owned a home before became homeowners. Banks and other financial institutions relaxed their lending standards so that individuals who previously were denied mortgages were able to qualify. House prices rose so much that the value of the average American home relative to the average American income was at historic highs—and ultimately unsustainable (see Figure 1).

When the U.S. housing bubble finally burst, millions of new homeowners were “under water”; the value of their homes was less than the value of their mortgages. Many of these homeowners walked away from their homes, leaving hundreds of thousands of homes standing empty.

Why did this happen? There is plenty of blame to go around. Some fault the Federal Reserve for keeping interest rates “too low for too long.” Others point the finger at the U.S. Congress for passing legislation that made it easier for Americans to own homes. Yet others accuse the banks for irresponsible lending practices. Unfortunately, part of the problem is human nature. It is very easy for even ordinary people to get caught up in a bubble mentality.

Economics has a lot to say about what kinds of policies can minimize the risk of financial crises and what kinds of policies can limit the economic damage from financial crises. It is important to point out, though, that on these important topics there is disagreement among economists.

Unemployment and Inflation

Unemployment

There can be large fluctuations in economic activity and also in **unemployment**. In periods when output has fallen, thousands, even millions, of people have been thrown out of work. In the Great Depression of the 1930s, for example, nearly 25 percent of the labor force was unemployed (see Figure 2).

Inflation

Our second example of an economic problem is this: *What determines the extent of unemployment in the U.S. economy, and what can be done to reduce it?* This problem is complicated by a related phenomenon: The level of prices may rise when we reduce the level of unemployment. In other words, **inflation** may occur. Therefore, the problem is not only to curb unemployment but to do it without producing an inflation so ruinous to the nation's economic health that the cure proves more dangerous than the ailment. Consequently, another question we must ask is this: *What determines the rate of inflation, and how can it be kept under control?* As Figure 3 shows, we have experienced considerable inflation since 1930; the dollar has lost over 90 percent of its purchasing power during the past 85 years. Moreover, in the 1970s and early 1980s, our economy was bedeviled by “stagflation”—a combination of high unemployment and high inflation. While inflation does not seem to be the most pressing economic issue in the second decade of the twenty-first century, it remains a problem in many parts of the world and could, depending on the circumstances, become an economic challenge in the future.

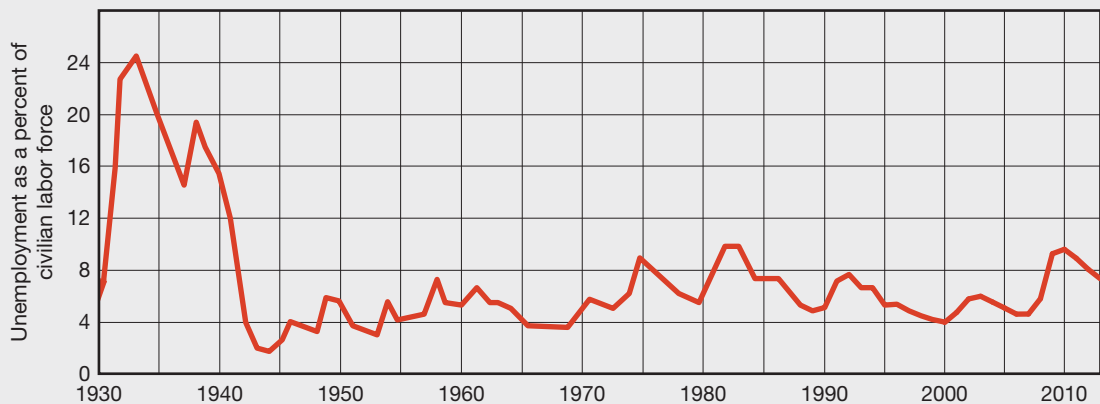


FIGURE 2

Unemployment Rates, United States, 1930–2012

The unemployment rate has varied substantially from year to year. In the Great Depression, it reached a high of over 24 percent. In 2000, it hit a low of 3.8 percent.

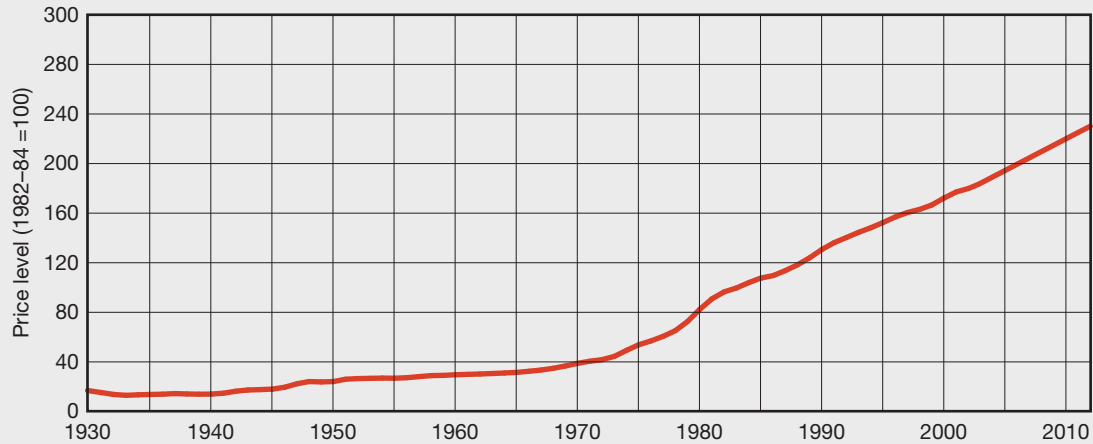


FIGURE 3
Changes in Price Level, United States, 1930–2012

The price level has increased steadily since the 1930s and is now almost ten times higher than it was in 1950.

During the past six decades, economists have learned a great deal about the factors that determine the extent of unemployment and inflation. As a responsible citizen, you need to understand what has been learned. But you also need to be aware of the differences of opinion among leading economists on this score. To understand many of the political issues of the day and vote intelligently, you need to be equipped with this knowledge. And to understand the fallacies in many apparently simple remedies for the complex problems in this area, you need to know some economics.

Labor Productivity and Rising Standard of Living

Believe it or not, the history of the U.S. economy is for the most part a story of growth, not business cycles. Our output—the amount of goods and services we produce annually—has grown rapidly over the years, giving us a standard of living that could not have been imagined a century ago. For example, the output per person in the United States was about \$48,000 in 2011; in 1900, it was much, much smaller—about one-tenth as big, after adjusting for inflation. The rise in our standard of living is closely correlated with how productive we are.

Labor productivity

Labor productivity is defined as the amount of output that can be obtained per hour of labor. All countries are interested in increasing labor productivity, since it is intimately related to a country's standard of living. Many factors, including new technologies like the Internet and biotechnology, influence the rate of increase of labor productivity. Historically, labor productivity has increased relatively rapidly in the United States.

However, beginning in the late 1960s, U.S. labor productivity rose at a slower pace. At first, it was unclear whether this slowdown was only temporary, but during the 1970s, the situation got worse, not better. Between 1977 and 1980, labor productivity in the United States actually declined. (In other words, less was produced per hour of labor in 1980 than in 1977!) During the 1980s and early 1990s, productivity growth picked up but was still slower than it was in the 1960s.

In the 1970s, 1980s, and early 1990s, many observers worried about the poor productivity performance of the United States relative to other industrialized countries, especially Japan and Germany. There was much talk of a "competitiveness problem" in the United States. However, by the late 1990s, productivity growth was strong again, thanks, in part, to large investments in information technologies earlier in the decade and the explosive growth of the Internet. During the 2000s, productivity growth remained strong and continued to do so through the Great Recession.

Our third example of an economic problem is this: *What determines the rate of increase of labor productivity? Why did productivity growth slow down in the 1970s and 1980s? Why did it accelerate in the 1990s? What can be done to sustain high growth rates of productivity?* Economics provides a considerable amount of information on this score. Not only does economics tell us a good deal about the broad factors influencing national productivity levels; it also provides rules and principles that are useful in increasing the productivity and efficiency of individual firms and government agencies.

Challenges Facing Emerging Market Economies

In 1900, per capita income in the United States was about 10 times greater than that of the poorest country, after adjusting for differences in purchasing power. By 2011, that gap had widened so that the typical American earned over 100 times as much as the typical Ethiopian. Nevertheless, some emerging market economies, notably those in East Asia, made significant strides in closing the gap. In 2011, Singapore and Hong Kong's per capita income levels were, respectively, 88 and 77 percent of the U.S. level. Other emerging markets, such as Chile and Mexico, have also succeeded in closing the gap in the past 30 years.