



Preface

The twentieth century witnessed a spectacular change in the living standards of most of the world, particularly those in the affluent countries of North America, Western Europe, and East Asia. People are asking, Will the twenty-first century repeat the successes of the last century? Will the affluence of the few spread to the many in poor countries? Or will the horsemen of the apocalypse—famine, war, and disease—continue to grip Africa and perhaps even spread more widely? To a large extent, the answers to these questions depend mainly on the economic successes of countries—in education, in investment, in foreign trade, and in health care.

The Growing Role of Markets

Over the past quarter-century, both attitudes and economic institutions have changed dramatically. Dozens of countries have rejected socialist and collectivist approaches and adopted market systems. Strong economic growth has been experienced in countries as diverse as Ireland, Botswana, and the Philippines. At no time in recorded history have so many enjoyed such a sustained period of economic growth as they have during the past half-century.

You might think that prosperity would lead to a declining interest in economic affairs, but paradoxically an understanding of the enduring truths of economics has become even more vital in the affairs of people and nations. The United States grappled with slow growth in living standards; yet over the last decade productivity growth has rebounded so sharply that the nation has combined rapid output growth with declining employment.

In the larger scene, the world has become increasingly interconnected as computers and communications create an ever-more-competitive global marketplace. Developing countries like China, India, and Russia—three giants that relied heavily on central planning until recently—need a firm understanding of the institutions of a market economy if they are to attain the living standards of the affluent. At the same time, there is growing concern about international environmental problems and the need to forge agreements to preserve our precious natural heritage. All these fascinating changes are part of the modern drama that we call economics.

ECONOMICS Reborn

For more than half a century, this book has served as the standard-bearer for the teaching of introductory economics in classrooms in America and throughout the world. Each new edition distills the best thinking of economists about how markets function and about what society can do to improve people's living standards. But economics has changed profoundly since the first edition of this text appeared in 1948. And because economics is above all a living and evolving organism, *Economics* is born anew each edition as the authors have the exciting opportunity to present the latest thinking of modern economists and to show how the subject can contribute to a more prosperous world.

Our task then is this: We want to present a clear, accurate, and interesting introduction to the principles of modern economics and to the institutions of the American and world economies. Our primary goal is to survey economics, and in doing this we emphasize the basic economic principles that will endure beyond today's headlines.

THE EIGHTEENTH EDITION

Economics is a dynamic science—changing to reflect the shifting trends in economic affairs, in the environment, in the world economy, and in society at large. As economics and the world around it evolve, so does this book. These seven features differentiate this edition from other books:

1. The Core Truths of Economics. Often, economics appears to be an endless procession of new puzzles, problems, and dilemmas. But as experienced teachers have learned, there are a few basic concepts that underpin all of economics. Once these basic concepts have been mastered, learning is much quicker and more enjoyable. *We have therefore chosen to focus on the central core of economics—on those enduring truths that will be just as important in the twenty-first century as they were in the twentieth.* Microeconomic concepts such as scarcity, efficiency, the gains from specialization, and the principle of comparative advantage will be crucial concepts as long as scarcity itself exists. Moreover, students of macroeconomics must receive a firm grounding in the concepts of aggregate supply

and demand and must understand the role of national and international monies. Students will learn the widely accepted theory of economic growth, but they should also understand the controversial theories of the business cycle.

2. Innovation in Economics. Economics has made many advances in understanding the role of innovation. We are accustomed to the dizzying speed of invention in computers, where new products and software appear monthly. The Internet is revolutionizing communications and making inroads into commerce.

In addition, we emphasize innovations in economics itself. Economists are tinkerers, innovators, and inventors in their own way. History shows that economic ideas can produce tidal waves when they are applied to real-world problems. Among the important innovations we survey is the application of economics to our environmental problems through “emissions trading” plans. Other important economic innovations discussed are improved regulatory mechanisms and the radical new step of European monetary unification. One of the most influential economic innovations of the last few years involves the measurement of consumer prices. We explain how behavioral economics has changed views of consumer theory. Network economics is explained, and we describe how it affects economic efficiency and market power and how it has entered into the debate about how to deal with Microsoft’s monopolistic behavior. One of the most important innovations for our common future is dealing with global public goods like climate change, and we analyze new ways to deal with international environmental problems, including approaches such as the Kyoto Protocol.

3. Small Is Beautiful. Economics has increased its scope greatly over the past half-century. The flag of economics flies over its traditional territory of the marketplace, but it also covers the environment, legal studies, statistical and historical methods, art, gender and racial discrimination, and even family life. But at its core, economics is the science of choice, which means that we, as authors, must choose the most important and enduring issues for this text. In a survey, as in a meal, small is beautiful because it is digestible.

Choosing the subjects for this text required many hard choices. To select these topics, we continually survey teachers and leading scholars to determine the issues most crucial for an informed citizenry and a new generation of economists. We drew up a list of key ideas and bid adieu to material we judged inessential or dated. *At every stage, we asked whether the material was, as best we could judge, necessary for a student’s understanding of the economics of the twenty-first century.* Only when a subject passed this test was it included. The result of this campaign is a book that has lost more than one-quarter of its weight in the last two editions. Farm economics, labor unions, Marxian economics, the lump-of-labor fallacy, and health economics have been trimmed to make room for environmental economics, network economics, real business cycles, and financial economics.

4. Policy Issues for the New Century. For many students, the lure of economics is its relevance to public policy. The eighteenth edition emphasizes policy in both microeconomics and macroeconomics. As human societies grow, they begin to overwhelm the environment and ecosystems of the natural world. Environmental economics, presented in Chapter 18, helps students understand the externalities associated with economic activity and then analyzes different approaches to making human economies compatible with natural systems. New examples—such as dividend tax reform, the minimum wage, international outsourcing, the value of a brand, as well as problems of financial finagling—bring the core principles of microeconomics to life.

A second area of central importance is financial and monetary economics. We have completely reorganized our treatment of monetary economics by introducing a new chapter, “Financial Markets and the Special Case of Money.” This chapter places monetary economics in the larger context of finance and, along with the chapter on central banking, explores the critical role that money plays in the business cycle.

Drawing upon history, economic chronicles, and the authors’ experience, the eighteenth edition continues the use of case studies and empirical evidence to illustrate economic theories. The dilemma involved in combating poverty hit home when we understand the 1996 welfare reforms. The need for economic approaches to the environment is illustrated by the dilemma of global warming. Our appreciation of

macroeconomic analysis increases when we see how government deficits lower national saving.

5. Debates about Globalization. The last decade has witnessed pitched battles over the role of international trade in our economies. Some argue that the decline in American manufacturing employment comes because jobs are exported to Mexico and China, although a careful analysis of job trends questions this assessment. Whatever the causes, the United States was definitely faced with the puzzle of rapid output growth and a decline in employment in the early 2000s.

One of the major debates of recent years has been over “globalization,” which concerns the increasing economic integration of different countries. Americans have learned that no country is an economic island. Immigration and international trade have profound effects on the goods that are available, the prices we pay, and the wages we earn. Terrorism can wreck havoc on the economy at home, while war causes famines and reduces living standards in Africa. No one can fully understand the impact of growing trade and capital flows without a careful study of the theory of comparative advantage. The eighteenth edition continues to increase the material devoted to international economics and the interaction between international trade and domestic economic events.

6. The Contending Schools of Macroeconomics. One of the major obstacles to understanding modern economics is the proliferation of contesting schools of macroeconomics. Teachers often wonder how students can understand the subject when macroeconomists themselves are so divided. While many people fret about the divisiveness of modern macroeconomics, we think it is a sign of health and prefer lively debate to complacent consensus.

The eighteenth edition analyzes all major schools of modern macroeconomics within the clear organizing synthesis of aggregate supply and demand. We show how macroeconomics of the Keynesian, old and new classical, real-business cycle, and monetarist varieties can be understood as emphasizing different aspects of expectations, market clearing, and aggregate demand. Each school is clearly presented and compared with its competitors in a balanced and evenhanded way. For each, the empirical evidence is

presented and evaluated. The major schools are discussed in Chapter 33, “The Warring Schools of Macroeconomics.” We also emphasize the importance of the *policy implications* of the different approaches.

Economists are increasingly examining the determinants of long-run economic growth, the recent rebound in productivity growth, and the generation of innovation and new technological knowledge. Putting economic growth front and center is necessary if students are to understand modern debates about the role of government debt and deficits. The eighteenth edition reflects this revival by synthesizing growth theories and findings into the central section on macroeconomics.

7. Clarity. Although there are many new features in the eighteenth edition, the pole star for our pilgrimage in preparing this edition has been to present economics clearly and simply. Students enter the classroom with a wide range of backgrounds and with many preconceptions about how the world works. Our task is not to change students’ values. Rather, we strive to help students understand enduring economic principles so that they may better be able to apply them—to make the world a better place for themselves, their families, and their communities. Nothing aids understanding better than clear, simple exposition. We have labored over every page to improve this survey of introductory economics. We have received thousands of comments and suggestions from teachers and students and have incorporated their counsel in the eighteenth edition.

Optional Matter

Economics courses range from one-quarter surveys to year-long intensive honors courses. This textbook has been carefully designed to meet all situations. The more advanced materials have been put in separate sections and chapters. These will appeal to curious students and to students in demanding courses that survey the entire discipline thoroughly. We have included advanced questions for discussion to test the mettle of the most dedicated student.

If yours is a fast-paced course, you will appreciate the careful layering of the more advanced material. Hard-pressed courses can skip the advanced sections, covering the core of economic analysis without losing the thread of the economic reasoning. This book

will challenge the most advanced young scholar. Indeed, many of today's leading economists have written to say they've relied upon *Economics* all along their pilgrimage to the Ph.D.

Format

The eighteenth edition employs an expanded set of in-text logos, and material to help illustrate the central topics. You will find three distinctive logos, indicating warnings for the fledgling economist, examples of economics in action, and biographical material on the great economists of the past and present. But these central topics are not drifting off by themselves in unattached boxes. Rather, they are integrated right into the chapter so that students can read them without breaking their train of thought. Keep these logos in mind as you read through the text:



is a warning that students should pause to ensure that they understand a difficult or subtle point.



is an interesting example or application of the analysis, and often it represents one of the major innovations of modern economics.



presents biographies of important economic figures. Sometimes these are famous economists like Adam Smith, while at other times they are people who introduced economics into public policy.

New features in this edition include fresh end-of-chapter questions, with a special accent upon short problems that reinforce the major concepts surveyed in the chapter.

Terms printed in **bold type** in the text mark the first occurrence and definition of the most important words that constitute the language of economics.

But these many changes have not altered one bit the central stylistic beacon that has guided *Economics* since the first edition: to use simple sentences, clear explanations, and concise tables and graphs.

For Those Who Prefer Macro First

Although, like the previous edition, this new edition has been designed to cover microeconomics first, many teachers continue to prefer beginning with

macroeconomics. Many believe that the beginning student finds macro more approachable and will more quickly develop a keen interest in economics when the issues of macroeconomics are encountered first. We have taught economics in both sequences and find both sequences work well.

Whatever your philosophy, this text has been carefully designed for it. Instructors who deal with microeconomics first can move straight through the chapters. Those who wish to tackle macroeconomics first should skip from Part One directly to Part Five, knowing that the exposition and cross-references have been tailored with their needs in mind.

In addition, for those courses that do not cover the entire subject, the eighteenth edition is available in two paperback volumes, *Microeconomics* (Chapters 1 to 19 of the full text) and *Macroeconomics* (Chapters 1 to 3 and 20 to 34 of the full text).

Auxiliary Teaching and Study Aids

Students of this edition will benefit greatly from the *Study Guide*. This carefully designed supplement was prepared by Gary Lemon of Depauw University, who worked in close collaboration with us in our revision. When used alongside classroom discussions and when employed independently for self-study, the *Study Guide* has proved to be an impressive success. There is a full-text *Study Guide*, as well as micro and macro versions. These items can all be obtained by contacting your local McGraw-Hill/Irwin sales representative.

In addition, instructors will find both the *Instructor's Resource Manual* and the *Test Bank* useful for planning their courses and preparing multiple sets of test questions in both print and computerized formats. Moreover, McGraw-Hill/Irwin has designed a beautiful set of two-color overhead transparencies for presenting the tabular and graphical material in the classroom. The graphs and figures in this edition can also be viewed electronically as PowerPoint slides. The slides can be downloaded from our website (www.mhhe.com/samuels18). The website also contains chapter summaries, self-grading practice quizzes, Web questions, and links to the websites suggested for further research at the end of each chapter.

Economics in the Computer Age

The electronic age has revolutionized the way that scholars and students can access information. In economics, the information revolution allows us quick

access to economic statistics and research. An important feature of the eighteenth edition is the section “Economics and the Internet,” which appears just before Chapter 1. This little section provides a road map for the state of economics on the Information Superhighway.

In addition, each chapter has an updated section at the end with suggestions for further reading and addresses of websites that can be used to deepen student understanding or find data and case studies.

Students can also purchase *The Power of Macroeconomics* and *The Power of Microeconomics*, which contain lessons directly tied to this text. These programs are lively combinations of PowerPoints with audio and are designed to reinforce economics concepts. They allow students to move at their own pace, and they engage students with questions during the presentation. *The Power of Macroeconomics* and *The Power of Microeconomics* were developed by Peter Navarro at the University of California at Irvine, Graduate School of Management. A complete description of this supplement can be found at www.powerofeconomics.com.

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Students at MIT, Yale, and other colleges and universities have served as an “invisible college.” They constantly challenge and test us, helping to make this edition less imperfect than its predecessor. Although they are too numerous to enumerate, their influence is woven through every chapter. Nancy King helped in logistics at the New Haven end of the operation.

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A WORD TO THE SOVEREIGN STUDENT

You have read in the history books of revolutions that shake civilizations to their roots—religious conflicts, wars for political liberation, struggles against colonialism and imperialism. A decade ago, economic revolutions in Eastern Europe, in the former Soviet Union, in China, and elsewhere tore those societies apart. Young people battered down walls, overthrew established authority, and agitated for democracy and a market economy because of discontent with their centralized socialist governments.

Students like yourselves are marching, and even going to jail, to win the right to study radical ideas and learn from Western textbooks like this one in the hope that they may enjoy the freedom and economic prosperity of democratic market economies.

The Intellectual Marketplace

Just what is the market that students in repressed societies are agitating for? In the pages that follow, you will learn about the markets for stocks and bonds, Mexican pesos and European Euros, unskilled labor and highly trained neurosurgeons. You have

probably read in the newspaper about the gross domestic product, the consumer price index, the stock market, and the unemployment rate. After you have completed a thorough study of the chapters in this textbook, you will know precisely what these words mean. Even more important, you will also understand the economic forces that influence and determine them.

There is also a marketplace of ideas, where contending schools of economists fashion their theories and try to persuade their scientific peers. You will find in the chapters that follow a fair and impartial review of the thinking of the intellectual giants of our profession—from the early economists like Adam Smith, David Ricardo, and Karl Marx to modern-day

titans like John Maynard Keynes, Milton Friedman, and James Tobin.

Skool!

As you begin your journey into the land of markets, it would be understandable if you are anxious. But take heart. The fact is that we envy you, the beginning student, as you set out to explore the exciting world of economics for the first time. This is a thrill that, alas, you can experience only once in a lifetime. So, as you embark, we wish you bon voyage!

Paul A. Samuelson
William D. Nordhaus