ESSENTIALS OF ECONOMICS





Bradley R. Schiller

WITH KAREN GEBHARDT

Essentials of Economics

Tenth Edition

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Essentials of Economics, Tenth Edition

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ABOUT THE AUTHORS

Bradley R. Schiller has over four decades of experience teaching introductory economics at American University, the University of California (Berkeley and Santa Cruz), the University of Maryland, and the University of Nevada (Reno). He has given guest lectures at more than 300 colleges ranging from Fresno, California, to Istanbul, Turkey. Dr. Schiller's unique contribution to teaching is his ability to relate basic principles to current socioeconomic problems, institutions, and public policy decisions. This perspective is evident throughout *Essentials of Economics*.

Dr. Schiller derives this policy focus from his extensive experience as a Washington consultant. He has been a consultant to most major federal agencies, many congressional committees, and political candidates. In addition, he has evaluated scores of government programs and helped design others. His studies of income inequality, poverty, discrimination, training programs, tax reform, pensions, welfare, Social Security, and lifetime wage patterns have appeared in both professional journals and popular media. Dr. Schiller is also a frequent commentator on economic policy for television, radio, and newspapers.

Dr. Schiller received his PhD from Harvard and his BA degree, with great distinction, from the University of California (Berkeley). When not teaching, writing, or consulting, Professor Schiller is typically on a tennis court, schussing down a ski slope, or enjoying the crystal blue waters of Lake Tahoe.

Karen Gebhardt is a faculty member in the Department of Economics at Colorado State University (CSU). Dr. Gebhardt has a passion for teaching economics. She regularly instructs large introductory courses in macro and microeconomics, small honors sections of these core principles courses, and upper division courses in Public Finance, Microeconomics, and International Trade, as well as a graduate course in teaching methods. She is an early adopter of technology in the classroom and advocates strongly for it because she sees the difference it makes in student engagement and learning. Dr. Gebhardt has taught online consistently since 2005 and coordinates the online program within the Department of Economics at CSU. She also supervises and mentors the department's graduate teaching assistants and adjunct instructors.

Dr. Gebhardt was the recipient of the Water Pik Excellence in Education Award in 2006 and was awarded the CSU Best Teacher Award in 2015.

Dr. Gebhardt's research interests, publications, and presentations involve the economics of human—wildlife interaction, economics education, and the economics of gender in the United States economy. Before joining CSU, she worked as an Economist at the United States Department of Agriculture/Animal and Plant Health Inspection Service/Wildlife Services/ National Wildlife Research Center conducting research on the interactions of humans and wildlife, such as the economic effects of vampire bat-transmitted rabies in Mexico; the potential economic damage from the introduction of invasive species to the Islands of Hawaii; bioeconomic modeling of the impacts of wildlife-transmitted disease; and others. In her free time, Dr. Gebhardt enjoys learning about new teaching methods that integrate technology, as well as rock climbing and camping in the Colorado Rockies and beyond.



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Source: © Karen Gebhardt

PREFACE

Election campaigns bring out the best and the worst economic ideas. Virtually every candidate promises a "chicken in every pot," without regard to the supply of chickens. They will clean up the environment, fix our schools, put more police on the streets, build more affordable housing, and, of course, guarantee every American access to quality health care. And they'll do this while cutting taxes, subsidizing alternative energy sources, and rebuilding America's infrastructure.

Don't you wish you lived in such a utopia?! I know I do. And our students overwhelmingly embrace these promises.

The problem is, of course, that there is no such thing as a free lunch. Nor free health care, free environmental protection, or free infrastructure development. As economists, we know this; we know that resource scarcity requires us to make difficult choices about competing uses of those resources. We know that politicians can't place a chicken in every pot without allocating more resources to poultry production—and fewer resources to the production of other desired goods and services.

Our first task as instructors is to convince students of this basic fact of life—that every decision about resource use entails opportunity costs. If we can establish that beachhead early on, we have a decent chance of instilling in students a basic appreciation of economic theory.

The other challenge for us as instructors is to instill in students a sense of *why* the economic problems we analyze are important. We know that inflation and unemployment cause serious hardships. But most of our students haven't experienced the income losses that accompany unemployment or seen their retirement savings decimated by inflation. We have to explain and illustrate why the macro problems we seek to solve are politically, socially, and economically important.

The same reference gap exists in micro. Formulas and graphs illustrating externalities or lost consumer surplus are meaningless abstractions to most students. If we want them to appreciate these concepts, we have to illustrate them with real-world examples (e.g., the death toll from second-hand smoke; the higher airfares that result on monopoly airplane routes). For most students, this course is their first exposure to economics. If we want them to understand the subject—maybe even pursue it further—we have got to relate our concepts and theories to the world that they live in. This has been the hallmark of *Essentials* from the beginning: introducing the core concepts of economics in a reality-based, policy-driven context. This tenth edition continues that tradition.

WHAT, HOW, FOR WHOM?

The core theme that weaves through the entire text is the need to find the best possible answers to the basic questions of WHAT, HOW, and FOR WHOM to produce. Students are confronted early on with the reality that the economy doesn't always operate optimally at either the macro or micro level. In Chapter 1, they learn that markets sometimes fail to generate optimal outcomes, but also that government interventions can fail to improve economic performance. The policy challenge is to find the mix of market reliance and government regulation that generates the best possible outcomes. Every chapter ends with a Policy Perspectives feature that challenges students to apply the economic concepts they have just encountered to real-world policy issues. In Chapter 1, the policy question is, "Is 'Free' Health Care Really Free?"—a question that emphasizes the opportunity costs associated with all economic activity. In Chapter 10, the issue is "Is Another Recession Coming?"—which challenges students to think about the causes and advance indicators of

Preface

economic downturns. And Chapter 16 is devoted to explaining the perennial contrast between theory and reality, with a mixture of institutional, political, and theoretical factors. Students love that macro capstone.

FOCUS ON CORE CONCEPTS

It's impossible to squeeze all the content—and the excitement—of both micro and macro economics into a one-semester course, much less an abbreviated intro text. But economics is, after all, the science of choice. Instructors who teach a one-term survey of economics know how hard the content choices can be. There are too many topics, too many economic events, and too little time.

Few textbooks confront this scarcity problem directly. Some one-semester books are nearly as long as full-blown principles texts. The shorter ones tend to condense topics and omit the additional explanations, illustrations, and applications that are especially important in survey courses. Students and teachers alike get frustrated trying to pick out the essentials from abridged principles texts.

Essentials of Economics lives up to its name by making the difficult choices. The standard table of contents has been pruned to the core. The surviving topics are the essence of economic concepts. In microeconomics, for example, the focus is on the polar models of perfect competition and monopoly. These models are represented as the endpoints of a spectrum of market structures. Intermediate market structures—oligopoly, monopolistic competition, and the like—are noted but not analyzed. The goal here is simply to convey the sense that market structure is an important determinant of market outcomes. The contrast between the extremes of monopoly and perfect competition is sufficient to convey this essential message. The omission of other market structures from the outline also leaves more space for explaining and illustrating how market structure affects market behavior.

The same commitment to essentials is evident in the section on macroeconomics. Rather than attempt to cover all the salient macro models, the focus here is on a straightforward presentation of the aggregate supply—demand framework. The classical, Keynesian, and monetarist perspectives on aggregate demand (AD) and aggregate supply (AS) are discussed within that common, consistent framework. There is no discussion of neo-Keynesianism, rational expectations, public choice, or Marxist models. The level of abstraction required for such models is neither necessary nor appropriate in an introductory survey course. Texts that include such models tend to raise more questions than survey instructors can hope to answer. In *Essentials*, students are exposed to only the ideas needed for a basic understanding of how macro economies function.

CENTRAL THEME

The central goal of this text is to convey a sense of how economic *systems* affect economic *outcomes*. When we look back on the twentieth century, we see how some economies flourished while others languished. Even the "winners" had recurrent episodes of slow, or negative, growth. The central analytical issue is how various economic systems influenced those diverse growth records. Was the relatively superior track record of the United States a historical fluke or a by-product of its commitment to market capitalism? Were the long economic expansions of the 1980s and 1990s the result of enlightened macro policy, more efficient markets, or just good luck? What roles did policy, markets, and (bad) luck play in the Great Recession of 2008–2009? What forces deserve credit for the economic recovery that followed?

In the 2016 presidential elections, economic issues were at the forefront (as Yale economist Ray Fair has been telling us for years). Democratic candidates claimed credit for the economic recovery, pointing to their support of President Obama's stimulus program, unemployment assistance, financial regulation, and health care reform. Republican

vi Preface

candidates pointed to soaring federal budgets and deficits as harbingers of economic collapse and faulted the Democrats for not giving greater priority to short-term job creation. How are students—and voters—supposed to sort out these conflicting claims? *Essentials* offers an analytical foundation for assessing both economic events and political platforms. Students get an initial bird's-eye view of the macro economy that relates macro determinants to macro outcomes. Then they get enough tools to identify cause-and-effect relationships and to sort out competing political claims.

A recurrent theme in *Essentials* is the notion that economic institutions and policies *matter*. Economic prosperity isn't a random occurrence. The right institutions and policies can foster or impede economic progress. The challenge is to know when and how to intervene.

This central theme is the focus of Chapter 1. Our economic accomplishments and insatiable materialism set the stage for a discussion of production possibilities. The role of economic systems and choices is illustrated with the starkly different "guns versus butter" decisions in North and South Korea, Russia, and the United States. The potential for both market failure (or success) and government failure (or success) is highlighted. After reading Chapter 1, students should sense that "the economy" is important to their lives and that our collective choices on how the economy is structured are important.

A GLOBAL PORTRAIT OF THE U.S. ECONOMY

To put some meat on the abstract bones of the economy, *Essentials* offers a unique portrait of the U.S. economy. Few students easily relate to the abstraction of the economy. They hear about specific dimensions of the economy but rarely see all the pieces put together. Chapter 2 fills this void by providing a bird's-eye view of the U.S. economy. This descriptive chapter is organized around the three basic questions of WHAT, HOW, and FOR WHOM to produce. The current answer to the WHAT question is summarized with data on GDP and its components. Historical and global comparisons are provided to underscore the significance of America's \$18 trillion economy. Similar perspectives are offered on the structure of production and the U.S. distribution of income. An early look at the role of government in shaping economic outcomes is also provided. This colorful global portrait is a critical tool in acquainting students with the broad dimensions of the U.S. economy and is unique to this text.

REAL-WORLD EMPHASIS

The decision to include a descriptive chapter on the U.S. economy reflects a basic commitment to a real-world context. Students rarely get interested in stories about the mythical widget manufacturers that inhabit so many economics textbooks. But glimmers of interest—even some enthusiasm—surface when real-world illustrations, not fables, are offered.

Every chapter starts out with real-world applications of core concepts. As the chapters unfold, empirical illustrations continue to enliven the text analysis. The chapters end with a **Policy Perspectives** section that challenges the student to apply new concepts to real-world issues. The first Policy Perspective, in Chapter 1 (Is "Free" Health Care Really Free?), highlights the difficult choices that emerge when we try to offer "free" health care.

POLICY PERSPECTIVES

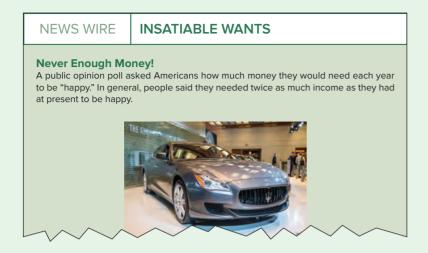
Is "Free" Health Care Really Free?



Everyone wants more and better health care, and nearly everyone agrees that even the poorest members of society need reliable access to doctors and hospitals. That's why President Obama made health care reform such a high priority in his first presidential year.

Although the political debate over health care reform was intense and multidimensional, the economics of health care are fairly simple. In essence, President Obama wanted to expand the health care industry. He wanted to increase access for the millions of American who didn't have health insurance and raise the level of service for people with low incomes and preexisting illnesses. He wasn't proposing to reduce health care for those who already

Preface **vii**



The real-world approach of *Essentials* is reinforced by the boxed **News Wires** that appear in every chapter. The 73 News Wires offer up-to-date domestic and international applications of economic concepts. Some new examples that will particularly interest your students include:

- The opportunity cost (famine) of North Korea's rocket program
- The impact of lower gas prices on sales of electric vehicles
- The diversity in starting pay for various college majors
- The incidence of passive smoking deaths
- 2014–2015 tuition hikes
- The impact of the 2013 payroll tax hike on consumer spending
- How the strong dollar has made European vacations cheaper

This is just a sampling of the stream of real-world applications that cascades throughout this text. Twenty-eight of the News Wires are new to this edition.

THEORY AND REALITY

In becoming acquainted with the U.S. economy, students will inevitably learn about the woes of the business cycle. As the course progresses, they will not fail to notice a huge gap between the pat solutions of economic theory and the dismal realities of occasional recession. This experience will kindle one of the most persistent and perplexing questions students have. If the theory is so good, why is the economy such a mess?

Economists like to pretend that the theory is perfect but politicians aren't. That's part of the answer, to be sure. But it isn't fair to either politicians or economists. In reality, the design and implementation of economic policy is impeded by incomplete information, changing circumstances, goal trade-offs, and politics. Chapter 16 examines these real-world complications. A News Wire on the "black art" of economic modeling, together with new examples of the politics of macro policy, enliven the discussion. In this signature chapter, students get a more complete explanation of why the real world doesn't always live up to the promises of economic theory.

NEW IN THIS EDITION

The dedication of *Essentials* to introducing core economic principles in a real-world context requires every edition to focus on trending policies and front-page developments. As in earlier editions, this tenth edition strives to arouse interest in economic theories by illustrating them in the context of actual institutions, policy debates, and global developments.

viii Preface

The following list highlights both the essential focus of each chapter and the new material that enlivens its presentation:

Chapter 1: The Challenge of Economics—The first challenge here is to get students to appreciate the concept of *scarcity* and how it forces us to make difficult choices among desirable, but competing, options. That is really the essence of economic thinking. How we make those choices is also critical. The 2016 presidential campaign seemed to imply that we can have it all, without higher taxes or other sacrifices. That created a great chance to emphasize opportunity costs. The opportunity costs of North Korea's stepped-up rocket program and the implied costs of "affordable" health care also make for good illustrations. Chapter 1 includes 10 new Problems, one new Discussion Question, and three new News Wires.

Chapter 2: The U.S. Economy.—The purpose of this chapter is to give students an accurate picture of the size and content of the U.S. economy, especially as compared to other nations. Most students have no sense of how large the U.S. economy is or what it produces or trades. The description here is organized around the core questions of What, How, and For Whom output is produced. The portrait includes the latest data on U.S. and global output, income distributions, and government sectors. A new News Wire on manufacturing jobs versus output helps put the changing answers to the What question into perspective. There are 6 new Problems.

<u>Chapter 3: Supply and Demand</u>—This is the introduction to the market mechanism, that is, how markets set both prices and production for various goods. Interesting new News Wires include the shortages that accompany new iPhone launches and the impact of falling gasoline prices on sales of electric vehicles. Five new Problems and two new Discussion Questions are included.

Micro

<u>Chapter 4: Consumer Demand</u>—This chapter starts by looking at patterns of U.S. consumption, then analyzing the demand factors that shape those patterns. The elasticity of demand gets a lot of attention, as illustrated by consumer responses to iMac prices, price hikes at Starbucks, and higher gasoline prices (all new News Wires). There are 6 new Problems and 3 new Discussion Questions.

Chapter 5: Supply Decisions—The key point of this chapter is to highlight the difference between what firms *can* produce (as illustrated by the production function) and what they *want* to produce (as illustrated by profit-maximization calculations). The importance of marginal costs in the production decision gets its proper spotlight. The Tesla decision to build a "gigafactory" to produce lithium batteries for electric cars is used to contrast the long-run *investment decision* and the short-run *production decision*. The addition of 5 new Problems and 3 new Discussion Questions keep the topic lively.

Chapter 6: Competition—This first look at market structure emphasizes the lack of pricing power possessed by small, competitive firms. Perfectly competitive firms must relentlessly pursue cost reductions, quality improvements, and product innovation if they are to survive and prosper. Although few firms are perfectly competitive, competitive dynamics keep all firms on their toes. Those dynamics affect even the behavior of such giants as Apple (relentlessly trying to stay ahead of the pack)—not just the small T-shirt vendors on beach boardwalks (both in new News Wires). How firms locate the most profitable rate of production with the use of market prices and marginal costs is illustrated. The chapter includes 3 new Problems and 1 new Discussion Question. The chapter-ending Policy Perspective considers how competition helps rather than hurts society.

Chapter 7: Monopoly—As a survey introduction to economics, *Essentials* focuses on the differences in structure, behavior, and outcomes of only two market structures, namely, perfect competition and monopoly. This two-way contrast underscores the importance of market structure for social welfare. The monopoly produces less and charges more than a competitive market with the same cost structure, as illustrated with a step-by-step comparison of market behavior. The various barriers monopolies use to preserve their position and profits are illustrated as well. The chapter includes 3 new Problems and 1 new Discussion Question.

Preface ix

Chapter 8: The Labor Market—The 2016 presidential campaign highlighted very different views about income equality, minimum wages, unions, and mandatory workforce regulations. This chapter delves into these issues by first illustrating how market wages are set, and then examining how various interventions alter market outcomes. Highlighted stories include Dale Earnhardt's earnings, Nick Saban's salary and benefits at Alabama, minimum-wage proposals, and the Swiss rejection of CEO pay caps. Of special interest to students is the latest data on salaries for college grads in various majors. There are 6 new Problems and 3 new Discussion Questions.

Chapter 9: Government Intervention—Another focus of every election is the appropriate role for government in a market-driven economy. This chapter identifies the core rationale for government intervention and offers new illustrations of public goods (Israel's "Iron Dome" anti-missile program) and externalities (the Keystone XL Pipeline). There is also new poll data on trust in government. The chapter includes 1 new Problem and 2 new Discussion Questions.

Macro

<u>Chapter 10: The Business Cycle</u>—This introduction to macro examines the up and down history of the economy, then looks at the impact of cyclical instability on unemployment, inflation, and the distribution of income. The goal here is to get students to recognize why macro instability is a foremost societal concern. The latest macro data are incorporated, along with 3 new News Wires, 9 new Problems, and 4 new Discussion Questions.

Chapter 11: Aggregate Supply and Demand—This chapter gives students a conceptual overview of the macro economy, highlighting the role that market forces and other factors play in shaping macro outcomes. Aggregate supply (AS) and aggregate demand (AD) are assessed, with an emphasis on the distinction between curve positions and curve shifts (the source of instability). The bottom line is that either AS or AD must shift if macro outcomes are to change. There are 3 new News Wires highlighting shift factors, 6 new Problems, and 2 new Discussion Questions. The Policy Perspectives section summarizes the broad policy options that President Obama's successor will have to work with.

Chapter 12: Fiscal Policy—This chapter highlights the potential of changes in government spending and taxes to shift the AD curve. The power of the income multiplier is illustrated in the context of the AS/AD framework and operationalized with analysis of the 2009 Economic Recovery Act and the 2013 payroll tax hike. The implications of fiscal policy for budget deficits are also examined. Updated budget data are included, along with 9 new Problems.

<u>Chapter 13: Money and Banks</u>—ApplePay and Bitcoins are used to illustrate differences between *payment services* and *money*. A new News Wire focuses on the methods of payment consumers utilize. The core of the chapter depicts how deposit creation and the money multiplier work, using a step-by-step illustration of each. The new Policy Perspectives section assesses why Bitcoins aren't really "money." There are 8 new Problems and 2 new Discussion Questions.

Chapter 14: Monetary Policy—In this chapter, students first get an overview of how the Federal Reserve is organized, including an introduction to Janet Yellen. Then the 3 basic tools of monetary policy are illustrated, with an emphasis on how open-market operations work. The narrative then focuses on how the use of these monetary tools shifts the AD curve, ultimately impacting both output and prices. News about China's cut in reserve requirements helps illustrate the intended effects. The 2008–2015 spike in excess reserves is also discussed, along with the Fed's new policy targeting. The chapter includes 6 new Problems.

Chapter 15: Economic Growth—The challenge of every society is to grow its economy and lift living standards. This chapter reviews the world's growth experience, then highlights the factors that affect growth rates. Of special interest in today's policy context is the role of immigration in spurring growth. The chapter's Policy Perspectives section examines whether economic growth is desirable, a question students often ask. There are 5 new Problems.

<u>Chapter 16: Theory and Reality</u>—This unique capstone chapter addresses the perennial question of why economies don't function better if economic theory is so perfect. The

x Preface

chapter reviews the major policy tools and their idealized uses. Then it contrasts theoretical expectations with real-world outcomes and asks why macro performance doesn't live up to its promise. Impediments to better outcomes are explored and the chapter ends by asking students whether they favor more or less policy intervention. Lots of new data are incorporated, along with 4 new Problems and 2 new Discussion Questions.

International

Chapter 17: International Trade—Students are first introduced to patterns of global trade, highlighting international differences in export dependence and trade balances. Then the question of "why trade at all?" is explicitly addressed, leading into an illustration of comparative advantage. Of importance is also a discussion of the sources of resistance to free trade and the impact of trade barriers. In addition to updating all data, 2 new News Wires, 5 new Problems, and 2 new Discussion Questions are included.

ASSURANCE OF LEARNING READY

Many educational institutions today are focused on the notion of assurance of learning, an important element of some accreditation standards. Essentials of Economics is designed specifically to support your assurance of learning initiatives with a simple yet powerful solution.

Each test bank question for *Essentials of Economics* maps to a specific chapter learning objective listed in the text. You can use *Connect Economics* or our test bank software, EZ Test Online, to easily query for learning objectives that directly relate to the learning objectives for your course. You can then use the reporting features of *Connect* to aggregate student results in similar fashion, making the collection and presentation of assurance of learning data simple and easy.

AACSB STATEMENT

The McGraw-Hill Companies is a proud corporate member of AACSB International. Understanding the importance and value of AACSB accreditation, *Essentials of Economics*, *10e*, recognizes the curricula guidelines detailed in the AACSB standards for business accreditation by connecting selected questions in the text and the test bank to the six general knowledge and skill guidelines in the AACSB standards.

The statements contained in *Essentials of Economics*, 10e, are provided only as a guide for the users of this textbook. The AACSB leaves content coverage and assessment within the purview of individual schools, the mission of the school, and the faculty. While *Essentials of Economics*, 10e, and the teaching package make no claim of any specific AACSB qualification or evaluation, we have within *Essentials of Economics*, 10e, labeled selected questions according to the six general knowledge and skills areas.

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INSTRUCTOR'S RESOURCE MANUAL

The *Instructor's Resource Manual* is designed to assist instructors as they cope with the demands of teaching a survey of economics in a single term. The manual has been fully

Preface xi

updated for the tenth edition by Larry Olanrewaju of John Tyler Community College. Each chapter of the *Instructor's Resource Manual* contains the following features:

- What is this chapter all about? A brief summary of the chapter.
- New to this edition A list of changes and updates to the chapter since the last edition.
- Lecture launchers Designed to offer suggestions on how to launch specific topics in each chapter.
- *Common student errors* To integrate the lectures with the student *Study Guide*, this provides instructors with a brief description of some of the most common problems that students have when studying the material in each chapter.
- News Wires A list of News Wires from the text is provided for easy reference.
- Annotated outline An annotated outline for each chapter can be used as lecture notes.
- *Structured controversies* Chapter-related topics are provided for sparking small group debates that require no additional reading. Also accessible on the website.
- *Mini-debates* Additional chapter-related debate topics that require individual students to do outside research in preparation. Also accessible on the website.
- Mini-debate projects Additional projects are provided, cutting across all the chapters. These include several focus questions and outside research. Also accessible on the website.
- Answers to the chapter questions and problems The Instructor's Resource Manual provides answers to the end-of-chapter questions and problems in the text, along with explanations of how the answers were derived.
- Answers to Web activities Answers to Web activities from the textbook are provided in the *Instructor's Resource Manual* as well as on the website.
- *Media exercise* Provides a ready-to-use homework assignment using current newspapers and/or periodicals to find articles that illustrate the specific issues.

Test Bank

The Test Bank has been rigorously revised for this tenth edition of *Essentials*. Digital co-author Karen Gebhardt and Nancy Rumore of University of Southwestern Louisiana assessed every problem in the Test Bank, assigning each problem a letter grade and identifying errors and opportunities for improvement. This author team assures a high level of quality and consistency of the test questions and the greatest possible correlation with the content of the text. All questions are coded according to chapter learning objectives, AACSB Assurance of Learning, and Bloom's Taxonomy guidelines. The computerized Test Bank is available in EZ Test, a flexible and easy-to-use electronic testing program that accommodates a wide range of question types, including user-created questions. Tests created in EZ Test can be exported for use with course management systems such as WebCT, BlackBoard, or PageOut. The program is available for Windows, Macintosh, and Linux environments. Additionally, you can access the test bank through McGraw-Hill *Connect*.

PowerPoints

Digital co-author Karen Gebhardt and Gregory Gilpin of Montana State University have prepared a concise set of Instructor PowerPoint presentations to correspond with the tenth edition of *Essentials*. Developed using Microsoft PowerPoint software, these slides are a step-by-step review of the key points in each of the book's chapters. They are equally useful to the student in the classroom as lecture aids or for personal review at home or the computer lab. The slides use animation to show students how graphs build and shift.

Web Activities

To keep *Essentials* connected to the real world, **Web activities**, updated by Charles Newton of Houston Community College, appear in the Instructor Resources section in *Connect* for each chapter. These require the student to access data or materials on a website and then use,

xii Preface

summarize, or explain this external material in the context of the chapter's core economic concepts. The *Instructor's Resource Manual* provides answers to the Web-based activities.

Digital Image Library

A digital image library of all figures from the textbook is available on the Instructor's Resource section in *Connect*. Professors can insert the exact images from the textbook into their presentation slides or simply post them for student viewing on their course management site.

News Flashes

As up-to-date as *Essentials of Economics* is, it can't foretell the future. As the future becomes the present, however, we will provide new two-page News Flashes describing major economic events and related to specific text references. These News Flashes provide good lecture material and can be copied for student use. They are also available via the Instructor Resource Material in *Connect*. Four to six News Flashes are sent to adopters each year.

ACKNOWLEDGMENTS

The greatest contribution to this tenth edition comes from the enlistment of Karen Gebhardt to the author team. Karen is a distinguished teacher who has won numerous awards for her pedagogical prowess at Colorado State University. She has assumed responsibility for the digital content of the *Essentials* learning package, including an overhaul of the test bank, the *Connect* program, LearnSmart, and other digital products. She has done a marvelous job not only improving the content of each digital supplement but also enhancing the symmetry between the text and all dimensions of the digital products. Students and instructors will share my gratitude for Karen's excellent work.

Reviewers and users of past editions of *Essentials* have also contributed to the evolution of this text. The following manuscript reviewers were generous in sharing their teaching experiences and offering suggestions for the revision:

Bob Abadie, National College

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Preface xiii

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xiv Preface

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Preface xv

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FINAL THOUGHTS

I am deeply grateful for the enormous success *Essentials* has enjoyed. Since its first publication, it has been the dominant text in the one-semester survey course. I hope that its brevity, content, style, and novel features will keep it at the top of the charts for years to come. The ultimate measure of the book's success, however, will be reflected in student motivation and learning. As the author, I would appreciate hearing how well *Essentials* lives up to that standard.

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CONTENTS IN BRIEF

Preface iv

Section I	BASICS			
Chapter 1	THE CHALLENGE OF ECONOMICS 2			
Chapter 2	THE U.S. ECONOMY 26			
Chapter 3	SUPPLY AND DEMAND 46			
Section II	MICROECONOMICS			
Chapter 4	CONSUMER DEMAND 72			
Chapter 5	SUPPLY DECISIONS 92			
Chapter 6	COMPETITION 110			
Chapter 7	MONOPOLY 132			
Chapter 8	THE LABOR MARKET 152			
Chapter 9	GOVERNMENT INTERVENTION 172			
Section III	MACROECONOMICS			
Section III Chapter 10	MACROECONOMICS THE BUSINESS CYCLE 192			
Chapter 10	THE BUSINESS CYCLE 192			
Chapter 10 Chapter 11	THE BUSINESS CYCLE 192 AGGREGATE SUPPLY AND DEMAND 214			
Chapter 10 Chapter 11 Chapter 12	THE BUSINESS CYCLE 192 AGGREGATE SUPPLY AND DEMAND 214 FISCAL POLICY 234			
Chapter 10 Chapter 11 Chapter 12 Chapter 13	THE BUSINESS CYCLE 192 AGGREGATE SUPPLY AND DEMAND 214 FISCAL POLICY 234 MONEY AND BANKS 254			
Chapter 10 Chapter 11 Chapter 12 Chapter 13 Chapter 14	THE BUSINESS CYCLE 192 AGGREGATE SUPPLY AND DEMAND 214 FISCAL POLICY 234 MONEY AND BANKS 254 MONETARY POLICY 270			
Chapter 10 Chapter 11 Chapter 12 Chapter 13 Chapter 14	THE BUSINESS CYCLE 192 AGGREGATE SUPPLY AND DEMAND 214 FISCAL POLICY 234 MONEY AND BANKS 254 MONETARY POLICY 270			
Chapter 10 Chapter 11 Chapter 12 Chapter 13 Chapter 14 Chapter 15	THE BUSINESS CYCLE 192 AGGREGATE SUPPLY AND DEMAND 214 FISCAL POLICY 234 MONEY AND BANKS 254 MONETARY POLICY 270 ECONOMIC GROWTH 286			
Chapter 10 Chapter 11 Chapter 12 Chapter 13 Chapter 14 Chapter 15 Section IV	THE BUSINESS CYCLE 192 AGGREGATE SUPPLY AND DEMAND 214 FISCAL POLICY 234 MONEY AND BANKS 254 MONETARY POLICY 270 ECONOMIC GROWTH 286 INTERNATIONAL			
Chapter 10 Chapter 11 Chapter 12 Chapter 13 Chapter 14 Chapter 15 Section IV Chapter 16	THE BUSINESS CYCLE 192 AGGREGATE SUPPLY AND DEMAND 214 FISCAL POLICY 234 MONEY AND BANKS 254 MONETARY POLICY 270 ECONOMIC GROWTH 286 INTERNATIONAL THEORY AND REALITY 304			

CONTENTS

About the Authors iii Preface iv

Section I BASICS

Chapter 1

THE CHALLENGE OF ECONOMICS 2

How Did We Get So Rich? 3

The Central Problem of Scarcity 6

Three Basic Economic Questions 6

WHAT to Produce 7

HOW to Produce 12

FOR WHOM to Produce 13

The Mechanisms of Choice 13

The Political Process 14

The Market Mechanism 14

Central Planning 14

Mixed Economies 15

What Economics Is All About 15

Market Failure 15

Government Failure 15

Macro versus Micro 16

Theory versus Reality 16

Politics versus Economics 17

Modest Expectations 18

Policy Perspectives: Is "Free" Health Care Really Free? 18

Summary 19

Appendix: Using Graphs 21

Slopes 22

Shifts 23

Linear versus Nonlinear Curves 24

Causation 24

News Wires

Never Enough Money! 4

Will Your Kids Be Better Off? 5

North Korea's Rockets Deepen Food Crisis 11

Chapter 2

THE U.S. ECONOMY 26

What America Produces 27

How Much Output 27

The Mix of Output 31

Changing Industry Structure 33

How America Produces 35

Factors of Production 35

The Private Sector: Business Types 37

The Government's Role 38

Striking a Balance 40

For Whom America Produces 40

The Distribution of Income 40

Income Mobility 41

Government Redistribution: Taxes and Transfers 41

Policy Perspectives: Can We End Global Poverty? 43

Summary 43

News Wires

U.S. Manufacturing: Output vs. Jobs since 1975 35

The Education Gap between Rich and

Poor Nations 37

Income Share of the Rich 42

Chapter 3

SUPPLY AND DEMAND 46

Market Participants 47

Goals 47

Constraints 47

Specialization and Exchange 47

Market Interactions 48

The Two Markets 49

Dollars and Exchange 49

Supply and Demand 50

Demand 50

Individual Demand 50

Determinants of Demand 53

Ceteris Paribus 53

Shifts in Demand 54

Movements versus Shifts 55

Market Demand 55

The Market Demand Curve 56

The Use of Demand Curves 56

Supply 58

Determinants of Supply 58

The Market Supply Curve 59

Shifts in Supply 59

Equilibrium 60

Market Clearing 60

Market Shortage 62

Market Surplus 63

Changes in Equilibrium 64

Contents xix

Disequilibrium Pricing 65

Price Ceilings 65
Price Floors 66
Laissez Faire 67

Policy Perspectives: Did Gas Rationing Help or Hurt New Jersey Motorists? 68

Summary 69

in NYC 62

News Wires

Higher Alcohol Prices and Student Drinking 53
Electric Cars Hurt Most among Renewables on Oil's Slump 55
Hurricane Sandy to Raise Prices on Used Cars 60

Scalpers Want Small Fortune for Tickets to See the Pope

Apple iPhone 6 Plus Sells Out: Shipping Delays Expected 63 Gov. Christie Signs Order to Ration Gas in 12 NJ Counties 69

Section II MICROECONOMICS

Chapter 4

CONSUMER DEMAND 72

Patterns of Consumption 73

Determinants of Demand 74

The Sociopsychiatric Explanation 74
The Economic Explanation 76

The Demand Curve 76

Utility Theory 76
Price and Quantity 78

Price Elasticity 79

Elastic versus Inelastic Demand 81
Price Elasticity and Total Revenue 82
Determinants of Price Elasticity 84
Other Changes in Consumer Behavior 85
Changes in Income 87

Policy Perspectives: Does Advertising Change Our Behavior? 87

Summary 88

News Wires

Men versus Women: How They Spend 75
Price Cut on MacBook Air Jumpstarts Sales 80
Smokers Gasping at Obama's Tax Hike 82
Starbucks Customers Shrug off Price Hike 84
San Francisco: The Butts Stop Here 85
Truck Sales Rise and Hybrid Sales Fall as Gas Prices Drop 86

Chapter 5

SUPPLY DECISIONS 92

Capacity Constraints: The Production Function 93

Efficiency 95 Capacity 95 Marginal Physical Product 95 Law of Diminishing Returns 96

Short Run versus Long Run 97

Costs of Production 98

Total Cost 98

Which Costs Matter? 99

Average Cost 100

Marginal Cost 100

Supply Horizons 102

The Short-Run Production Decision 103
The Long-Run Investment Decision 103

Economic versus Accounting Costs 104

Economic Cost 105
Economic Profit 105

Policy Perspectives: Can We Outrun Diminishing Returns? 106

Summary 107

News Wires

"We Pretend to Work, They Pretend to Pay Us" 97 Tesla to Boost Output in 2015; Tesla Plans "Gigafactory" 104

Chapter 6

COMPETITION 110

Market Structure 111

Perfect Competition 113

No Market Power 113

Price Takers 114

Market Demand versus Firm Demand 114

The Firm's Production Decision 116

Output and Revenues 116 Revenues versus Profits 116

Profit Maximization 117

Price 117

Marginal Cost 117

Profit-Maximizing Rate of Output 117

Total Profit 120

Supply Behavior 121

A Firm's Supply 121

Market Supply 122

Industry Entry and Exit 123

Entry 124

Tendency toward Zero Economic Profits 125

Exit 126

Equilibrium 126

Low Barriers to Entry 127

Market Characteristics 127

Policy Perspectives: Does Competition Help Us or Hurt Us? 128

Summary 130

News Wires

Catfish Farmers Feel Forced Out of Business 114

XX Contents

Market Supply 155

Derived Demand 155

Labor Demand 155

Marginal Physical Product 157 Flat Panels, Thin Margins 124 U.S. Catfish Growers Struggle against High Feed Prices, Marginal Revenue Product 158 Foreign Competition 126 The Law of Diminishing Returns 158 The T-Shirt Business: Too Much Competition 128 The Hiring Decision 161 The Firm's Demand for Labor 161 Chapter 7 Market Equilibrium 162 **MONOPOLY 132** Equilibrium Wage 163 Monopoly Structure 133 Equilibrium Employment 163 Monopoly = Industry 133 Changing Market Outcomes 163 Price versus Marginal Revenue 134 Changes in Productivity 163 Monopoly Behavior 136 Changes in Price 164 Profit Maximization 136 Legal Minimum Wages 164 The Production Decision 136 Labor Unions 166 The Monopoly Price 137 Policy Perspectives: Should CEO Pay Be Capped? 167 Monopoly Profits 138 Summary 169 **News Wires** Barriers to Entry 138 Threat of Entry 139 Thousands of Hopeful Job Seekers Attend Career Fair at Rutgers 154 Patent Protection: Polaroid versus Kodak 139 Hewlett-Packard's Job Cuts to Hit 34,000 156 Other Entry Barriers 140 Most Lucrative College Degrees 157 Comparative Outcomes 141 Alabama's Nick Saban Gets Raise, Contract Extension 162 Competition versus Monopoly 141 Obama Proposes to Increase Federal Minimum Wage 165 Near Monopolies 142 Swiss Voters Reject Strict CEO Pay Limits in Referendum 168 WHAT Gets Produced 144 FOR WHOM 145 **HOW 145** Chapter 9 Any Redeeming Qualities? 145 **GOVERNMENT INTERVENTION 172** Research and Development 146 Market Failure 173 Entrepreneurial Incentives 146 The Nature of Market Failure 174 Economies of Scale 146 Sources of Market Failure 174 Natural Monopolies 147 Public Goods 174 Contestable Markets 147 Joint Consumption 175 Structure versus Behavior 147 The Free-Rider Dilemma 175 Policy Perspectives: Why Is Flying Monopoly Air Routes So Externalities 177 Expensive? 148 Consumption Decisions 177 Summary 150 **News Wires Production Decisions 179** Social versus Private Costs 181 SCO Suit May Blunt the Potential of Linux 140 Policy Options 182 Judge Rules Microsoft Violated Antitrust Laws 141 OPEC Keeps Output Target on Hold, Predicts Low Market Power 185 Prices 143 Restricted Supply 185 German Brewers Fined over Price-Fixing 144 Antitrust Policy 186 Two Drug Firms Agree to Settle Pricing Suit 145 Inequity 186 Following the Fares 149 Macro Instability 188 Policy Perspectives: Will the Government Get It Right? 188 Chapter 8 Summary 190 **THE LABOR MARKET 152 News Wires** Israel's "Iron Dome" Works! 176 Labor Supply 153 Secondhand Smoke Kills 600,000 People a Year: Study 178 Income versus Leisure 154

Obama Vetoes Keystone Pipeline 183

Bloomberg: Forced Recycling a Waste 185

Breathing Easier 184

Contents xxi

Section III MACROECONOMICS

Chapter 10

THE BUSINESS CYCLE 192

Assessing Macro Performance 194

GDP Growth 195

Business Cycles 195 Real GDP 195 Erratic Growth 196

Unemployment 198

The Labor Force 198

The Unemployment Rate 200

The Full Employment Goal 201

Inflation 203

Relative versus Average Prices 203

Redistributions 205 Uncertainty 209 Measuring Inflation 210

The Price Stability Goal 210

Policy Perspectives: Is Another Recession Coming? 211

Summary 212

News Wires

Market in Panic as Stocks Are Dumped in 12,894,600 Share Day: Bankers Halt It 193

Economy: Sharpest Decline in 26 Years 195 Depression Slams World Economies 198 How Unemployment Affects the Family 201

UPS to Hire up to 95,000 Seasonal Employees for Holiday Season 202

Inflation and the Weimar Republic 204

College Tuition in the U.S. Again Rises Faster than Inflation 205

Chapter 11

AGGREGATE SUPPLY AND DEMAND 214

A Macro View 215

Macro Outcomes 215
Macro Determinants 216

Stable or Unstable? 216

Classical Theory 216

The Keynesian Revolution 217

The Aggregate Supply-Demand Model 218

Aggregate Demand 218 Aggregate Supply 220 Macro Equilibrium 221

Macro Failure 222

Undesirable Outcomes 222 Unstable Outcomes 223 Shift Factors 225

Competing Theories of Short-Run Instability 227

Demand-Side Theories 227

Supply-Side Theories 228 Eclectic Explanations 228

Policy Options 229

Fiscal Policy 229 Monetary Policy 229 Supply-Side Policy 229

Policy Perspectives: Which Policy Lever to Use? 230

Summary 231
News Wires

Job Losses Surge as U.S. Downturn Accelerates 223 Consumer Confidence Plummets 225 Sandy Pummels New York Area 226

Chapter 12

FISCAL POLICY 234

Components of Aggregate Demand 235

Consumption 236
Investment 236

Government Spending 237

Net Exports 238 Equilibrium 238

The Nature of Fiscal Policy 239

Fiscal Stimulus 239

More Government Spending 241

Tax Cuts 244

Inflation Worries 247

Fiscal Restraint 247

Budget Cuts 248
Tax Hikes 248
Fiscal Guidelines 24

Fiscal Guidelines 248

Policy Perspectives: Must the Budget Be Balanced? 249 Summary 252

News Wires

Recession Looming 237

U.S. Congress Gives Final Approval to \$787 Billion Stimulus 240

The 2008 Economic Stimulus: First Take on Consumer Response 245

Wal-Mart Woes: Consumer Spending Curbed by Payroll Tax 249

Chapter 13

MONEY AND BANKS 254

The Uses of Money 255

Many Types of Money 256

The Money Supply 256

Cash versus Money 256 Transactions Accounts 257 Basic Money Supply 257 Near Money 258

Aggregate Demand 259

xxii Contents

Creation of Money 259

Deposit Creation 259

A Monopoly Bank 260

Reserve Requirements 262

Excess Reserves 263

A Multibank World 263

The Money Multiplier 263

Limits to Deposit Creation 264

Excess Reserves as Lending Power 265

The Macro Role of Banks 265

Financing Aggregate Demand 265

Constraints on Money Creation 266

Policy Perspectives: Are Bitcoins the New Money? 267

Summary 267

News Wires

Bras: The Currency of Russia in the 1990s 256

How Would You Like to Pay for That? 259

Chapter 14

MONETARY POLICY 270

The Federal Reserve System 271

Federal Reserve Banks 272

The Board of Governors 272

The Fed Chair 273

Monetary Tools 273

Reserve Requirements 273

The Discount Rate 275

Open Market Operations 277

Powerful Levers 279

Shifting Aggregate Demand 279

Expansionary Policy 280

Restrictive Policy 280

Interest Rate Targets 281

Price versus Output Effects 281

Aggregate Demand 281

Aggregate Supply 281

Policy Perspectives: How Much Discretion Should the Fed

Have? 283

Summary 284

News Wires

China Cuts Reserve Requirements 275

Fed Cuts Key Interest Rate Half-Point to

1 Percent 277

Chapter 15

ECONOMIC GROWTH 286

The Nature of Growth 287

Short-Run Changes in Capacity Use 287

Long-Run Changes in Capacity 287

Nominal versus Real GDP 289

Growth Indexes 289

The GDP Growth Rate 289

GDP per Capita: A Measure of Living Standards 290

GDP per Worker: A Measure of Productivity 292

Sources of Productivity Growth 294

Labor Quality 294

Capital Investment 294

Management 294

Research and Development 294

Policy Levers 295

Education and Training 295

Immigration Policy 295

Investment Incentives 296

Savings Incentives 297

Government Finances 297

Deregulation 298

Economic Freedom 299

Policy Perspectives: Is More Growth Desirable? 300

Summary 301

News Wires

What Economic Growth Has Done for U.S. Families 291

House Poised to Pass STEM Immigration Bill 296

Americans Save Little 297

Improvement in Economic Freedom and Economic

Growth 300

Chapter 16

THEORY AND REALITY 304

Policy Tools 305

Fiscal Policy 305

Monetary Policy 307

Supply-Side Policy 309

Idealized Uses 311

Case 1: Recession 311

Case 2: Inflation 311

Case 3: Stagflation 311

Fine-Tuning 312

The Economic Record 313

Why Things Don't Always Work 314

Goal Conflicts 314

Measurement Problems 315

Design Problems 317

Implementation Problems 318

Policy Perspectives: Hands Off or Hands On? 320

Summary 321

News Wires

Budget Deficit Sets Record in February 308

Macro Performance, 2004-2014 314

NBER Makes It Official: Recession Started One Year Ago 316

Tough Calls in Economic Forecasting 317

Contents xxiii

Section IV INTERNATIONAL

Chapter 17

INTERNATIONAL TRADE 324

U.S. Trade Patterns 325

Imports 325 Exports 325

Trade Balances 327

Motivation to Trade 328

Production and Consumption without Trade 328
Trade Increases Specialization and World
Output 330

Comparative Advantage 331

Opportunity Costs 331

Absolute Costs Don't Count 332

Terms of Trade 332

Limits to the Terms of Trade 332 The Market Mechanism 332

Protectionist Pressures 333

Microeconomic Losers 333

The Net Gain 334

Barriers to Trade 335

Tariffs 335

Quotas 336

Nontariff Barriers 338

Exchange Rates 339

Global Pricing 340

Appreciation/Depreciation 340

Foreign Exchange Markets 341

Policy Perspectives: Who Enforces World Trade Rules? 342

Summary 344

News Wires

Exports in Relation to GDP 326

Insight: Brazil Protects Its... Wines? 334

A Litany of Losers 335

U.S. Solar Tariffs on Chinese Cells May Boost Prices 336

Obama Cuts Sour Deal on Sugar 339

What the Strong U.S. Dollar Means for Americans Traveling

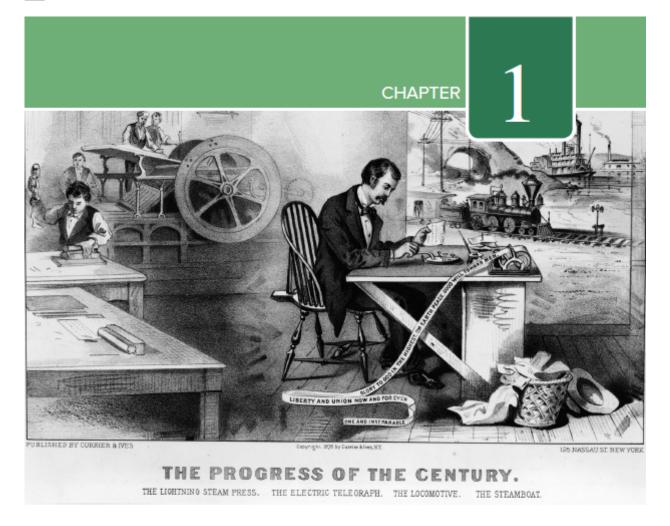
to Europe This Year 340

Glossary 347

Index 351

Essentials of Economics





The Challenge of **Economics**Source: Courtesy of Library of Congress Prints and Photograph Division

LEARNING OBJECTIVES

After reading this chapter, you should be able to:

- 1. 1 Explain the meaning of scarcity.
- 2. 2 Define opportunity cost.
- 3. 3 Recite society's three core economic questions.
- 4. 4 Discuss how market and command economies differ.
- 5. 5 Describe the nature of market and government failures.

Page 3

he twentieth century was very good to the United States of America. At the beginning of that century, life was hard and short. Life expectancy was only 47 years for whites and a shockingly low 33 years for blacks and other minorities. People who survived infancy faced substantial risk of early death from tuberculosis, influenza, pneumonia, or gastritis. Measles, syphilis, whooping cough, malaria, typhoid, and smallpox were all lifethreatening diseases at the turn of the last century.



Work Then:

Source: Library of Congress Prints and Photographs Division [LC-DIG-nclc-01133]

Work was a lot harder back then, too. In 1900 one-third of all U.S. families lived on farms, where the workday began before sunrise and lasted all day. Those who lived in cities typically worked 60 hours a week for wages of only 22 cents an hour. Hours were long, jobs were physically demanding, and workplaces were often dirty and unsafe.

People didn't have much to show for all that work. By today's standards, nearly everyone was poor back then. The average income per person was less than \$4,000 per year (in today's dollars). Very few people had telephones, and even fewer had cars. There were no television sets, no home freezers, no microwaves, no dishwashers or central air conditioning, and no computers. Even indoor plumbing was a luxury. Only a small elite went to college; an eighth-grade education was the norm.



Work Now: Technology has transformed work. Source: © Yuri Arcurs/Getty Images, RF

All this, of course, sounds like ancient history. Today most of us take new cars, central air and heat, remote-control TVs, flush toilets, smartphones, college attendance, and even long weekends for granted. We seldom imagine what life would be like without the abundance of goods and services we encounter daily. Nor do we often ponder how hard work might still be had factories, offices, and homes not been transformed by technology.

HOW DID WE GET SO RICH?

We ought to ponder, however, how we got so affluent. Billions of people around the world are still as poor today as we were in 1900. How did we get so rich? Was it our high moral standards that made us rich? Was it our religious convictions? Did politics have anything to do with it? Did extending suffrage to women, ending prohibition, or repealing the military draft raise our living standards? Did the many wars fought in the twentieth century enhance our material well-being? Was the tremendous expansion of the public sector the catalyst for growth? Were we just lucky?

Some people say America has prospered because our nation was blessed with an abundance of natural resources. But other countries are larger. Many others have more oil, more arable land, more gold, more people, and more math majors. Yet few nations have prospered as much as the United States.

Students of history can't ignore the role that economic *systems* might have played in these developments. Way back in 1776 the English economist Adam Smith asserted that a free market economy would best promote economic growth and raise living standards. As he saw it, people who own a business want to make a profit. To do so, they have to create new products, improve old ones, reduce costs and prices, and advance technology. As this happens, the economy grows, more jobs are created, and living standards rise. *Market capitalism*, Adam Smith reasoned, would foster prosperity.

Karl Marx, a German philosopher, had a very different view of market capitalism. Marx predicted that the *capitalist system* of private ownership would eventually self-destruct. The capitalists who owned the land, the factories, and the machinery would keep wages low and their own lifestyles high. They would continue exploiting the working class until it rose up and overthrew the social order. Long-term prosperity would be possible only if the *state* owned the means of production and managed the economy—a *communist system*.

Subsequent history gave Adam Smith the upper hand. The "working class" that Marx worried so much about now owned their own homes, a couple of cars, flat-screen TVs, and smartphones, and they take expensive vacations they locate on the Internet. By contrast, the nations that adopted Marxist systems—Russia, China, North Korea, East Germany, Cuba—fell behind more market-oriented economies. The gap in living standards between communist and capitalist nations got so wide that communism effectively collapsed. People in those countries wanted a different economic system—one that would deliver the goods capitalist consumers were already enjoying. In the last decade of the twentieth century, formerly communist nations scrambled to transform their economies from centrally planned ones to more market-oriented systems. They sought the rules, the mechanisms, the engine that would propel their living standards upward.

Page 4

Even in the United States the quest for greater prosperity continues. As rich as we are, we always want more. Our materialistic desires, it seems, continue to outpace our ever-rising incomes. We need to have the newest iPhone, a larger TV, a bigger home, a faster car, and a more exotic vacation. People today seem to think they need twice as much income as they have to be really happy (see News Wire "Insatiable Wants"). Even multimillionaires say they need much more money than they already have: People with more than \$10 million of net worth say they need at least \$18 million to live "comfortably."

How can any economy keep pace with these ever-rising expectations? Will the economy keep churning out more goods and services every year like some perpetual motion machine? Or will we run out of goods, basic resources, and new technologies? Will the future bring *more* goods and services — or *less*?

THE GREAT RECESSION OF 2008–2009 Anxiety about the ability of the U.S. economy to crank out more goods every year spiked in 2008–2009. Indeed, the economic system screeched to a halt in September 2008, raising widespread fears about another 1930s-style Great Depression. Things didn't turn out nearly that bad, but millions of Americans lost their jobs, their savings, and even their homes in 2008–2009. As the output of the U.S. economy contracted, people's faith in the capitalist *system* plunged. By the end of 2009, only one of four

American adults expected their income to increase in the next year. Worse yet, one of four Americans also expected their children to have *fewer* goods and services in the future than people now do (see the News Wire "Future Living Standards?"). Could that happen?

NEWS WIRE INSATIABLE WANTS Never Enough Money!

A public opinion poll asked Americans how much money they would need each year to be "happy." In general, people said they needed twice as much income as they had at present to be happy.



Current Income Less than \$50,000 More than \$50,000 Amount of Income Needed to be Happy (median) \$60,000 \$127,000

Photo Source: © Roberto Machado Noa/Getty Images

Data Source: CNN/ORC opinion poll of May 29 - June 1, 2014.

NOTE: People always want more than they have. Even multimillionaires say they don't have enough to live "comfortably."

Page 5

People worry not only about the resilience of the economic *system* but also about resource limitations. We now depend on oil, water, and other resources to fuel our factories and irrigate our farms. What happens when we run out of these resources? Do the factories shut down? Do the farms dry up? Does economic growth stop?

An end to world economic growth would devastate people in other nations. Most people in the world have incomes far below American standards. A *billion* of the poorest inhabitants of Earth subsist on less than \$3 per day—a tiny fraction of the \$75,000 a year the average U.S. family enjoys. Even in China, where incomes have been rising rapidly, daily living standards are below those that U.S. families experienced in the Great Depression of the 1930s. To attain current U.S. standards of affluence, these nations need economic systems that will foster economic growth for decades to come.

Will consumers around the world get the kind of persistent economic growth the United States has enjoyed? Will living standards here and abroad rise, stagnate, or fall in future years? To answer this question, we need to know what makes economies "tick." That is the foremost goal of this course. We want to know what kind of system a "market economy" really is. How does it work? Who determines the price of a textbook in a market economy? Who decides how many textbooks will be produced? Will everyone who needs a textbook get one? And why are gasoline prices so high? How about jobs? Who decides how many jobs are available or what wages they pay in a market economy? What keeps an economy growing? Or stops it in its tracks?

NEWS WIRE FUTURE LIVING STANDARDS? Will Your Kids Be Better Off?