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fifth edition

Paul R. Gregory

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PREFACE

Economics has the power to explain economic events as they unfold. As we begin the twenty-first century, the almost decade-long United States economic expansion is slowing down and a recession is feared. The prices of high tech stocks have collapsed, and the power of the U.S. "New Economy" is being questioned. The evenlydivided U.S. Congress has approved a tax cut that Democrats characterize as massive and Republicans characterize as prudent, or even modest. The once-powerful Russia is slowly emerging from economic ruin aided by the high price of oil. Rolling blackouts of electricity threaten the economy of California. The new U.S. President has initiated talks for a hemisphere-wide free trade zone encompassing North and South America. Europe continues its move toward a single European market of almost 300 million persons, with twelve new countries slated to join the European Union. Europe's move to a single currency is over two years old and soon a new common banknote, the Euro, will replace marks, franks, and lire. The fifth edition of Essentials of Economics, through coverage of the basic principles of modern micro- and macroeconomics, shows how economic theory can be used to explain these events. If students are to learn both micro- and macroeconomics in one course, it is better to learn the essentials well than to be overwhelmed by an excessive amount of over-specialized materials. This book is designed for a one-semester course, but it can be used in two-semester micro-macro sequences in combination with assigned readings.

The fifth edition has taken on a new organization that recognizes the growing connection between micro- and macroeconomics. Part I provides the basic concepts of supply, demand, and markets, thereby acquainting students with the basic vocabulary of economics. Part II presents the core of microeconomics, focusing on the costs of production, the behavior of competitive enterprises, and the behavior of noncompetitive enterprises. Part III, *Microfoundation of Macroeconomics*, supplies the microeconomic building blocks of macroeconomics; namely, consumption, saving, interest rates, and public finance. Part IV provides the core of macroeconomics—aggregate supply and demand, national income, economic growth, inflation, unemployment, stagflation, and the new economy. Part V deals with the globalization of the world economy and describes the world economy of "Haves" and "Have-Nots," trade theory, and the international monetary system.

Essentials of Economics provides a strong pedagogical exposition of basic microand macroeconomic theory in a blend of both traditional topics and new theories. In the macro area, it integrates modern aggregate supply and demand analysis, expectations theory, contracting, and the natural rate hypothesis. It analyzes the different views of aggregate supply in the short and long runs and discusses the activism-nonactivism policy debate. The macro portion has been shortened by going to aggregate demand and aggregate supply directly rather than through the detour of the aggregate expenditure model. The microeconomics chapters cover information theory and contemporary industrial organization theory, and provide a comprehensive treatment of traditional microeconomics.

Because essentials covers core economic topics, it is also important to be clear and accessible in explanation of theory. Theoretical concepts are explained in direct intuitive terms. The vocabulary of modern economics is carefully developed, and key terms and ideas are set in margins for easy reader reference. The theoretical concepts are introduced in both graphs and prose explanations without overwhelming the reader with excessive figures and graphs. Each chapter shows its real-world relevance. The micro chapters provide a number of boxed applications and examples. The macro chapters reinforce theoretical concepts with real-world data and policy examples. The goal of this book is to demonstrate that economics is a lively field of study that, if properly examined, will allow students to understand the real world.

Essentials of Economics is accompanied by a complete support package. The Online Student Study Guide presents the strongest problem-solving orientation of any one-term principles study guide, with numerous problem sets and analytical multiple-choice questions. The Companion Web site, www.awl.com/gregory, contains additional student and instructor resources; an extensive print Test Bank is also available for instructor support.

A number of persons made valuable suggestions to the earlier editions of this book. They are Claire H. Hammond, Wake Forest University; Gena F. Hampton, Gainesville College; Robert Kerr, College of Lake County; John Neal, Lake Sumter Community College; Charles A. Rambeck, Saint John's University; Steven Husted, University of Pittsburgh; Jerry Knarr, Hillsborough Community College; William John Mason, San Francisco State University; W. Douglas Morgan, University of California, Santa Barbara; Nic Nigro, Cogswell College; Mark Rush, University of Florida; and Anthony Stair, Frostburg State University. I would like to thank Richard A. Zuber, University of North Carolina at Charlotte; Richard L. Tontz, California State University at Northridge; and Paul A. Stock, Tarleton State University, for their valuable suggestions for this fifth edition.

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PART ONE

INTRODUCTION TO ECONOMICS

SCARCITY, CHOICE, AND OPPORTUNITY COSTS

Chapter Preview

We take for granted the electricity that heats and air-conditions our homes, cooks our food, and runs our factories and businesses. Electricity blackouts are catastrophes that plague "other people" in underdeveloped countries like Africa, Armenia, or Yugoslavia. The rolling electricity blackouts that threatened California, the largest state in the United States, in 2001 serve as a reminder that all economic resources are scarce, that they must be allocated among competing ends, and that there is "no such thing as a free lunch." When we use economic goods for one purpose, they are not available for alternative uses. We use the example of one product—electricity—to illustrate these concepts in this first chapter.

Definition

Economics studies how we use our scarce resources to specialize in production and to exchange and consume goods and services. **Economics** studies how economic agents—households, businesses, and governments—use their scarce resources to specialize in production and to exchange and consume goods and services according to the prevailing economic system.

This chapter introduces the main actors on the economic stage—households, businesses, and governments. It focuses on how they choose among alternative actions within the limits imposed by finite resources. The economic actors, who specialize in different economic activities, must exchange or trade with one another. Production and exchange culminate in the consumption of the goods and services that determine our material standard of living.

Concepts and Themes

Because so much information is packed into the definition of economics, we must explain its key concepts: economic agents, scarce resources, choice, specialization, exchange, and economic systems.

Economic agents engage in production, exchange, specialization, and consumption.

Economic Agents

Economic agents are those individuals and organizations that engage in production, exchange, specialization, and consumption. They can be individuals or households. They can be businesses, nonprofit organizations, or governments. Because economics concentrates on private economic activity, the main agents to be studied are businesses and households; but we are also interested in how voters and government institutions make economic decisions.

How many economic agents are there in the American economy? There are roughly 100 million single- and multiple-person households and 14 million businesses. There are some 80,000 governmental units. Who are the economic agents that participate in the electricity market? There are more than 10,000 generating units, operating hydro, steam, gas turbine, and nuclear plants. These units produce electricity for 110 million residential customers, 13 million commercial establishments, and a half million industrial users.

Scarce Resources

To understand **scarce resources** we must define both **resources** and **scarcity.** Resources are the land and natural resources, labor, and capital (plants, equipment, and inventories) that are combined to produce goods and services.

Productive resources are also called **factors of production.** They represent economic wealth because they ultimately determine how much output we can produce. We classify resources into the three general categories of land and natural resources, labor, and capital. Land can vary from productive farmland to garbage dumps. Capital can range from a mainframe computer to a plow. Labor ranges from a skilled surgeon to a ditchdigger. Resources, especially labor, must be considered in both quantitative and qualitative dimensions. One person may possess superb athletic ability; another may be a gifted talker; another may have had years of professional training. In addition to its use of its power plants and labor, the electricity industry uses scarce resources to produce electricity. In 2001, it used a billion tons of coal, almost 7 trillion cubic feet of natural gas, and 190 million barrels of petroleum liquids to produce electricity. These resources could have been used in other ways.

The term **scarcity** is used differently in economics from everyday language. Scarcity exists if the amount of the good or resource offered to users is less than they would want if it were given away free of charge. Scarcity has little to do with wealth or poverty. It exists in both rich and poor societies. The only requirement is that there be an imbalance between what is available and what people would want if the good were free. Goods consumed by the rich, such as Rolls-Royces, pleasure cruises, and Manhattan penthouses, can be just as "scarce" as goods consumed by the poor (city bus rides, canned meats, and mobile homes). In both cases the amounts people would want to have at a zero price exceed the amounts available.

Not all resources are scarce. Some natural resources, such as oxygen or the sun's rays (without which no production could take place), are available in such supply that the amount available exceeds the amount users would want at a zero price. Such nonscarce goods, or free goods, do not require complicated choices. They are simply available to anyone who wants them.

Resources are the land and natural resources, labor, and capital that can be combined to produce goods and services.

The factors of production are land, labor, and capital.

Scarcity exists when the amount of the good or resource offered is less than what users would want if it were given away free.