Krugman/Wells, *ECONOMICS*
Authors' Overview of *Microeconomics*

An important objective in writing this text was to produce a book that is easily readable and entertaining to students. An equally important objective was to produce a book that makes instructors' lives easier. Granted, every new textbook claims to ease an instructor's load. How do we think we are different?
Over and over, instructors say that the hardest area for students to master in economics is the conceptual: abstract concepts like consumer surplus or efficiency are just too far removed from the concrete terms in which most students think. We believe that this book can increase students' comprehension of conceptual matter in two distinct ways. First, each concept is motivated with a real-world example that students can easily relate to, such as the consumer and producer surplus generated in the market for used textbooks at their college. Second, the book is organized as a series of building blocks in which conceptual material learned at one stage is clearly built upon and integrated into the conceptual material covered in the next stage. These building blocks correspond to the 10 parts of the book.
It's important to note, however, that an instructor need not teach these sections in the same sequence in which they appear in the book. Chapters and sections have been written to incorporate a degree of flexibility in the sequence in which they are taught without sacrificing conceptual continuity. So an instructor can achieve some customization of his or her course through the choice of which chapters to cover and in which order to cover them. We will give a brief overview of each part and chapter, followed by a discussion of the various ways in which an instructor can tailor the book to his or her individual needs.

The Organization of This Book and How to Use It

What Is Economics?: Part 1

In the introduction, "The Ordinary Business of Life," students are initiated into the study of economics in the context of a shopping trip on any given Sunday in everyday America. It provides students with basic definitions of terms such as *economics*, the *invisible hand,* and *market structure.* In addition it serves as a "tour d'horizon" of economics, explaining the difference between microeconomics and macroeconomics.

In Chapter 1, "First Principles," nine principles are posited and explained: four principles of individual choice, covering concepts such as opportunity cost, marginal analysis and incentives; and five principles of interaction between individuals, covering concepts such as gains from trade, market efficiency, and market failure. In later chapters, we build intuition by frequently referring to these principles in the explanation of specific models. Students learn that these nine principles form a cohesive conceptual foundation to all of economics.

Chapter 2, "Economic Models: Trade-offs and Trade," shows students how to think like an economist by using three models—the production possibility frontier, comparative advantage and trade, and the circular-flow diagram—to analyze the world around them. It gives students an early introduction to gains from trade and to international comparisons. The Chapter 2 appendix contains a comprehensive math review for those students and instructors who wish to cover this material.

Supply and Demand: Part 2

Chapter 3, "Supply and Demand," covers the standard material in a fresh and compelling way: supply and demand, market equilibrium, and surplus and shortage are all illustrated using

an example of the market for scalped tickets to a sports event. Students learn how the demand and supply curves of scalped tickets shift in response to the announcement of a star player's impending retirement.

Chapter 4, "The Market Strikes Back," covers various types of market interventions and their consequences: price and quantity controls, inefficiency and deadweight loss, and excise taxes. Through tangible examples such as New York City rent control regulations and New York City taxi licenses, the costs generated by attempts to control markets are made real to students.

In Chapter 5, "Elasticity," the actions of OPEC and their consequences for the world market for oil are the motivating example in our discussion of the price elasticity of demand. There we introduce the various elasticity measures and show how elasticities are used to evaluate the incidence of an excise tax.

Individuals and Markets: Part 3

Through examples such as a market for used textbooks and eBay, students learn how markets increase welfare in Chapter 6, "Consumer and Producer Surplus." Although the concepts of market efficiency and deadweight loss are strongly emphasized, we also preview the ways in which a market can fail.

Chapter 7, "Making Decisions," is a relatively unique chapter. Microeconomics is a decision-theoretic discipline—it is fundamentally a science of how to make decisions. But that aspect is rarely highlighted in introductory microeconomics. Rather, much of the emphasis in other textbooks is placed on the consequences of decision making instead of helping students develop an understanding of how decisions should be made in any context. For example, due to the almost exclusive emphasis that economics textbooks place on marginal analysis, we believe that students are often unable to distinguish between what is and what isn't a marginal decision. To remedy this, we have included an entire section on "either–or" versus "how much" decisions—a distinction that is particularly useful in later chapters where we compare a firm's output decision to its entry/exit decision. In addition, in Chapter 7 we reprise the concept of opportunity cost; present a thorough treatment of marginal analysis; explain the concept of sunk cost; and, for instructors who wish to teach it, cover present discounted value. Full coverage of sunk cost at this point will help students later when they need to understand the irrelevance of fixed cost in the firm's short-run output decision. We think this chapter will be an important teaching aid because it helps students develop a deeper intuition about the common conceptual foundations of microeconomic models.

What Comes Next: The Firm or the Consumer?

In all likelihood, the most unorthodox aspect of the book occurs at this stage: the fact that we have placed the chapters covering the producer before the chapters covering the consumer. Why have we done this? Because we believe that it is a more natural conceptual progression to cover the producer after Chapter 7, "Making Decisions," than it is to cover the consumer. Since students have just studied opportunity cost, economic profit versus accounting profit, marginal benefit and marginal cost, and sunk cost, we think examining the firm's cost curves, its output decision, and its entry/exit decision is an easier next step for them to undertake.

We are aware that some instructors are likely to be skeptical of this approach. We have often heard instructors say that the consumer should be studied before the producer because students can relate to being a consumer but not to being a firm owner. We hope, however, to change that viewpoint because what we really want students to do is not just relate to being a consumer but to *think like a rational consumer—a consumer who maximizes utility subject to scarce resources*. And we believe that it is easier for students to understand utility maximization (utility being an inherently slippery concept) after they have come to understand profit

maximization.

Nonetheless, we want to strongly emphasize that it is very easy for those instructors who wish to follow a traditional chapter sequence—with the consumer before the firm—to do just that. We wrote the chapters so that there is no loss whatsoever if an instructor follows Chapter 7 with Chapter 10, "The Rational Consumer," and then Chapter 11, "Consumer Preferences and Consumer Choice," (an optional chapter).

The Producer: Part 4

In Chapter 8, "Behind the Supply Curve: Inputs and Costs," we develop the production function and the various cost measures of the firm. There is an extensive discussion of the difference between average cost and marginal cost, illustrated by examples such as a student's grade point average. Chapter 9, "Perfect Competition and the Supply Curve," explains the output decision of the perfectly competitive firm, its entry/exit decision, the industry supply curve, and the equilibrium of a perfectly competitive market. We draw on examples such as generic pharmaceuticals and the California energy crisis of 2000–2001 to contrast the behavior of oligopolists and monopolists.

The Consumer: Part 5

Chapter 10, "The Rational Consumer," provides a complete treatment of consumer behavior for those instructors who don't cover indifference curves. There is a simple, intuitive exposition of the budget line, the optimal consumption choice, diminishing marginal utility, and income and substitution effects and their relationship to market demand. Students learn, for example, that a budget line constructed using prices is much like a Weight-Watchers diet plan constructed using calories. Chapter 11, "Consumer Preferences and Consumer Choice," offers a more detailed treatment for those instructors who wish to cover indifference curves. It contains an analysis of the optimal consumption choice using the marginal rate of substitution as well as income and substitution effects.

What Comes Next: Markets and Efficiency or Market Structure?

Many instructors are likely to consider the next two chapters—Chapter 12, "Factor Markets and the Distribution of Income," and Chapter 13 "Efficiency and Equity"—optional. For those who wish to skip them, their next topic area will be market structure beyond perfect competition: monopoly, oligopoly, and monopolistic competition. Chapters 12 and 13 are likely to be used by instructors who want a more in-depth coverage of microeconomics as well as by those who wish to emphasize labor markets, welfare, and public policy issues.

Instructors who prefer a traditional sequence of topics may wish to go from Part 5 ("The Consumer") to Part 4 ("The Producer") to Part 7 ("Market Structure: Beyond Perfect Competition"), bypassing Part 6 ("Markets and Efficiency") altogether or covering it later. This is a good choice for those who wish to contrast the difference between the perfectly competitive firm's output decision and the monopolist's output decision. But those who follow the existing chapter sequence—"The Producer" followed by "The Consumer" followed by "Market Structure: Beyond Perfect Competition"—will be able to draw a tighter connection among consumer behavior, monopoly pricing, price discrimination, product differentiation, and monopolistic competition. We have written the chapters so that either sequence choice is equally good.

Markets and Efficiency: Part 6

Chapter 12, "Factor Markets and the Distribution of Income," covers the competitive factor market model and the factor distribution of income. It also contains modifications and alternative interpretations of the labor market: the efficiency-wage model of the labor market is discussed,

and the influences of education, discrimination, and market power are also addressed. It presents, we hope, a balanced and well-rounded view of the strengths and limitations of the competitive market model of labor markets and leads to a greater appreciation of the issues of efficiency and equity discussed in the next chapter. For those instructors who covered indifference curves in Chapter 11, the Chapter 12 appendix offers a detailed examination of the labor–leisure trade-off and the backward-bending labor supply curve.
In Chapter 13, "Efficiency and Equity," after recapping efficiency in a single market, we compare and contrast this to what it means to have efficiency in a market economy as a whole. Some may wonder why it is useful to draw the distinction between partial equilibrium and general equilibrium in a principles course. We believe that doing so gives students a deeper understanding of the often-conflicting objectives of efficiency and equity—something that really can't be fully explored in a partial equilibrium setting. As a real-world example, we discuss the reunification of West and East Germany in terms of the trade-offs faced by German policy makers, who sacrificed some efficiency-enhancing measures in order to reduce the income differences between East and West Germans. Students should come away from this chapter with a fuller appreciation of the complexity of real-world economic policy making—that is, how democracies may sometimes rationally choose to sacrifice some efficiency for equity purposes.

Market Structure: Beyond Perfect Competition: Part 7

Chapter 14, "Monopoly," is a full treatment of monopoly, including topics such as price discrimination and the welfare effects of monopoly. We provide an array of compelling examples, such as De Beers Diamonds, price manipulation by California utilities, and airline ticket-pricing. In Chapter 15, "Oligopoly," we present basic game theory, in both a one-shot and repeated-game context, as well as an integrated treatment of the kinked demand curve model. The models are applied to a wide set of actual examples, such as Archer-Daniels-Midland, the European vitamin cartel, OPEC, and airline ticket-pricing wars. In Chapter 16, "Monopolistic Competition and Product Differentiation," we start with an example of monopolistic competition that is a familiar feature of students' lives: the food court at the local mall. We go on to cover entry and exit, efficiency considerations, and advertising in monopolistic competition.

What Comes Next: Extending Market Boundaries or Microeconomics and Public Policy?

The next section of the book, "Extending Market Boundaries," is devoted to applications and extensions of the competitive market model: Chapter 17, "International Trade," and Chapter 18, "Uncertainty, Risk, and Private Information." Both of these chapters are entirely optional. Instructors who prefer to skip one or both of these chapters can proceed to the following section, "Microeconomics and Public Policy."

Extending Market Boundaries: Part 8

In Chapter 2, we presented a full exposition of gains from trade and the difference between comparative and absolute advantage, illustrated with an international example (trade between high-wage and low-wage countries). Chapter 17, "International Trade," builds on that material. It contains a recap of comparative advantage, traces the sources of comparative advantage, considers tariffs and quotas, and explores the politics of trade protection. In response to current events, we give in-depth coverage to the controversy over imports from low-wage countries.
The inclusion in a principles text of Chapter 18, "Uncertainty, Risk, and Private Information," may come as a surprise to some—a common reaction being "Isn't this material too hard for principles students?" We believe that, with our treatment, the answer is no for many more students than is typically expected. In this chapter we explain attitudes toward risk in a slow and careful way,

grounded in the basic concept of diminishing marginal utility. This allows us to analyze a simple competitive insurance market, examine the benefits and limits of diversification, and introduce students to the stock market. Next comes an easily comprehensible and intuitive presentation of private information in the context of adverse selection and moral hazard, with illustrations drawn from the market for lemons (used cars) and franchising. We believe that instructors will be surprised by how easy it is to teach this material and how much it will enlighten students about the relevance of economics to their everyday lives.

Microeconomics and Public Policy: Part 9

Chapter 19, "Externalities," covers negative externalities and solutions such as Coasian private trades, emissions taxes, and a system of tradable permits. We also examine positive externalities, technological spillovers, and the resulting arguments for industrial policy. Chapter 20, "Public Goods and Common Resources," makes an immediate impression by opening with the story of how "The Great Stink of 1858 " compelled Londoners to build a public sewer system. Students learn how to classify goods into four categories (private goods, common resources, public goods, and artificially scarce goods) based on two dimensions (excludability and rivalry in consumption). With this system, they can develop an intuitive understanding of why some goods but not others can be efficiently managed by markets.

Chapter 21, "Taxes, Social Insurance, and Income Distribution," begins with a review of the burden of taxation and considerations of equity versus efficiency. Next, it examines the structure of taxes, current tax policy, and public spending in the United States. This is followed by an investigation into the sources of poverty and their implications for government tax and transfer policies. From this chapter students can gain an appreciation of the difficult questions policy makers face in addressing issues of economic efficiency and welfare.

New Directions for Markets: Part 10

The final section of the book contains one chapter, Chapter 22, "Technology, Innovation and Network Externalities."

We believe that Chapter 22, with its real economic models and relevant cases, will be enjoyable for both instructors and students. Starting with the example of sharing music files over the Internet, it introduces the concept of information goods and network externalities and analyzes the problems they cause for efficient pricing. We discuss the implications for standard-setting and the ambiguities that network externalities present for regulatory policy. Students will see how these issues affect their daily lives through references to Kazaa, Apple Computers, and Microsoft.