



PREFACE

Decisions that affect the public often depend on microeconomics. Yet courses in public sector economics face a chronic problem: the lack of a suitable textbook. Though many texts cover microeconomic principles, they provide scant coverage of economic techniques and societal considerations vital to public sector decisions. In addition, the analytic perspective of these texts is typically that of a private firm rather than a public agency or the public in general. Moreover, texts often require prior training in economics or mathematics, presume future study in economics, or focus on theory development rather than application to public issues.

Microeconomics for Public Decisions meets a need for a core textbook that covers the essential microeconomic principles and applies them to public decisions. Further, this text strives to analyze the societal effects of these decisions, examine the economic arguments of different public choices, and offer real-world issues that will motivate students to learn microeconomics. This text offers features that address these needs and distinguish it from other texts:

A PUBLIC SECTOR PERSPECTIVE

This text covers the key principles of microeconomics, such as supply, demand, and market processes. Plus, it provides extensive coverage of topics that concern public sector decisions, such as public goods, externalities, welfare analysis, and cost-benefit analysis, and their unique complexities.

For instance, public sector decision makers often need to consider multiple societal goals, not only profit maximization. They often need to consider the impacts of their decisions on both the private and public sector, not only their own agency. And they often need to assess many types of benefits and costs, not only those placed in monetary terms.

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As examples: How can a public agency set an appropriate fare for public transit services, which may never show a monetary profit, yet can benefit the community in other ways? How can a county government evaluate a public resource, such as open space, and compare it to proposals for private housing development on that land? How can state officials choose among strategies for reducing pollution, when some may be less costly but also less effective? How would a cost-benefit analysis differ between a private sector firm and public sector agency, and what are the implications for privatizing a public service? Further, in each example, who would gain the benefits and who would bear the costs?

Public sector decision makers, of course, also need to understand the dynamics of private markets and the principles of efficient production. By relating traditional topics, such as market equilibrium and efficiency, to public sector issues, the text demonstrates the applicability of economic concepts to a wide range of decisions.

SUITABILITY

Microeconomics for Public Decisions is designed to serve as a core textbook for basic microeconomics courses that addresses public sector issues. These courses are offered, and often required, in programs such as public policy, city and regional planning, urban affairs, public administration, business, resources management, environmental studies, civil engineering, and government.

The level of the text is targeted toward master's level graduate students and upper-division undergraduate students, although it is suitable for other levels and does not require prior coursework. As a core text, additional materials are not necessary, although instructors may choose to supplement the text with current events, media reports, journal articles, and examples from their work.

ACCESSIBILITY

A feature of this text is that students do not need prior training in economics or calculus to understand the material. In fact, experience with the text has shown that students with little or no such prior training can still perform at the top of the class. Further, students who have already taken economics will find much of the material new, and even standard concepts are expanded and applied within the context of public sector decisions.

The text covers economic principles without heavy dependence on mathematics that could limit its accessibility. For those who desire calculus-based proofs, mathematical appendixes are provided on topics such as theory of consumer behavior and theory of the firm. The relative lack of calculus, however, should not be confused with a lack of rigor. A goal of this text is to explain economics with clarity and precision, so that complex topics can be relatively straightforward to learn. The text also

includes topics that are often treated in more advanced microeconomics texts, such as welfare economics, public goods pricing, and cost-benefit analysis.

PRACTICALITY

Students crave relevance and often learn best in context. This text blends theory with applications so that students will understand how and why microeconomics is important to them.

Before writing this text, I asked many former public sector economics students, “How do you currently use economics in your work? What were the most useful things that you learned in your microeconomics course? What were the least useful? What economic applications have been interesting or complex? What would be most important to cover in a microeconomics text?”

Many said they learned theoretical concepts, but did not adequately learn how to apply these concepts to everyday decisions. Armed with these comments, I present principles and applications that make economics meaningful to students.

ESSENTIAL AND CONCISE TREATMENT

Writing this textbook involved difficult decisions about topic selection and extent of coverage. I decided to focus on topics that would be most important to students in their future careers, education, and lives. This text was not designed to provide an encyclopedic treatment of microeconomic theory, but rather to focus on essential principles and analytic techniques for making decisions, especially those that affect the public.

Students will learn both how to apply microeconomic principles and how to evaluate economic analyses. In their future work, students may not be doing the analyses themselves, but will need the expertise to evaluate results and recommendations based on analyses performed by others. Thus, the text will help students to develop a solid understanding of both microeconomics and its appropriate use.

EXPANDED, REORGANIZED, AND UPDATED COVERAGE

I wrote and pretested this text while teaching a graduate course in economics for planning and public policy. Many of the ideas for this text evolved from the 1987 text by Apgar and Brown, *Microeconomics for Public Policy*. My goal was to build upon the strengths the earlier text, while providing more comprehensive and detailed coverage of key topics, with updated examples and applications to current issues.

This new text offers a more systematic treatment of fundamentals such as supply, demand, equilibrium, market processes, and interventions. It also expands topics such as equity and efficiency, monopoly, externalities, and public goods. Further, it provides new material on welfare analysis, imperfect information, risk and uncertainty, investments and discounting, and cost-benefit analysis. *Microeconomics for Public Decisions* was designed for a wider audience that includes not only policy and planning, but also other disciplines that involve economics and the public sector.

OVERVIEW OF THE TEXTBOOK

The text is organized in three parts. The first part, Chapters 1 through 5, presents the fundamentals of microeconomics and the market economy, such as demand, supply, elasticities, equilibrium, market dynamics, and market interventions. These chapters also provide a public sector framework that is important to analyses throughout the text.

The second part, Chapters 6 through 11, examines topics that are central to public sector decision making, such as the economic role of government, and cases where markets and governments may fail to achieve desired outcomes. These topics include equity and efficiency, welfare economics, monopolies, externalities, public goods, risk, and imperfect information.

The third part, Chapters 12 through 14, provides the concepts and analytic techniques for assessing benefits and costs that occur over time, and for evaluating projects and policies. These chapters detail the process of conducting a cost-benefit analysis, considering both market and nonmarket effects. In addition, these chapters provide applications and evaluations of cost-benefit analyses, with attention to public sector concerns.

CHAPTER SPECIFICS

Chapter 1 provides an overview of microeconomics, a preview of future chapters, and the rationale for the importance of economics to both private and public sector decisions.

Chapter 2 lays the analytic foundation for microeconomics: demand and supply. It looks at decisions of consumers and producers, interactions in the market, and effects on market price and quantity.

Chapter 3 builds upon the study of demand and supply with more advanced analyses and applications. It examines market interventions, such as taxes, subsidies, price and output controls, and the effects of these interventions on market participants.

Chapter 4 takes a closer look at demand, covering utility theory, willingness to pay, indifference curves, and derived demand curves. It develops the concept and application of consumer surplus, and the measurement of benefits among different sectors in society. A mathematical appendix details the principles of utility maximization.

Chapter 5 takes a closer look at supply. It details various types of costs, such as monetary costs and opportunity costs, and their use in marginal analysis and production decisions. The chapter also covers profit, producer surplus, economies of scale, and short-run and long-run supply. A mathematical appendix develops the theory of the firm and production functions.

Chapter 6 leads off the second part of the book by examining the multiple goals of public sector decision making, and the concepts of efficiency and equity. It explores the roles and rationales for government intervention in the market economy, cases where both the private sector and public sector can fail to achieve societal goals, and possible remedies.

Chapter 7 extends these concepts through the study of welfare economics. It presents techniques to analyze the efficiency and distributional consequences of decisions, the trade-offs between the two, and the effects of market interventions.

Chapter 8 looks at the case of monopolies, such as public utilities, and their effects on efficiency and equity. It compares competitive and monopolistic markets, examines different types of regulation and pricing strategies, and discusses public policy implications.

Chapter 9 examines the causes and consequences of externalities in both public and private sector decisions, and the challenges of resolving externality problems. It compares strategies for managing externalities, such as regulation and marketable permits, develops evaluation criteria, and offers detailed examples that illustrate strengths and limitations of each strategy.

Chapter 10 looks at different classes of goods, public and private, with attention to goods and services that the public sector typically provides. It covers techniques for valuing public goods, setting the price of public services and resources, and evaluating approaches for public good provision.

Chapter 11 addresses issues associated with imperfect information, such as adverse selection, moral hazard, and the principal-agent problem. It provides methods for making decisions under uncertainty, covering topics of utility theory, risk, insurance, decision analysis, and the value of information.

Chapter 12 leads off the third part of the book by providing techniques to assess benefits and costs that occur over different time periods. It covers discounting, equivalencies, present values, amortization, and investment decisions.

Chapter 13 examines concepts and methods, specifically cost-benefit analysis, for evaluating projects, programs, and policies. It discusses challenges and considerations such as the valuation of nonmonetary goods, the choice of a discount rate, and the distribution of benefits and costs in the present and future generations.

Chapter 14 presents three detailed examples of cost-benefit analysis, which illustrate methods from previous chapters, and practical considerations for using economic analyses for public sector decision making.

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— Anne Steinemann