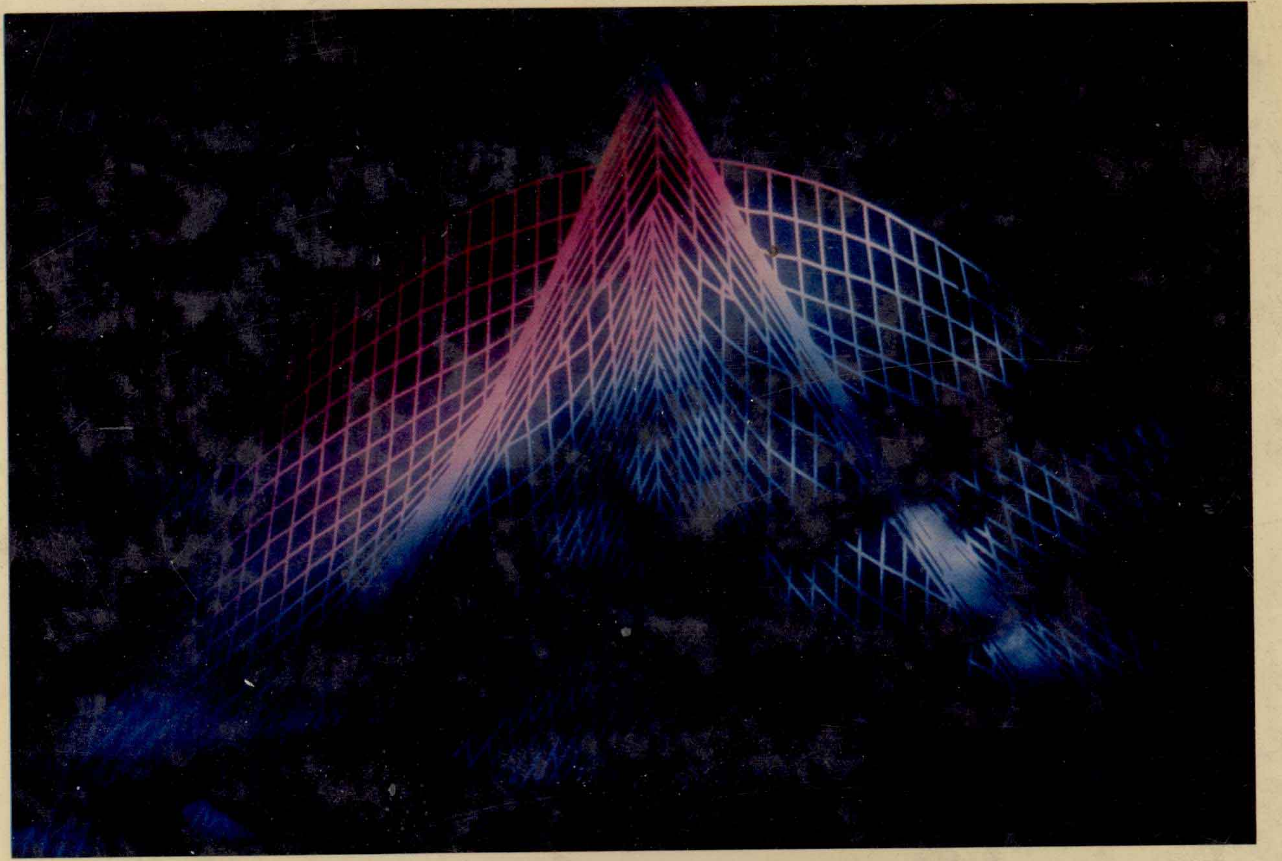

Microeconomics Theory and Applications

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THEORY AND APPLICATIONS

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Preface

Microeconomic theory studies the economic behavior of individual consumers, resource owners, and business firms, and the operation of markets in a free-enterprise economy. While macroeconomic issues, such as the rate of national unemployment and inflation, usually receive more attention in the media, it is the sum total of all the individual decisions by consumers, resource owners, and firms that actually determines the overall performance of the economy. Because it presents many of the basic tools of economic analysis, microeconomic theory is one of the most important courses in all economics and business programs.

This is a text for the standard undergraduate course in intermediate microeconomics in economics and business programs. Only a prior course in principles of economics is required and only simple geometry is used. The presentation is clear and concise, and it is reinforced throughout with numerous pertinent real-world *examples* and extensive *applications* from economics and business. There are no mathematical footnotes, but there is an optional mathematical appendix at the end of the text for students who have had calculus.

Useful and Unique Features of the Text

Although the structure of this text is traditional, there are a number of very useful features which, together, makes it unique.

Each chapter includes several extensive and current *real-world applications*. These applications serve to highlight the relevance of microtheory in analyzing (and offering possible solutions to) important present-day economic problems. The recurrent theme throughout the text is that only by "putting theory to work" does theory truly come alive. Applications deepen understanding of the theory and motivate the student by demonstrating the great usefulness of the theory.

Each chapter progresses smoothly *from theory to applications*. Many texts present applications in separate chapters, with the result that applications seem to be mere appendages and are seldom covered. Other texts present applications throughout the chapter, interrupting the continuity in the presentation of the theory.

This text also introduces *greater realism* than most others by presenting numerous real-world examples of the theories examined. The oligopoly chapter (Chapter 13) includes an extensive discussion of *managerial theories of the firm* and *game theory*. These important topics are often omitted from other texts.

A very important feature of the text is the presentation of *important recent developments in consumer demand theory* (Chapter 6) and important extensions of production theory (Chapter 9). These examine revealed preference, index numbers, choices subject to risk, the demand for characteristics, and empirical demand curves (in Chapter 6); and the Cobb-Douglas production function, empirical production and cost curves, technological progress, and linear programming (in Chapter 9). While these chapters are optional, many professors may want to expose their students to at least some of these current developments and extensions in demand and production theory. In other texts, either these important topics are not covered at all (a serious omission) or they are presented at too high a level to be accessible to most undergraduates.

There is also a chapter (16) on interest and capital theory and one (Chapter 19) on public goods, externalities, and the role of the government.

Graphs are drawn on a light background grid with real numbers to add realism to the analysis and to facilitate reading off answers. For example, instead of saying that a reduction in the price of X from P_1 to P_2 results in an increase in the quantity demanded from Q_1 to Q_2 per unit of time, we examine how a reduction from $2 to $1 in the price of hamburgers leads an individual to increase the quantity demanded from 2 to 6 per week. This also allows us to separate numerically the substitution from the income effect of the price reduction, thus making the analysis more realistic and much more easily and thoroughly comprehensible to students.

Organization of the Book

The text is organized into six parts. *Part I* (Chapters 1–2) presents an introduction to microeconomic theory and a review of some principles of economics. Chapter 1 deals with scarcity as the fundamental economic fact facing every society, examines the function or purpose of microeconomic theory and its methodology, and discusses the overall organization of the text and of each of its chapters. Chapter 2 is a brief review of the concepts of demand, supply, equilibrium, and elasticity.

Part II (Chapters 3–6) presents the theory of consumer behavior and demand. Chapter 3 examines the tastes of the consumer and how the consumer maximizes utility or satisfaction in spending his or her income. These concepts are then utilized and extended in Chapter 4 to derive the consumer's demand curve for a commodity. Chapter 5 shows how, by aggregating or summing up individual consumer's demand curves, we get the market demand curve for the commodity. Chapter 5 also examines in detail the usefulness and measurement of the various demand elasticities. Finally, Chapter 6 presents more advanced topics and more recent important developments in consumer demand theory. The presentation of the theory is reinforced throughout with many real-world examples and important applications.

Part III (Chapters 7–9) presents the theory of production and cost. Chapter 7 examines production theory or how firms combine resources or inputs to produce final commodities. These concepts are then utilized and extended in Chapter 8 to examine costs of production and to derive the short-run and the long-run cost curves of the firm. Finally, Chapter 9 presents more advanced topics in the theory of production and costs. As in the previous parts, the presentation of the theory is reinforced throughout with many real-world examples and important applications.

Part IV (Chapters 10–13) presents the theory of the firm and market structure. It brings together the theory of consumer behavior and demand (from Part II) and the theory of production and costs (from Part III) to analyze how price and output are determined under various types of market organization. Chapter 10 shows how price and output are determined under perfect competition. Chapter 11 shows price and output determination under pure monopoly. Chapter 12 does the same for monopolistic competition, and Chapter 13 does so for oligopoly.

Part V (Chapters 14–16) presents the theory of input pricing and employment. Until this point, input prices were assumed to be given. In this part we examine how input prices and the level of their employment are determined in the market. Chapter 14 examines input pricing and employment under perfect competition in the output and input markets. Chapter 15 deals with input pricing and employment under imperfect competition in the output and/or input markets. Chapter 16 presents interest and capital theory; that is, it deals with choices in the allocation of inputs over time. Many real-world examples and applications add an important dose of realism to the theoretical analysis.

Part VI (Chapters 17–19) presents the theory of general equilibrium and welfare economics, and examines the role of government. Chapter 17 presents general equilibrium theory. This examines the interdependence or relationship among all products and input markets, and shows how the various individual markets (studied in Parts II–V) fit together to form an integrated economic system. Chapter 18 studies welfare economics within a general equilibrium framework. It examines questions of economic efficiency in the production of output and equity in the distribution of income. Finally, Chapter 19 examines externalities, public goods, and the role of government. It studies why externalities (such as pollution) and the existence of public goods (such as national defense) lead to economic inefficiencies. It also presents policies that can be used to overcome these inefficiencies.

The eight core chapters are: 3–5, 7–8, 10–11, 14.

Audience and Level

There are several choices in the use of the text.

(1) For a solid, popular, "no-frills" undergraduate course in microeconomics, I would include Chapters 1 and 2 and the eight core chapters (3–5, 7–8, 10–11, 14) with their applications.

(2) With a stronger background (such as a two-semester course in principles of economics), I would skip Chapter 2 and cover parts of one or two other chapters, as follows:

(2a) If the aim is to give a stronger theoretical background, I would choose topics from Chapter 6 (Extensions of Consumer Demand Analysis) and Chapter 9 (Extensions of Production Theory), or Chapters 17 (General Equilibrium Analysis) and 18 (Welfare Economics).

(2b) For a more "applied" course, I would choose topics from Chapter 15 (Input Price and Employment under Imperfect Competition) and Chapter 19 dealing with public goods, externalities, and the role of government.

(2c) For business majors, I would cover the following topics (time permitting) in addition to the eight core chapters: choices subject to risk, index numbers, and empirical demand curves (from Chapter 6); empirical production and cost curves, and linear programming (from Chapter 9); managerial theories of the firm and game theory (from Chapter 13); and Chapter 16 on interest rates and capital theory.

Thus, the book is designed for flexibility, depending on the background of the student and the aims of the course—keeping in mind that in most cases no more than 11 or 12 chapters can be covered in one semester.

Teaching Aids

Each chapter contains a number of teaching aids to make the text easier to use in the classroom. The sections of each chapter are numbered for easy reference. Longer sections are broken into two or more subsections. All of the graphs and diagrams are carefully explained in the text and then summarized briefly in the captions. Most diagrams are drawn on a light background grid to facilitate reading off answers.

Each chapter ends with the following teaching aids:

Summary—Reviews the main points covered in the text.

Chapter Glossary—Gives the definition of important terms introduced in bold-face in the chapter. A separate index of glossary terms in alphabetical order is provided at the end of the book for easy cross-reference.

Questions for Review—At least one question for each section in the chapter.
Problems—These ask the student to calculate a specific measure or explain a particular theory or issue. Brief answers to selected problems are provided at the end of the book for feedback. These problems are indicated by a star (★).
Supplementary Readings—The most important references are included along with specific notes indicating the topic they cover. A separate author index is included at the end of the book.

For those interested, a short *mathematical appendix* is available at the end of the text.

A substantial *Instructor's Manual* prepared *by the author* is available which includes chapter objectives, lecture suggestions, detailed answers to the end-of-chapter problems, a set of 25 multiple-choice questions with answers for each chapter, and additional problems with answers for each chapter for examinations and/or class discussions. The *Manual* was prepared with as much care as the text itself.

A *Study Guide*, prepared by Dr. Mary Acker of Iona College, is available which includes chapter summaries, an annotated bibliography for each chapter, multiple choice questions, review questions, and problems.

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This text grew out of the undergraduate and graduate courses in microeconomics that I have been teaching at Fordham University during the past 15 years. I was very fortunate to have had many excellent students who with their questions and comments have contributed much to the clarity of exposition of this text.

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D.S.

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