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# PRICE THEORY AND APPLICATIONS

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**B. Peter Pashigian**



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# PRICE

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# THEORY

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# AND

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# APPLICATIONS

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Graduate School of Business  
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## PRICE THEORY AND APPLICATIONS

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### **ABOUT THE AUTHOR**

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# P R E F A C E

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Students enrolled in an intermediate price theory class appear to be divided equally between courses offered in departments of economics and those offered in business schools. Only a minority of these students have and take the opportunity to apply the theory in upper-level courses. In most business schools microeconomics is a required course and students seldom take advanced courses where the theory is applied. *Most readers of this book will never take another microeconomics course.* These are the stark facts that each instructor must recognize, adapt to, and somehow contend with.

Given the student's fleeting encounter with economics, how should the essentials of microeconomics be taught? I take the position that a microeconomics course should impart not only an understanding of the theory but also the excitement of using the theory to explain a broad set of behaviors. In my view this can be best accomplished by teaching the course with an artful blend of theory and application.

## Product Differentiation

A chorus of reviewers has singled out the intermingling of theory and application as a distinctive feature of this book. This is a source of personal satisfaction to me because that is what I set out to achieve. I made a conscientious effort to motivate the student's interest either in theory or in an application of the theory by using interesting, serious real-world applications. Each chapter includes applications of the theory under discussion, some containing more than others, and most readers will quickly notice the empirical flavor of the book. References to actual behavior of consumers and firms reinforce the theory and make the theoretical material more accessible to the student. The applications are often taken from the business press or from academic journals where interesting illustrations of consumer and firm behavior can be found and related to the theory. Rather than take the somewhat conventional approach of looking at government behavior for applications, I turned more to the private sector. I have refrained from flooding students with short, and probably less informative, applications of the theory, in favor of fewer but more in-depth applications showing how the theory is used to address specific questions and issues. Such applications are intended to prepare students for the end-of-chapter review questions and exercises. I consider these exercises a valuable part of the book because they test students' understanding of the theory by requiring them to apply it in new situations. Applying microeconomic theory to new situations is exactly what many students will be doing for the rest of their lives.

Instructors of microeconomics are fortunate because a consensus exists about what the core material of a course should include. Nevertheless, each author exercises some latitude in deciding how to present the core material and which modern topics to include. The core chapters include many new and different applications that demonstrate the relevance of theory. For example, in Chapter 6, "The Cost Functions of the Firm," regulating plant emissions by requiring emissions from each smokestack to be reduced by the same percentage is shown to be unnecessarily costly. In Chapter 8, "Price Determination in a Competitive Industry," the question is raised whether hurricane victims can get assistance more quickly by allowing prices to rise. In the same chapter the adjustment of a competitive industry to a cost-reducing innovation is given detailed treatment since price reductions appear to be all-pervasive as an industry evolves through stages of development. Chapter 9, "Pricing under Monopoly," shows the inconsistency between the claim that cigarette and oil companies behave like monopolists and the claim that the demand for these products is inelastic. Chapter 10, "Pricing in Oligopoly," shows why a price policy of meeting competition can yield higher, not lower, prices.

A differentiating feature of this book is its systematic examination of several topics either not treated or treated superficially elsewhere. Numerous reviewers have mentioned that the section dealing with pricing practices and policies is one of the strengths of the book. Chapters 12 through 15 develop several models that help explain firms' price policies. Chapter 12, "Price Discrimination," presents an in-depth examination of the different forms of price discrimination. Unlike most books, where the free rider problem is briefly discussed when public goods are introduced, Chapter 13, "The Free Rider Problem and Pricing," highlights free rider problems in private markets and shows how firms use the price system and other methods to circumvent these problems. My classroom experiences and the reviewer comments indicate that students find this topic fascinating, and I urge instructors to include part or all of this chapter in their course outlines if at all possible. Chapter 14, "Market Behavior with Asymmetric Information," discusses how firms acquire a reputation for honesty and how private markets adapt to situations where asymmetric information exists. Finally, Chapter 15, "Pricing under Uncertainty," introduces the topic of uncertainty, showing how the theory of pricing under uncertainty can explain why firms have sales and what kinds of products are placed on sale.

Other chapters also treat subjects that are often ignored. The cost of time is given comprehensive treatment in Chapter 4, "The Cost of Time and the Theory of Consumer Behavior." With more women in the work force and with women's earnings rising faster than men's, time plays an important role in explaining consumer behavior and deserves fuller recognition in microeconomics texts. Another topic that is often ignored is governance of the firm. After a decade of massive hostile takeovers and mergers, can a modern textbook ignore the role of product and capital markets in the way a firm is governed? Much has been learned about the role of the capital market in monitoring management performance in the last 15 years, and this topic receives full treatment in Chapter 11, "The Goals of the Firm."



## Alternative Course Designs

What topics to include in a course is always a challenge, and some instructors may look for guidance. This book has been written to give an instructor considerable flexibility with regard to both content and level of difficulty. For a quarter course offered at a business school an instructor will have to select among chapters. One suggestion is to include Chapters 1, 2, 4, and 6 to 9 and then choose from Chapters 10 to 15. Some instructors in business schools do not include production theory, and they can skip to Chapter 6, where the development of cost functions is independently derived. For a quarter course offered in an economics department an instructor can include Chapters 1 to 9, 18, 19, and possibly parts of other chapters. For a semester course at either a business school or department an instructor has greater latitude in supplementing the above chapters with others depending on the interests of the instructor and the students.

## Alternative Levels of Rigor

*Price Theory and Applications* was written to give the instructor the added flexibility of either including or excluding sections marked with an asterisk (\*) in the opening outlines; these cover more difficult material. There is also flexibility in the use of mathematics, with all the calculus presented in footnotes or in optional chapter appendixes. Special care was taken to keep the exposition clear without sacrificing rigor. The finished product is appropriate for students with diverse backgrounds and interests.

## An Innovative Teaching-Learning Package

Daniel Fuller and Sarah Tinkler of Weber State University have prepared a remarkable Study Guide with software, *Microquest*, to accompany *Price Theory and Applications*. This Study Guide and software package provides an integrated environment to enhance students' understanding of and mastery over the fundamentals of intermediate microeconomics. *Microquest* is designed to be as user-friendly as possible, minimizing student startup time and complaints. While the software is planned primarily to supplement student work, it can also be a valuable classroom supplement given appropriate projection technology. *Microquest* is available for both DOS and Macintosh systems.

The Study Guide follows the textbook, chapter by chapter. It is designed to strengthen comprehension by putting students in problem-solving and other analytical situations. Where possible, the Study Guide makes use of the simulations and exercises contained in *Microquest*.

*Microquest* takes advantage of the superiority of computer-based graphics to explore central concepts presented in the textbook. In addition to brief textual and graphic analysis of these concepts, *Microquest* seeks to present students with a number of exploratory exercises. These are what-if model situations in which students change the values of key variables and parameters, as well as models in which they must assume the role of an optimizing decision maker. This material

includes market simulation models, consumer utility models, profit maximization under perfect competition, profit-maximizing behavior, and models of imperfect competition.

The Instructor's Resource Manual and the Test Bank accompanying *Price Theory and Applications* follow the lead of the textbook in their application of economic concepts to real-world problems. Prepared by Clifford Nowell of Weber State University, with a considerable contribution of test questions from Shane Greenstein of the University of Illinois, the Instructor's Resource Manual and the Test Bank have been closely coordinated with the textbook and the Study Guide with accompanying software. Both the Instructor's Resource Manual and the Test Bank are available in computerized format.

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B. Peter Pashigian

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