

INTERMEDIATE MICROECONOMICS

and its application



Walter Nicholson

INTERMEDIATE MICROECONOMICS *and its application*

Sixth Edition

Walter Nicholson
Amherst College



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Intermediate Microeconomics

The goal of *Intermediate Microeconomics and Its Application* is to provide a clear, concise introduction to the ways in which economists analyze the operations of markets. This goal has remained unchanged over the various editions of this book, and I hope the sixth edition moves even closer to its attainment. This most recent updating seeks to provide students with a clear introduction to the tools they will need if they wish to delve deeper into economics, together with a presentation that is interesting enough so that they will want to do so. All of the topics presented here are developed in non-technical, intuitive ways, and the requirements for using the book are quite modest—a course in introductory economics and a bit of algebra (which is reviewed in Chapter 2) should suffice.

New to the Sixth Edition

The organization and format of this edition are quite similar to that of the fifth edition. Users seemed to be enthusiastic about the outline adopted previously (which develops the entire competitive model before exploring other cases), so the changes adopted here have been focused primarily on making the presentation work even better. Several new topics have been added to fill in holes that existed in the previous edition, and many new, up-to-date applications have been developed in ways that more clearly illustrate the various concepts in the book.

■ New Topics

The new topics added to this edition are intended primarily to complete the coverage of competitive and noncompetitive analysis in the text and to include a bit more about topics in the rapidly expanding areas of the economics of uncertainty and information. Specific additions include:

- A new chapter on competitive model applications that extensively uses the concepts of consumer and producer surplus in order to analyze the welfare consequences of various market changes (Chapter 13).
- A completely revised chapter on game theory clarifying the relationship between strategic thinking by firms and the more customary topics of pricing and entry decisions (Chapter 18).
- A revised chapter on monopoly, including a simplified treatment of a number of topics related to the theory of price discrimination (Chapter 16).
- Substantial additional material on the economics of information, especially with respect to issues related to adverse selection (Chapters 7 and 15).

Many other changes have been incorporated into the text in every chapter in order to improve readability and to bring the existing material into line with recent theoretical advances.



Preface

■ New Applications

The applications in this edition have been thoroughly revised both by the updating of information and by the replacement of many older applications with more recent ones that better illustrate some of the concepts. A few of the new topics included are:

- Shortages in Formerly Communist Countries
- Economic Sanctions against Iraq
- Frequent-Flyer Programs
- Valuing Clean Air
- The Microelectronic Revolution
- The Video Rental Market
- Voluntary Export Restraints on Automobiles
- First-Mover Advantages
- Are Any Resources Scarce?
- Saving the Elephants
- Jokes about Economists

In all, the book now has approximately 120 applications, of which roughly half are new to this edition. All of the applications have been thoroughly revised in an effort to make them more readable, interesting, and thought-provoking.

■ New Learning Pedagogy

Considerable attention has been paid to improving the various learning elements already in the fifth edition. The Review Questions have been thoroughly rewritten to focus more explicitly on fundamental issues, many new problems have been added (the text now has nearly 250 problems), and the end-of-book solutions have been expanded to improve readability and clarity. I hope this edition, therefore, will be even more helpful to students than its predecessors.

Again, Frank Westhoff has produced an excellent workbook and study guide, *Problems and Exercises for Intermediate Microeconomics*, to accompany the text. The computer graphics employed in this edition are remarkable. (See, for example, the very useful exercises associated with consumer and producer surplus in Chapter 13.) Users of the previous edition of this workbook have found Frank's patient approach to pedagogy very useful, and I believe this edition is even better.

To the Instructor

In some ways the sixth edition is little changed from the fifth, so only modest changes in the approach taken are needed. The most important new material

is contained in the new Chapter 13 on applications of the supply-demand model, and I believe most instructors will want to use this chapter. To do so will require an explicit introduction to the concept of producer surplus, a topic that was not well covered in the previous edition. Because covering this topic in some detail (especially with regard to the nature of producer surplus in the long run) helps to tie together interactions between goods and input markets, I believe the insights provided more than justify the costs of adding a new topic.

Two other topics new to this edition may be covered more selectively. The “state-preference” approach to decisions under uncertainty is now briefly introduced in the concluding sections of Chapter 7, and I believe this provides a good introduction to the burgeoning research in the economics of information. The material may be skipped without any loss of continuity, however. Similarly, the new chapter on game theory (Chapter 18) provides a simple introduction to a number of new topics in the field of industrial organization, but this material is not essential to the text itself.

Specific suggestions about class scheduling and alternative approaches that might be applied to the material in class are included in the *Instructor’s Manual* and *Test Bank* accompanying this edition. The *Instructor’s Manual* also includes solutions to all of the problems in the text and an extensive set of multiple-choice and essay-type questions, and is available on computer disk. Over the six editions of this text, I have received many helpful suggestions from users that I have tried to incorporate either into the book directly or into the manual. I’m sure I still have a lot more to learn, however, so any additional comments or suggestions would be most appreciated.

To the Student

This book is primarily intended for you, the student. I hope you find the applications interesting and up-to-date, that the extensive rewriting has made even complex matters clear, and, most of all, that the presentation will encourage you to learn more about this fascinating and ever-changing field. Of course, I’m sure there are still sections of the text that could stand improvement, and I hope you will let me know about them. Just as this edition owes a large debt to previous student users for their helpful suggestions, so, too, would I appreciate any thoughts that you might have about changes that should be incorporated into new, future editions.

Acknowledgments

As for previous editions, most of the good ideas that I have included in this writing came from friends, colleagues, and students who have used the book. Specific, detailed reviews of the fifth edition were provided by:

- Hamid Bastin, Shippensburg University
- George Bittlingmayer, University of California, Davis
- Doug Brown, Georgetown University
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- John R. Tedford, Clarkson University
- S. Y. Liu, Virginia State University
- Heather M. O'Neill, Ursinus College
- David C. Rose, University of Missouri, St. Louis
- Hossein Salehi, University of California, Los Angeles

These reviewers offered a variety of good advice, especially about my new chapter on the applications of supply and demand; I have tried to do all that was suggested. I truly appreciate all of the ideas the reviewers and other users gave me for new applications, and I have shamelessly stolen them in order to make it appear that I actually know something about the vast subjects covered. If I have mangled any of the facts, I hope more-knowledgeable people will let me know.

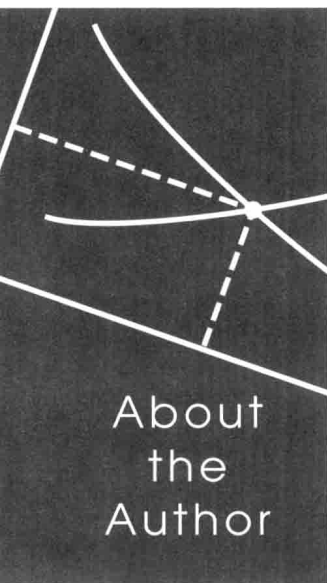
I should once again stress my debt to the generations of Amherst students who have contributed to the development of the problems in the book. Mark Bruni, Stephanie Cogen, Adrian Dillon, David Macoy, Katie Merrell, and Jeff Rodman should be explicitly mentioned, both as designers of some of the best problems and as perpetrators of much of the groan-producing humor. Many other students have made good suggestions on how specific problems might be improved. Indeed, even those students who made egregious errors on problems helped me by showing me some of the pitfalls that lie within what appears to be the most straightforward exercise.

The sixth edition survived Dryden's move from Hinsdale, Ill., to Fort Worth, Texas, with only minor inconveniences. Rick Hammonds was especially helpful in providing strong support for the text and in helping to untangle some difficulties with the art program. Daryl Fox was a great help in developing this edition by offering many thoughtful questions that forced me to focus on what I was doing. The actual production of the text was coordinated by Amy Schmidt, who invariably caught my errors and came up with better ways to do things. How she kept all of the book's pieces together is a mystery to me. To these efforts were added a fine copyediting job by Judi McClellan and (as you will see) some exceptional design work by Terry Raspberry that resulted in a first class product. Once again, I am greatly indebted to these professionals at Dryden, without whom the publication of a book such as this one would be impossible.

The Word-for-Word empire of my secretarial assistant, Happy Cramer, keeps expanding. Nevertheless, once again, she managed to find the time to organize this project and keep things moving. Her ability to get things done shames all of her authors into keeping on schedule.

My children, Kate, David, Tory, and Paul, probably don't care very much any more about seeing their names in print, but tradition is hard to break. All are now fully capable of reading this book, but, so far, they have felt no great urgency about the task. My wife, Susan, is another matter. Not only has she read the book, but she has volunteered her insights into and her disagreements about practically every page. The dedication to her is both intended to recognize her courage for undertaking the job and to express my appreciation for keeping me humble about what economists think they know.

Walter Nicholson
Amherst, Massachusetts
October 1993



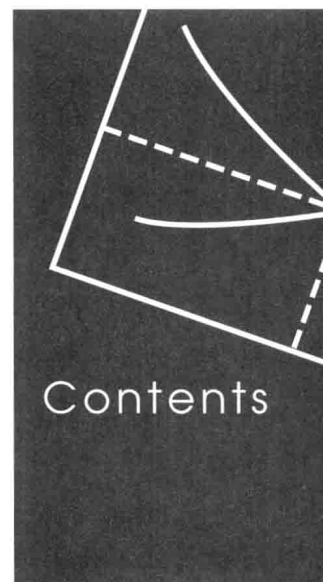
Walter Nicholson is the Ward H. Patton Professor of Economics at Amherst College. He received a B.A. degree in mathematics from Williams College and a Ph.D. in economics from the Massachusetts Institute of Technology. Professor Nicholson's primary research interest is in the econometric analysis of labor market policy. He has published papers on such topics as unemployment insurance, welfare policy, and the domestic labor market impact of international trade. He is also the author of *Microeconomic Theory: Basic Principles and Extensions*, 5th ed. (The Dryden Press, 1992). He and his wife, Susan, live in Amherst, Massachusetts, where they are continuing to worry about college and how to pay tuition for their children, Kate, David, Tory, and Paul.

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