

INTERMEDIATE MICROECONOMICS AND ITS APPLICATION

Fourth Edition



Walter Nicholson

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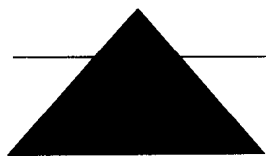
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Preface

This fourth edition of *Intermediate Microeconomics and Its Application*, like its predecessors, has two principal goals: (1) to provide a clear, concise, and accurate introduction to the subject of microeconomics; and (2) to make that introduction interesting to students so that they will want to learn more. Many changes have been made in the book over its various editions in the pursuit of these goals. This edition, however, continues to offer a concise, nontechnical presentation of the basic theories of microeconomics together with a wide variety of applications. Concepts are developed intuitively and graphically, and many include simple numerical examples. The text always stresses the relationships of these theories to the real world by supplying each concept with an empirical application taken from actual data.

New to This Edition

The most visible change in *Intermediate Microeconomics* is the adoption of a two-color format, which greatly improves the book's visual appeal and increases the clarity and usefulness of its graphs. As a result of this change, I have had to drop my joking reference in earlier editions to the absence of two colors.

Even more important than the change to two colors are several substantive changes in the content of the book that I believe will improve its already strong appeal to instructors and students alike. Most importantly, the principal focus of this revision has been on developing a book that is consistently easy to read, easy to use, and easy to learn from. To achieve these goals, many parts of the book have been completely rewritten, some of the more complex topics from the prior editions have been dropped, entirely new and timely topics have been added, and many new learning aids appear for the first time.

Major new topic areas include:

- A new chapter on the modern theory of the firm, including issues in implicit labor contracts, the principal-agent problem, and the market for corporate control (Chapter 10).
- A new chapter on public goods and public choice theory (Chapter 19).
- A thoroughly revised and updated treatment of general equilibrium and welfare economics (Chapter 17).
- Expanded background material in elementary algebra, game theory, and the mathematics of compound interest (Chapter 2, Appendix to Chapter 13, and Appendix to Chapter 16, respectively).

New learning aids include:

- Marginal glossary definitions of key terms that are cross-referenced with the complete glossary and with the index.
- Additional simplified problems together with solutions to all odd-numbered problems.
- Thought-provoking questions about the empirical applications, now titled “Applying Economics,” which are set off more effectively in colored boxes in this edition.
- Thoroughly revised and expanded chapter summaries.
- Completely redrawn graphs with improved labeling.
- Many new numerical examples that illustrate basic analytical concepts.

In making these additions I have tried to retain the book’s primary focus on the careful development and application of economic analysis. The learning aids are intended to assist in that process, not substitute for it.

New Ancillaries. In addition to these changes within the text, this new edition also has a companion workbook and study guide—*Problems and Exercises for Intermediate Microeconomics*—prepared by my friend and colleague, Frank Westhoff of Amherst College. This guide offers students a wide variety of learning exercises, including chapter summaries, multiple-choice questions, and many additional problems. A version of *Problems and Exercises for Intermediate Microeconomics* including much of the content of the study guide (together with some additional features as well) is available on a computer disk for IBM PC (and most compatibles) called *Computer Problems and Exercises for Intermediate Microeconomics*. We have used many of the components of the study guide in our own teaching for several years and have found it to be quite helpful for students, and hope that others will have a similar experience.

To the Instructor

Although this edition generally follows the organization of prior ones, some specific changes should be noted. Despite the addition of two new chapters (on the theory of the firm and public choice) there are only 19 chapters in the present edition. This reduction in number of chapters has been achieved primarily by combining related material that previously appeared in two or more

separate chapters. Such combinations occur in Chapter 6, “Applications of Utility Analysis”; Chapter 11, “Pricing in Perfectly Competitive Markets,” which now covers both the short run and the long run in a single chapter; Chapter 14, “The Demand for Factors of Production,” which now includes both the perfectly and imperfectly competitive cases; and Chapter 17, “General Equilibrium and Economic Efficiency.” Much of this reorganization was done at the request of users of the book for a more compact, streamlined treatment. I believe the new organization meets this goal without compromising the coverage of essential material.

I also hope instructors will find helpful the many new problems and the discussion questions that appear with the applications in this edition. Most of the problems added here are quite straightforward. Their general goal is to help students to become more comfortable with numerical and graphic material. Some of the more difficult problems from prior editions have now been eliminated and those difficult ones that remain are denoted by an asterisk in the text. Solutions to odd-numbered problems appear in an appendix at the back of this edition. Solutions to all of the problems together with some discussion suggestions focusing on the economic applications appear in the *Instructor's Manual and Test Bank*, available to all adopters. The *Instructor's Manual and Test Bank* includes over 300 multiple choice test questions as well as sample examinations.

As always, I would be most happy to hear from users of this book. Most of what I know about the strengths and weaknesses of prior editions comes from such feedback. Such interaction can't help but improve the final product.

To the Student

The primary goal of this edition is to make *Intermediate Microeconomics and Its Application* even more helpful to students. I hope that the new two-color format combined with numerous student aids such as the marginal glossary, simple numerical illustrations, problems and solutions, and the concise chapter summaries will make the book both easier to learn from and helpful in reviewing for the inevitable tests and exams. Perhaps more important than these visible features are changes in the text and graphs that were made to add to the clarity of the overall presentation. In writing I have tried to provide both complete and intuitive explanations of the ideas being discussed, and I have (I hope) kept the graphs as simple and uncluttered as possible.

Students will be the ultimate judge of how well I have succeeded in making this book a good one to learn from. I would be happy to hear from you about the places where I have fallen short. Words of praise would, of course, also be acceptable.

Acknowledgments

So many of the ideas used in this new edition came from colleagues and friends that it is hard to be sure which are my own and which are theirs. It is also difficult to remember everyone who has given me helpful advice on the book

since much of the most important advice I received was delivered in informal ways and in unlikely places (Fenway Park, for example). Still, I have some obvious debts that clearly deserve acknowledgment. Detailed reviews for this new edition were provided by Ted Amato, University of North Carolina, Charlotte; Taeho Bark, Georgetown University; David Emmons, Wayne State; Simon Hakim, Temple University; Dean Hiebert, Illinois State University; Gillian Hunter, Syracuse University; Ali Khan, University of Illinois; David Mills, University of Virginia; and Paul D. Thistle, University of Alabama. The contribution of these reviewers is apparent throughout the book and I am most thankful for their insights. Additional guidance came from the ten economists who helped me address some remaining issues by participating in an in-depth survey: Jere R. Behrman, University of Pennsylvania; Steven Craig, University of Houston; Bill Even, Miami University; D. Allen Dalton, Boise State University; Wayne Gray, Clark University; Alice M. Hughes, Clark University; Janet E. Kohler, University of Houston, University Park; Sharon Bernstein Megdal, University of Arizona; Scott S. Monroe, Oakland University; and Arthur Woolf, University of Vermont. A special thanks is owed to Gillian Hunter of Syracuse University, who reviewed all of the problems in the book and offered many helpful suggestions on them. Other users of the book who offered good advice on many topics were: Lee Friedman, University of California, Berkeley; Bernard Saffron, Swarthmore College; and Gordon Winston, Williams College. My colleagues at Amherst, Frank Westhoff and Beth Yarbrough, also clarified my thinking about the proper way to proceed in several places, and I think the book benefited greatly from their suggestions.

David Macoy of the Amherst College class of 1987 provided assistance to me at several spots in the book, especially in the development of some problems. His work and the fine work of earlier students (Adrian Dillon, Jeff Rodman, Katie Merrell, and Mark Bruni) clearly made this a better book. Readers who object to what passes for humor in the problems should take the matter up with these students, however.

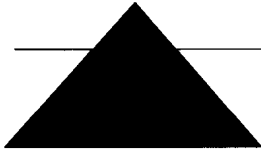
The effort of the entire staff at The Dryden Press played an important role in shaping this edition. Liz Widdicombe offered numerous stylistic and substantive suggestions that provided overall direction to the project. Her attention to details (such as the labeling of graphs) was remarkable and I greatly appreciate her help. Debby Acker also provided a great deal of overall guidance and kept the project moving ahead. The copyediting work of Michele Heinz and the supervision of the art by Jeanne Calabrese provided two other important components to the success of the final product. Everything in the production stage of the book was coordinated by Holly Crawford. How she managed to keep all the components straight is beyond me. All in all then, this edition is as much the product of the Dryden staff as it is mine, and I think the book was greatly improved by this joint effort.

Happi Cramer typed the entire manuscript for this book, all on a rather tight schedule. Her work was exceptional for both its high quality and for the speed in which it was accomplished. I consider myself very lucky that Happi could take on this project on short notice when the press of other events prevented Dorothy Ives from working on this edition. After three editions of

this book, three editions of *Microeconomic Theory*, and numerous instructor's manuals, Dorothy clearly deserved a break and I'm pleased that the transition went so smoothly. My dedication of this edition to Dorothy Ives is just one small indication of the many debts I owe her and of the love everyone in our department has for her. I only hope we can talk her out of this foolish talk of retirement.

As always, my children—Kate, David, Tory, and Paul—want to be mentioned. They are a bit older now than when first mentioned in my prefaces (aren't we all!). They have even started to argue with me about some of the statements made in this book. But getting their names in print has become a habit I can't seem to break.

*Walter Nicholson
Amherst, Massachusetts
September 1986*



ABOUT THE AUTHOR

Walter Nicholson is professor of economics at Amherst College. He received a B.A. degree in mathematics from Williams College and a Ph.D. in economics from Massachusetts Institute of Technology. Professor Nicholson's primary research interests are in the econometric analysis of labor markets. He has published many articles on topics related to unemployment, job search, welfare policy, and the domestic impact of international trade. He is also the author of *Microeconomic Theory: Basic Principles and Extensions*, third edition (The Dryden Press, 1985). Professor Nicholson lives in Amherst, Massachusetts. He and his wife, Susan, have four children—Kate, David, Tory, and Paul—all of whom like to see their names in print.



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