

UPDATED
EDITION

MICROECONOMICS

THIRD EDITION

MICHAEL PARKIN

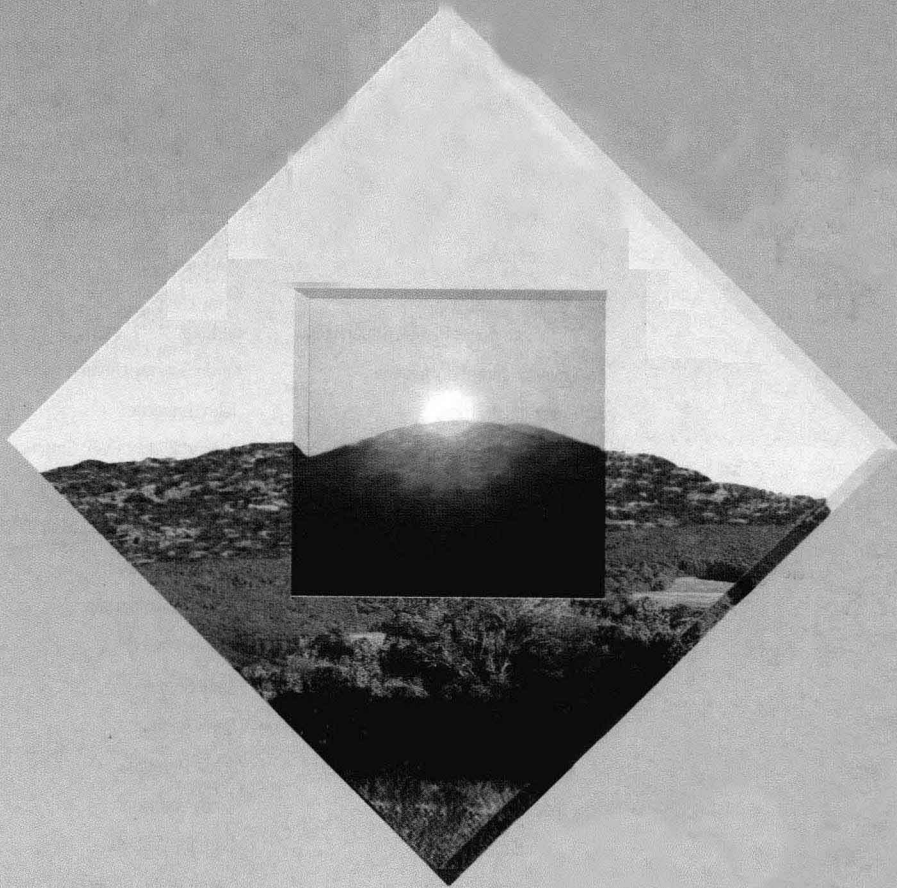



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MICROECONOMICS

THIRD EDITION

MICHAEL PARKIN

UNIVERSITY WESTERN ONTARIO



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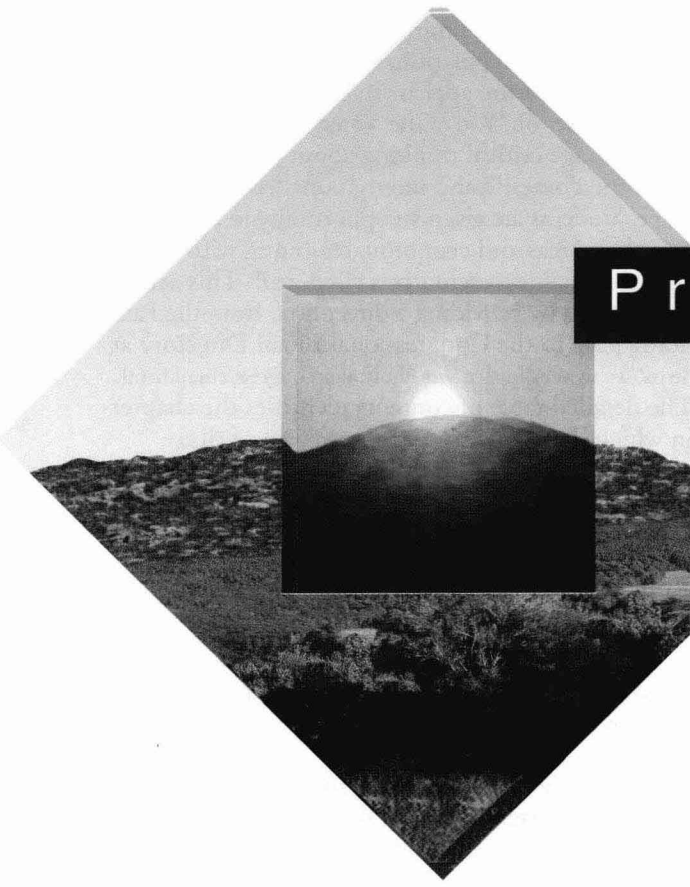
To Robin

About **Michael Parkin**

Michael Parkin received his training as an economist at the Universities of Leicester and Essex in England. Currently in the Department of Economics at the

University of Western Ontario, Canada, Professor Parkin has held faculty appointments at Brown University, the University of Manchester, the University of Essex, and Bond University. He has served on the editorial boards of the *American Economic Review* and the *Journal of Monetary Economics* and as managing editor of the *Canadian Journal of Economics*. Professor Parkin's research on macroeconomics, monetary economics, and international economics has resulted in over 160 publications in journals and edited volumes, including the *American Economic Review*, the *Journal of Political Economy*, the *Review of Economic Studies*, the *Journal of Monetary Economics*, and the *Journal of Money, Credit and Banking*. It became most visible to the public with his work on inflation that discredited the use of wage and price controls. Michael Parkin also spearheaded the movement toward European monetary union. Professor Parkin is an experienced and dedicated teacher of introductory economics.





To change the way students see the world—this is my purpose in teaching economics and it has remained my goal in preparing the third edition of this text and the supplements package that accompanies it. There is no greater satisfaction for a teacher than to share the joy of students who have begun to understand the powerful lessons of the economic approach. But these lessons are hard to learn. Every day in my classroom, I relive the challenges of gaining the insights that we call the economist's way of thinking and recall my own early struggles to master this discipline.

In preparing this edition, I have been privileged to draw on the experiences not only of my own students but also of the many teachers and students who have used the two previous editions.

The principles of economics course is constantly evolving. Yet it is firmly founded on the core and timeless principles of our subject. Today's principles course springs from today's issues, the issues of an age as challenging as any in human history. It seeks to be relevant to an increasingly demanding generation of students who are drawn from an ever wider range of interests and are heading in an ever greater number of directions. Today's course embraces and distills the best of the traditional and modern theories of consumers and producers, markets and governments, national and global economies, and long-term growth and short-term fluctuations. It maintains the distinction between micro and macro as the basis for dividing the subject into manageable components for a semester of study, but it reflects the increasing blurring of the distinction.

The Third Edition Approach

THE CENTRAL GOAL OF THE REVISION IS TO FOCUS sharply on the core concepts of the principles course and to use those principles to explain the key issues and problems of the 1990s. The ideas of choice and opportunity cost, marginal analysis, substitution and incen-

tives, and the power of the competitive process focus the micro chapters. And the tension between achieving the long-term objectives of growth and price stability and the short-term objective of full employment focus the macro chapters. New ideas—such as dynamic comparative advantage, game theory and its applications, the modern theory of the firm, information, public choice, and new growth theory—are described and explained using the core principles. And current issues, such as the environment, health care, preventing inflation, avoiding protectionism, and the performance of emerging economies are studied using these same core principles.

The presence of modern topics does not translate into “high level,” nor does it translate into “bias.” But this book does have a point of view. It is that economics is a serious, lively, and evolving science—a science that seeks to develop a body of theory powerful enough to explain the economic world around us and that pursues its task by building, testing, and rejecting economic models. In some areas, the science has succeeded at its task, but in others, it has some distance to go and controversy persists. Where matters are settled, I present what we know; where controversy persists, I present the alternative viewpoints. This positive approach to economics is, I believe, especially valuable for students as they prepare to function in a world in which simple ideologies have become irrelevant and in which familiar patterns in the economic landscape have shifted and blurred.

Always recalling my own early struggles with economics, I place the student at center stage and write for the student foremost. I am conscious that many students find economics hard. As a result, my goal has been to make the material as accessible as possible. I use a style that makes for an easy read and that doesn’t intimidate. Each chapter opens with a clear list of learning objectives, a vignette that connects with the student’s world and seeks to grab attention, and a statement of where we are heading. Once in the chapter, I don’t reduce economics to a set of recipes to be memorized. Instead, I encourage students to try to understand each concept. To accomplish this goal, the book illustrates every principle with examples that have been selected both to hold the student’s interest and to bring the subject to life. To encourage a sense of enthusiasm and confidence, when the book has explained a new principle, it puts it to work and uses it to illuminate a current real-world problem or issue.

A new interactive newspaper feature entitled “Reading Between the Lines: Policy Watch” has been added to the Update. This feature presents and analyzes the economic impact of current political debates on topics such as the minimum wage, airline regulation, monopoly regulation, the gas tax, and trade policy. This feature appears in selected chapters and includes a set of “You’re the Voter” questions designed to encourage critical thinking about how policies affect the domestic and international economic landscape. Students are given an opportunity to communicate their ideas and economic reasoning with their congressional representatives via e-mail. This activity is facilitated by providing a direct link, from the Parkin home page to the Congressional Email Directory at <http://www.webslingerz.com/jhoffman/congress-email.html>. The detailed table of contents identifies the chapters in which the “Policy Watch” newspaper feature appears. In addition to this new Policy Watch feature, some of the “Reading Between the Lines” newspaper spreads have been replaced with 1996 articles. Data in the text and graphics have been updated through 1995.

Changes in the Third Edition of Microeconomics

The structure of the microeconomics presentation remains consistent with the first two editions, but it reflects the central goals of the revision: to focus on core concepts, to explain current issues, and to be leaner and simpler. I have substantially rewritten Chapter 1, which sets the tone for the revision and which is organized around the themes of ‘how economists think’ and ‘what economists do.’ It gives a broad preview of our subject and places equal emphasis on its scientific and policy content. Chapter 3 is substantially rewritten and uses lively new examples to illustrate the core concepts of scarcity, choice, and opportunity cost. It also gives a neat and accessible explanation of comparative advantage (and dynamic comparative advantage) and the gains from trade.

Chapter 4, the core demand and supply chapter, always very strong in the opinion of reviewers, is now even stronger. It has a new opening section on the distinction between money price and relative price that connects the theory of price with the core principle of opportunity cost. A new final section builds on the chapter opener and uses demand and supply to explain real price changes. Chapter 5 has a clearer

and briefer explanation of elasticity, a new illustration of the connection between elasticity and total revenue, and new international elasticity comparisons.

The revision of Chapter 8, an optional chapter on indifference curves, presents a clear, accessible treatment of the subject. For those who believe that indifference curves are a vital part of principles training, this chapter achieves rigor with simplicity. A new final section applies the model to labor-leisure and consumption-saving choices.

In Chapter 9, thoroughly revised material on the firm and its economic problem explains how agency relationships arise from incomplete information and how they lead to different types of business organizations. The revision of Chapter 10 is another example of the third edition's focus on basic concepts and clear explanations. It has a simplified explanation of the connection between short-run average cost curves and long-run average cost curves and of the relationship between returns to scale, economies of scale, and the shapes of the cost curves. Chapter 11 gets to the point of the competitive model more quickly and omits a difficult analysis of the effects of technological change and a dated section on farms in distress. Chapter 12 has an improved and leaner explanation of monopoly and a new expanded explanation and illustration of price discrimination between two groups with different demand elasticities. Chapter 13 has a more streamlined yet still comprehensive coverage of the game theory approach to oligopoly. It also has a new section on contestable markets, which maintains our focus on core principles by studying behavior in these markets as an entry game.

Chapter 14 again reflects the focus on basics. A new section explains the fundamental idea of factor price as the opportunity cost of using a factor. Chapter 16 explains the distinction between financial capital and physical capital and has a simplified and more focused explanation of markets for exhaustible natural resources.

The chapters on markets and government reorganize and extend the comparable chapters of the second edition and are further examples of the focus on core principles. Chapter 18 previews the entire range of government and public choice issues. The material on public goods in Chapters 19 and 20 of the second edition is brought together in this chapter. Chapter 19 (Chapter 18 in the second edition) discusses inequality and redistribution. Because health and the cost of health care are major issues and major sources

of inequality, this chapter has a new section on health care reform. Chapter 20 (Chapter 21 in the second edition) includes new cases and examples, such as Microsoft and cable television. Chapter 21 explains externalities and illustrates these concepts with their most important examples in today's world. External costs and alternative ways of coping with them are illustrated through an exploration of the economics of the environment, and external benefits and the alternative ways of ensuring that they are valued are illustrated through an examination of the economics of knowledge—of education and research and development.

Chapter 22 has an expanded description of U.S. international trade, a description of GATT and the new World Trade Organization (WTO), and a new section that uses core principles to evaluate and debunk the popular arguments for protection and the restrictions of international trade. Finally, Chapter 23 combines discussions of growth and development and economic systems in transition into one chapter. The coverage of current problems in Eastern and Central Europe and the dramatic growth of the Asian economies focuses on the core principles of incentives and efficiency.

Features that Enhance the Learning Process

THIS THIRD EDITION, LIKE ITS PREDECESSORS, IS packed with special features designed to enhance the learning process.

The Art Program: Showing the Economic Action

The first and second editions of this book set new standards with their highly successful and innovative art programs. My goal has always been to show clearly "where the economic action is." The figures and diagrams in this book continue to generate enormously positive feedback, confirming my view that graphical analysis is the most important tool for teaching and learning economics. But it is a tool that gives many students much difficulty. Because many students find graphs hard to work with, the art has been designed to be both visually attractive and engaging and also to communicate economic principles

unambiguously and clearly. In the third edition, the crystal clear style of the data-based art that reveals the data and trends has been retained. In addition, diagrams that illustrate economic processes now consistently distinguish among key economic players (firms, households, governments, and markets).

We observe a consistent protocol in style, notation, and use of color, which includes:

- Highlighting shifted curves, points of equilibrium, and the most important features in red
- Using arrows in conjunction with color to lend directional movement to what are usually static presentations
- Pairing graphs with data tables from which the curves have been plotted
- Using color consistently to underscore the content and referring to such use of color in the text and captions
- Labeling key pieces of information in graphs with boxed notes
- Rendering each piece electronically so that precision is achieved

The entire art program has been developed with the study and review needs of the student in mind. It has the following features:

- Marking the most important figures and tables with a red icon and listing them at the end of the chapter under “key figures and tables”
- Using complete, informative captions that encapsulate major points in the graph so that students can preview or review the chapter by skimming through the art

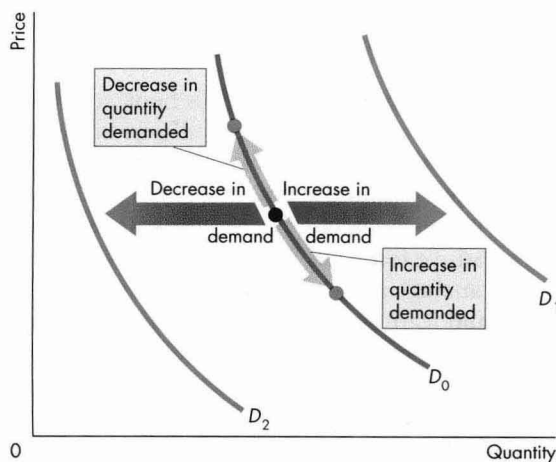
Interviews: Leading Economists Lend a Hand

Substantive interviews with famous economists constituted another popular feature in the first and second editions. I am continuing the tradition and have included all new interviews—seven in total—each with an economist who has contributed significantly to advancing thinking and practice in our discipline. One of the interviews is with a recent Nobel Laureate: Douglass North. The interviews encourage students to participate in the conversations as the economists discuss their areas of specialization, their unique contributions to economics, and also their general insights that are relevant to beginning students.

An interview opens each of the book’s seven parts, and each interview has been carefully edited to be self-contained. Because each interview discusses topics that are introduced formally in the subsequent chapters, students can use it as a preview to some of the terminology and theory they are about to encounter. A more careful reading afterwards will give students a fuller appreciation of the discussion. Finally, the whole series of interviews can be approached as an informal symposium on the subject matter of economics as it is practiced today.

Reading Between the Lines: News Articles for Critical Thinking

Another feature of the previous editions that has been consistently well received is “Reading Between the Lines.” A major goal of the principles course, that “Reading Between the Lines” is designed to pursue is to help students build critical thinking skills and use economic principles to interpret daily news events (and their coverage in the media). I have updated half of the news articles in the Update, including the “Policy Watch” articles, and have selected topics that appeal to students, such as the minimum wage debate, college financial aid, Pearl Jam ticket prices, the Netscape and Microsoft software battle, and advertisement in the Super Bowl XXX broadcast. Each “Reading Between the Lines” spread contains three passes at a story. It begins with a facsimile (usually abbreviated) of an actual newspaper or magazine article. These news stories come from major newspapers and magazines, including the *Economist*, *New York Times*, *Wall Street Journal*, *Chicago Tribune*, *Detroit Free Press*, *Los Angeles Times*, and *Fortune*. The second pass presents a digest of the article’s



essential points. Finally, the third pass provides an economic analysis of the article. In order not to disrupt the flow of the material, these features are placed at the end of each chapter, before the chapter summary.

Economics in History: Pathbreaking Ideas

The “Economics in History” feature helps students trace the evolution of path-breaking economic ideas and recognize the universality of their application, not only to the past but to the present. For example, Adam Smith’s powerful ideas about the division of labor apply to the creation of a computer chip as well as to the pin factory of the eighteenth century. In order not to disrupt the flow of the material, these features are located between chapters.

Learning Aids: Pedagogy that Leads to Active Learning

The careful pedagogical plan has been refined to ensure that this book complements and reinforces classroom learning. Each chapter contains the following pedagogical elements:

Objectives Each chapter opens with a list of objectives that enable students to set their goals as they begin the chapter.

Chapter Openers Intriguing puzzles, paradoxes, or metaphors frame the important questions that are unraveled and resolved as the chapter progresses.

Highlighted In-Text Reviews Succinct summaries for review are interspersed throughout the chapter. In this edition, these in-text reviews have a list format that is designed to give the student a more easily digested statement of the key points.

Key Terms Highlighted within the text, these concepts form the first part of a three-tiered review of economic vocabulary. These terms are repeated with page references at the chapter ends and compiled in the end-of-book glossary.

Key Figures and Tables The most important figures and tables are identified with the red icon and listed at chapter end.

End-of-Chapter Study Material In the third edition, we worked hard to create truly effective end-of-chapter review questions and problems and have added many new ones. As a new feature, we have included a substantial number of diagram problems. In addition, each chapter has a multipart problem based on the “Reading Between the Lines” feature. Many of the problems can be worked by using the *Economics in Action* software package; these problems are identified by an icon (♦). Each chapter ends with a summary organized around its major headings, a list of key terms with page references, a list of key figures and tables with page references, review questions, and problems.

Flexibility: Navigating the Principles Course

One semester or quarter is a short amount of time to accomplish the goals of the principles course and a powerful example of the fundamental economic problem: our wants exceed our resources and we must make choices. To facilitate these choices, a text must be flexible and contain much optional material. A table at the end of this preface explains which chapters form the core and which are optional. Additional optional material within chapters is indicated by footnotes. These sections may be omitted with no loss of continuity.

The Teaching and Learning Package

ADDISON-WESLEY’S EDITORS, THE SUPPLEMENTS authors, and I have worked closely together to ensure that our integrated text and supplements package provides students and teachers with a seamless learning and teaching experience. The authors of the components are outstanding economists and teachers who have brought their own human capital (and that of their students) to the job of ensuring that the supplements are of the highest quality and value. The package contains three broad components:

- Tools to enhance learning
- Tools to enhance teaching
- Tools for the electronic classroom

Tools to Enhance Learning

Study Guide Available in microeconomics and macroeconomics split versions, the all new third edition study guide was prepared by Mark Rush of the University of Florida. Carefully coordinated with the main text, each chapter of the study guide contains:

- Key concepts
- Helpful hints
- True/false questions that may not be true or false and that ask students to explain their answers
- Multiple-choice questions
- Short-answer problems
- Common questions or misconceptions that the student is asked to explain as if he or she were the teacher

At the end of each part, students get to test their cumulative understanding in a number of ways. A “Reading Between the Lines” exercise asks them to apply what they’ve learned by analyzing a news article and answering short-answer questions. Each multiple-choice test simulates a mid-term test by presenting a selection of questions similar to those in the test bank for the chapters in each part of the book.

Several elements of the study guide are geared to building critical thinking: True/False/Uncertain questions, multiple-choice answers that include explanations of why the answer is correct, “You’re the Teacher” sections, and “Reading Between the Lines” exercises. Other elements are geared to making studying economics a bit easier. The key concepts are a study aid; the helpful hints focus on ways to better understand the principles or to avoid common pitfalls; the multiple-choice questions are plentiful and include explanations of why an answer is correct; the part tests allow students to simulate an exam.

The study guide includes an essay, “Should the Study of Economics Be Part of Your Future?,” written by Robert Whaples of Wake Forest University. This essay describes the value of studying economics for both majors and non-majors. It includes information on career options for those with an economics degree, what the study of economics entails, what graduate school is like, and references for further reading.

Economics in Action Interactive Software The second edition supplements package included truly interactive software to support student mastery of economic principles. Students across the country have used this pathbreaking and widely acclaimed computer

learning tool to increase their success in the principles course. With the third edition, they will have fun working the tutorials and testing themselves ahead of their mid-term exams. And they’ll find the real-world data both illuminating and useful for projects. New releases of the software have the following features:

- Step-by-step, graph-based tutorials that actively engage students in exploring economic concepts
- A graphing tool that allows students to graph real-world economic data
- A self-testing facility that simulates a multiple-choice-test setting and gathers results
- A problem-solving tool that allows students to solve homework problems from the text

Tools to Enhance Teaching

Test Bank Revised test items were prepared by David Denslow of the University of Florida and Robert Rossana of Wayne State University to thoroughly reflect the content and terminology of the third edition. The file includes over 5,000 multiple-choice questions, about one-third of which are new to this edition. All questions have been reviewed carefully for accuracy by Robert Horn and Ehsan Ahmed of James Madison University. Each chapter includes a section of questions that are taken directly from the study guide and *Economics in Action* software, and a section of questions that parallel those in the study guide and *Economics in Action* software.

Computerized Test Bank Testing software is available for DOS, Windows, and Macintosh. It includes all questions in the printed test bank. This software gives instructors the ability to add questions, edit questions, scramble question order and answer options, export to a word processor, and more.

Instructor’s Manual An instructor’s manual has been prepared by Mark Rush of the University of Florida. The instructor’s manual is designed to integrate the teaching and learning package, serving as a guide to all supplements. Each chapter includes a chapter outline, changes in the third edition, teaching suggestions, the big picture (how the chapter relates to what has come before and what comes later), cross-references to the acetates, software units, additional discussion questions, answers to the review questions, and answers to the problems. Solutions to the problems that accompany the new “Reading

Between the Lines” and “Reading Between the Lines: Policy Watch” are available on the Parkin World Wide Web site. If you do not have access to the Web, please contact the Addison-Wesley Editorial Department or your local sales representative.

An introductory section written by Byron Brown of Michigan State University and Dennis Hoffman of Arizona State University presents technology ideas for professors who are just getting started with electronic teaching tools. This section talks about teaching in a multimedia classroom, how to use electronic tools in the lecture, and how to integrate *Economics in Action* into the course.

Acetates and Overlays Key figures from the text are rendered in full color on the acetates. Several figures include overlays that make it easy to walk through the figure as you lecture. The acetates are enlarged and simplified to be more legible in large classrooms. They are available to qualified adopters of the textbook (contact your Addison-Wesley sales representative).

Tools for the Electronic Classroom

Electronic Lecture Support A complete lecture framework in Microsoft PowerPoint is available for Macintosh and Windows. Prepared by Tony Lima of California State University, Hayward, this lecture support system is organized by chapter and includes key figures from the text in addition to speaking notes. Some of the PowerPoint slides simulate the overlays in the full-color acetates.

MacNeil/Lehrer Business Reports Once again, Addison-Wesley offers videos that have been carefully selected to illustrate the core principles through topical yet timeless news stories. The package includes video selections for microeconomic, macroeconomic, and international topics. The videos are free to adopters.

Economics in Action Software Instructors can use *Economics in Action* interactive software in the classroom. Its full-screen display makes it possible to use as “electronic transparencies” to do live graph manipulation. Instructors can also have students use the real-world data in *Economics in Action* to complete various course projects. Additionally, *Economics in Action* is a helpful review tool for instructors to use with their students or assign to their students to help reinforce economic principles before tests or exams.

The Parkin Internet Exchange An exciting new element of the Parkin package is on-line support that includes mailing list discussion groups, access to information through ftp and gopher, and a World Wide Web home page. Teachers who are using the third edition texts (and others) can share teaching tips; concerns about the principles course; ideas for using the book, supplements, and *Economics in Action* interactive software; and other topics of mutual interest through a majordomo mailing list called ParkinPr. To subscribe to the list, send an e-mail message to majordomo@aw.com. The body of the message should say only “subscribe ParkinPr.” Discussion threads from the mailing list, new “Reading Between the Lines” analyses, interviews, issues of the *Economic Times*, data sets for *Economics in Action* interactive software, and more will be available through ftp, gopher, and the Parkin home page on aw.com.

An Internet discussion group is also available for students using the third edition. Students can chat with other students about the course, the book, projects, economics, and other relevant topics on their own majordomo mailing list. To subscribe to the student mailing list, send an e-mail message to majordomo@aw.com. The body of the message should say only “subscribe ParkinSt.”

Whether you are a teacher or a student, you can reach all of these Internet services and more at <http://www.aw.com/he> on the World Wide Web. The Parkin home page includes access to the mailing lists, gopher, and ftp sites; a demo of *Economics in Action* interactive software; and links to economic resources and other discussion groups on the Internet and Web.

Finally, if you have questions, comments, or suggestions for improvement, you can submit them via e-mail to Addison Wesley’s economics editors at ParkinEd@aw.com or to me at parkin@vaxr.ssc1.uwo.ca.

Acknowledgments

THE ENDEAVOR OF CREATING A PRINCIPLES TEXT involves the creative collaboration and contribution of many people. Although the extent of my debts cannot be fully acknowledged, it is nevertheless a joy to record my gratitude to the many people who have helped, some without realizing just how helpful they were.

I thank those of my current and former colleagues at the University of Western Ontario who have taught me a great deal that can be found in these pages: Jim Davies, Jeremy Greenwood, Ig Horstmann, Peter Howit, Greg Huffman, David Laidler, Phil Reny, Chris Robinson, John Whalley, and Ron Wonnacott. I also thank Doug McTaggart of Bond University and Christopher Findlay of the University of Adelaide, co-authors of the Australian edition. Their suggestions arising from their adaptation of the first two editions have been extremely helpful in preparing this edition.

It is a special pleasure to acknowledge my debt and express my thanks to the several thousand students whom I have been privileged to teach. The instant feedback that comes from the look of puzzlement or enlightenment has taught me, more than anything else, how to teach economics.

Producing a text such as this is a team effort, and the members of the Addison-Wesley "Parkin Team" are full co-producers of this book. I have been fortunate to work with a sequence of extraordinary editors. On the first two editions, from which this edition has grown, Barbara Rifkind played a crucial role and I want to thank her for the legacy that is still visible in this edition. This edition has been inspired by a truly outstanding editor, Denise Clinton. The new approach to macro could not have been brought to fruition without her clear-headed vision and tough empirical approach. I am enormously impressed by and grateful to her. Marilyn Freedman has been my senior development editor for two editions now and I thank her again for her personal and professional commitment. I thank Yvonne Linton, who did the preliminary market research in the summer of 1993 from which this revision began. I also thank Susan D. Howard, who assisted Marilyn, did much of the photo research, and helped me in a hundred small but important ways. And I thank Larry Rungren and the Bedford Free Public Library for the research assistance they provided to Marilyn and me. Loren Hilgenhurst Stevens has been my senior production editor for two editions and I renew my thanks to her for directing the design and production effort. I also thank Nancy Fenton who doubled with Loren and took the production reins when Loren took maternity leave. Craig Bleyer, my marketing manager, has played a crucial role in helping to shape this revision and ensure that it sensitively reflects market needs. Cindy Johnson has once more played a pivotal role in managing all the supplements. Her skill and commit-

ment have ensured that the book and the supplements form a truly integrated and effective teaching and learning package that meets the highest standards. I thank Lena Buonanno, who played a key role in coordinating a long sequence of conference calls that were a crucial part of my search for the right way to restructure and redefine introductory macroeconomics. Lena also took care of the interviews and helped the interviewees and me make our conversations accessible to our student readers. Barbara Willette has again been copyeditor and I thank her for continuing to coax yet better English from my keyboard. Karen Lehman has designed all three editions of this book and with each edition she has raised the design to new heights. I thank her for her continued inspiration, which has inspired me. I also thank Mark Dalton, a vice president in the higher education group, and Michael Payne, an executive editor, for their deep support of this project and for ensuring that it is directed by the most talented editors in the business.

I thank the supplements authors: Mark Rush, David Denslow, Robert Rossana, Tony Lima, Robert Whaples, Byron Brown, and Dennis Hoffman. Mark has played a crucial role in the creation of this edition and has been a constant source of good advice and good humor. He helped me digest the reviews and distill the consensus and he acted as an accuracy reviewer and supplier of news articles for and reviewer of the "Reading Between the Lines" features. Kathleen Possai also helped my search for good stories for "Reading Between the Lines" and she reviewed the supplements, including *Economics in Action*. Robert Whaples was another extraordinary reviewer who went well beyond the call of duty or the scope of the checkbook in his manuscript, accuracy, and study guide reviews; his participation in a lengthy macro conference call; and his writing of an essay for the study guide. I am deeply grateful to Carol Dole and Malcolm Robinson for their accuracy reviews of page proof. Byron Brown and Dennis Hoffman have written excellent essays for the instructor's manual, and J. Peery Cover provided outstanding advice on how to make the instructor's manual even more helpful. Others who helped me shape my ideas for the new macro sequence are Andy Dane (who also wrote the video guide), David Hakes, John Edgren, Tony O'Brien, Joseph Daniels, Robert Gillette, Robert Rossana, Fred Jungman, Michael Carter, Art Welch, Jerry Babb, Richard Gosselin, Robert Parks, Paul Schmitt, Gary Shelley, John

Graham, Janet Mitchell, James Eden, and Lee Weissert.

I thank Richard Parkin, who has provided outstanding support in creating the electronic art manuscript and final art files and has contributed many ideas that have improved the figures in this book.

As with the previous editions, this one owes an enormous debt to Robin Bade. I dedicate this book to her and again thank her for her work. She has read every word that I have written, commented in detail on every draft, created many of the end-of-chapter review questions and problems, inspired me when I have been flagging, and managed the entire project from its initial conception through its three editions and through seven editions published in other countries. I could not have written this book without the unselfish help she has given me. My thanks to her are unbounded.

The empirical test of this book's value continues to be made in the classroom. I would appreciate hearing from instructors and students about how I can continue to improve it in future editions.

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Microeconomics Flexibility

Core

- 1** What is Economics?
- 3** Production, Growth, and Trade
- 4** Demand and Supply
- 5** Elasticity
- 7** Utility and Demand *or*
- 10** Output and Costs
- 11** Competition
- 12** Monopoly
- 14** Pricing and Allocating Factors of Production
- 22** Trading with the World

Optional

- 2** Making and Using Graphs
- 6** Markets in Action
- 8** Possibilities, Preferences, and Choices
- 9** Organizing Production
- 13** Monopolistic Competition and Oligopoly
- 15** Labor Markets
- 16** Capital and Natural Resource Markets
- 17** Information and Uncertainty
- 18** Market Failure and Public Choices
- 19** Inequality, Redistribution, and Health Care
- 20** Regulation and Antitrust Law
- 21** Externalities, the Environment, and Knowledge
- 23** Emerging Economies



Credits

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