

Microeconomics



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PREFACE



In the preface to the previous edition of this book (1982), we noted that we were fortunate to have the opportunity to write during a period when economics was very much in the limelight but that we faced the challenging task of explaining economic change in a period marked by much confusion and controversy. Economics had attracted a great deal of attention from the news media and the general public, because both were very much aware that the problems of the day were mainly economic in nature. Then, the bugaboo was inflation, which was at double-digit levels in the United States for the first time in the twentieth century. Not only were prices rising rapidly, but unemployment was unacceptably high. The microeconomic dimensions of the crisis became evident as governments experimented with price controls on specific products, sometimes with unsatisfactory results that were all too predictable.

More recently, we have had some good times and bad, but economists have not forgotten the lesson that their discipline, which rather complacently rested in the shadow of Keynes for some 25 or so years after World War II, is not yet fully grown. Recent soul-searching by economists has occurred mostly in macroeconomics, which, it seems, failed to adequately explain the combination of unemployment and inflation that plagued the United States periodically from 1973 onward. Nonetheless, the importance of a sound *microeconomic* background for policy analysis became increasingly apparent as theoreticians tended more and more to tie macroeconomic events to individual and business behavior.

As textbook writers, we are again challenged. Economics is no less newsworthy now than before; nor is it less riddled with controversy. We are again both fortunate and unfortunate. The continuing economic problems of the United States and many other industrialized nations have made it increasingly diffficult to analyze economic events without a thorough grounding in both microeconomics and macroeconomics.

Because it deals with applications of microeconomics that are relevant to recent changes in policy (deregulation, antitrust, unions, public sector microeconomics, international trade), this book is a noticeably different product from our earlier edition. We believe it also differs significantly from other beginning economics texts currently available for college and university students. Our task below is to tell you why.

IMPROVEMENTS AND CHANGES

The foundations of a basic course oriented toward microeconomics are laid in Part One of the text. This material introducing the subject matter of economics, its methodology, and the elements of demand and supply analysis is somewhat more compact than it was in the previous edition. Nonetheless, it does a thorough job of getting students started and contains some new material that is presented in an efficient way. For instance, Chapter 3 now includes a brief discussion of price ceilings and price floors in a boxed example that requires only one page to show students a way to apply concepts they have just learned. Also new in Chapter 3 is an expanded discussion of both the determinants of demand and the determinants of supply. For students who are unfamiliar with graphical presentations, Special Topic A, on working with graphs, has been substantially rewritten and simplified.

Although the core theoretical materials found in Parts Two and Three (consumer behavior, theory of the firm, and market structures) are much the same as in the previous edition, they are reinforced by many new and updated examples. As we have updated, we have attempted to illustrate economic principles and events with examples that we believe students can comprehend and that will stand the test of time. Finally, we have made numerous adjustments in coverage and presentation wherever we, our students, or our reviewers have found omissions or opportunities for clarification.

Important changes in Parts Four through Six include detailed coverage of recent antitrust decisions and their implications; thorough updating of the materials on international trade, international finance, and commercial policy; an improved discussion of the farm problem; and an expanded discussion of economic systems.

INNOVATIONS IN COVERAGE AND PRESENTATION

Certain chapters of the book either employ new devices or touch on timely materials that will help students understand economic analysis and its current application. For example, the discussion of demand in Chapter 3 clarifies the distinction between a demand function and a demand curve by using a unique set of diagrams that emphasizes the *ceteris paribus* condition while recognizing that consumers' purchasing decisions depend on variables other than a product's own price. Other innovations in presentation and coverage include:

- 1. A set of chapters on demand and the theory of the firm that clarifies revenue concepts, explicitly treats the connection between production and cost of production, and describes the fundamentals of profit analysis
- 2. Two chapters on the microeconomics of public sector decisions that concisely explain both the externalities issue and the steps required to conduct rational analyses of public capital projects
- 3. A completely up-to-date discussion of international trade, payments, and commerical policy that provides more depth than most other texts yet allows students to analyze problems using tools developed early in the book
- 4. A selection of optional "Special Topics" tailored to allow discretion in depth of coverage of certain theoretical materials and related subjects

It is unlikely that an instructor will choose to use every one of these innovations. Indeed, with certain academic calendars, such a strategy would not be possible. However, we think that these unique materials will add flexibility in the design of individual courses.

SPECIAL FEATURES

This edition contains several pedagogical elements, some of which are new and unique, that are designed to facilitate students' grasp of key

terms and concepts and to maximize the effectiveness of the text as a learning tool outside the classroom.

Perspectives

At the beginning of each chapter we have placed a brief vignette called a "Perspective." The Perspectives use interesting contemporary economic events to set the stage for the chapter and show how it applies to the real world. This is a feature that we introduced in the previous edition and have decided to retain. The new Perspectives tend to be shorter than the earlier ones. Some are quite similar to the original version, since we found that we had chosen topics that have remained in the headlines. Our intention was and still is that the Perspectives serve as a motivational device (a "teaser," if you prefer) to lead in to what follows in the chapter, not as something to initially provoke a great deal of discussion or analysis.

Introductions

Each Perspective is followed by a single-paragraph introduction to the chapter, under the heading "What This Chapter Is About." The purpose of this brief statement is to let the student know where the chapter is headed and to make it easy for instructors to anticipate what familiar topics will be covered. Instructors who so wish can then state formal learning objectives for the chapter (see *Instructor's Manual*).

Concept Reviews

Unique to this text, this feature asks students periodically throughout each chapter to test their comprehension of essential concepts by answering a brief series of questions related to the discussion of the preceding pages. Since an understanding of economics is largely predicated on concepts which build on one another, the self-testing built into the Concept Reviews serves to accentuate this relationship and give the student a more efficient way to study the subject.

Vocabulary Development

Considerable emphasis is placed throughout our text on the development and understanding of the language of economics. Whenever a new term is used, it appears in boldface type and is highlighted along with its definition. All key terms and concepts are listed at the end of the chapter in which they appear and are repeated with their definitions in a comprehensive end-of-text glossary.

One additional feature that will significantly enhance students' grasp of basic terminology is our approach to abbreviations. Except for the most commonly used abbreviations such as AVC, terms are spelled out each time they are used. This approach avoids unnecessary confusion later in the text where the accumulation of abbreviations can overwhelm many students.

Key Term and Concept Referencing

Another aid to student comprehension is a unique system of referencing key terms and concepts. Throughout the text, when a previously discussed term or concept reappears, a page reference is placed in the margin. This indicates the spot to turn to for review of that specific term or concept. For example, a student who runs across a reference to "factors of production" on page 37 in Chapter 2 (Economic Systems and Policies) will find that the term is followed by a small box like this: □. In the margin, a larger box will contain a reference to page 16 in Chapter 1, where the original definition and discussion of the concept appears. (In some instances, the page reference in the margin will refer to a section heading or figure rather than a highlighted definition.)

End-of-Chapter Materials

Each chapter concludes with the following learning aids.

- 1. Summary: A numbered review of the major subjects in the order that they were discussed.
- 2. Important terms and concepts: A list of terms and concepts in the approximate order that

- they were defined in the chapter. In parentheses after each item is the page number where the term and further discussion can be found.
- 3. Questions and problems: For student self-testing or assignments, these items frequently test analytical skills rather than memory. Numerical problems related to the chapter's main arguments are provided whenever possible. For reinforcement, answers to odd-numbered questions and problems are supplied at the back of the book.

In addition to the above aids, each chapter has an end-of-chapter reading that appears under the heading "For Discussion." The readings are based on contemporary events and have been carefully selected to relate to the analysis of the chapter. They are interesting, timely, and often just plain fun to read. A set of questions following each reading helps students interpret and analyze what they have read and ties the reading back into the chapter.

History of Thought

A brief history of economic thought is provided as an integral part of this text. To avoid the discontinuities inherent in scattering such materials throughout the chapters on theory, issues, and policies, we have presented them as a three-part essay entitled "Economic Origins." The Economic Origins follow Chapters 1, 3, and 10. This treatment of the history of economic ideas allows instructors a degree of choice about including such material. Limiting it to only three parts avoids student confusion about what to read and what to omit.

OTHER LEARNING AND TEACHING AIDS

We have attempted in this book to strike a reasonable balance among the verbal, graphical, and numerical methods of description and analysis. Immediately following Chapter 1 is a Special Topic on the use of graphs in economic analysis that serves to acquaint students with coordinate systems,

slopes, and linear versus nonlinear curves. The early chapters also introduce theory construction, marginalism, and both partial and system-wide equilibrium in a way that makes understanding easy.

SUPPLEMENTARY MATERIALS

The complete package of ancillary materials for this text includes a *Study Guide*, a *Test Bank* that can be supplied in both printed and microcomputer formats, an extensive set of *Transparency Acetates and Masters*, a comprehensive *Instructor's Manual*, and an interactive *Software Package* for use as a tutorial. Each of these supplements is available free to adopters and is described below.

Instructor's Manual

In authoring this important resource, we have attempted in every way possible to stress utility over gimmickery and quality over quantity. In doing so, we have relied heavily on feedback from adopters and reviewers. Its contents include a set of conversion notes for each chapter. These notations identify where our coverage and approach differs from several leading texts. Additionally, a set of detailed lecture notes is provided for each chapter, with suggestions for use of the available transparency acetates and masters. Also included for each chapter is a set of learning objectives, answers to concept reviews, and answers to the end-of-chapter and discussion questions. The last element provided in this manual is a set of over 200 transparency masters, one for every graph or table found in the text which has not been reproduced in the package of acetates.

Printed Test Bank

Written by Jack Inch of Oakland Community College, the *Test Bank*, which covers both this volumn, and the companion volumn, *Microeconomics*, contains 2,200 multiple choice and true/false questions. In addition to providing the page reference from the text for correct answers, it

also includes a rationale for each. These questions have been constructed to test for general knowledge, terms and definitions, and application and analysis.

Computerized Test Bank

The previously described test questions are available for use on microcomputer. *MicroTest* allows you to edit, add, delete, or scramble questions as necessary. It is available for use with the IBM PC and compatibles, as well as for the Apple II and II/e.

Transparency Acetates

Approximately 100 of the most important graphs and tables from both *Macroeconomics* and *Microeconomics* have been reproduced in a two-color format as *Transparency Acetates*. We have carefully selected these illustrations to coincide with the topics which instructors have identified as the most difficult to teach.

Software

This package, authored by Stephen Lile of Western Kentucky University, features five interactive and user friendly lesson modules covering: (1) Demand, Supply, and Price; (2) The Income/Expenditure Model; (3) Macroeconomic Concepts and Their Measurement; (4) The Aggregate Supply/Aggregate Demand Model; and (5) Price Elasticity of Demand and Supply. It is available in both IBM and Apple versions and is accompanied by its own user's manual.

Study Guide

The Study Guide is authored by Robert Herman of Nassau Community College. Each chapter features a summary of key concepts, a vocabulary exercise, and a list of key terms. Also included for all chapters are approximately 35

multiple choice and true/false questions and 5 to 10 essay questions to enable students to prepare for examinations. Answers to all questions and exercises are provided.

ACKNOWLEDGMENTS

A project the magnitude of this book cannot be carried to fruition by authors alone. Scores of people, including survey respondents, reviewers, editors, designers, and typists have contributed substantially to the production process, and all deserve a vote of gratitude. We remember gratefully the help we received from reviewers of the previous edition, and we especially wish to thank those who reviewed this edition. Their numerous suggestions for improvement have had a positive impact on every chapter.

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NOTE TO STUDENTS



Many college and university students complete two or more courses in economics. However, very few people take beginning economics as an elective. It is, instead, a requirement for students in business administration and certain social sciences, as well as for economics majors. The latter usually are few in number, and introductory economics classes are thus filled with students whose goal is to become something other than an economist.

Why so much emphasis on economics if only a handful of students will ever get a degree in the field? The reason is simple. In business, government, and everyday life a large share of the most important and frequently asked questions that must be dealt with are fundamentally economic in nature. For example, your choice of a career involves evaluation not only of the purely monetary rewards that the career offers but also the personal satisfaction you get from doing one job rather than another. Both of these are economic questions involving economic choices.

In a very real sense, choices are what economics is all about. As an individual in a free society, your future life will involve thousands and thou-

sands of choices—not just about using your time or choosing your occupation but also about whom to vote for and what kinds of public programs you want or don't want. Economics, in one form or another, will often affect your decision.

Members of the United States Congress often express concern about questions that have to do with economic choices. In fact, a recent survey of newly elected senators and representatives revealed that virtually all of them wanted to be on "money" committees. When asked why, they usually responded that the economy was responsible for getting them elected—that the state of the economy was the issue and that they wanted to serve on a committee where they could do something about it.

No matter where your career may lead, you can bet that it will be filled with economic choices. That is why this book and the course or courses that go with it will be useful to you—not only to fulfill a degree requirement but also to show you how to think about economic events and their consequences. Here is how the book can do you the most good.

TEN HELPFUL HINTS

- 1. Read all assignments before they are discussed in class. As you read, test your comprehension by answering the brief questions you find under the Concept Review headings that appear at various points in each chapter. If at first you do not understand, read again.
- 2. Pay attention to the "Perspectives" and the "What This Chapter Is About" lists that appear at the beginning of each chapter. You can use these materials to help orient your thinking about the chapter.
- 3. Take advantage of the way this book handles terms and definitions. Most important terms are set in boldface type like this: **term.** Definitions are set in a different style of type to make them stand out. In addition, terms are cross referenced from later chapters to earlier ones. When a term is cross referenced, you will see a small box next to it like this: □. In the margin, you will find a larger box with a page reference. If you go to that page, you will find further information (a definition, section heading, or figure) relating to the term or concept.

There is a very complete glossary of terms at the end of the book. Also, at the end of each chapter, there is a list of important terms and concepts to review. Each item in the list is accompanied by a page reference that will tell you where you can find a definition or discussion of it in the chapter.

- 4. Take your time when you come to numerical examples in the chapters. If you gloss over them, you probably will not get the point.
- 5. Use the end-of-chapter summaries to review the major points in each chapter. Don't trick yourself into thinking you can read the summaries only and ignore the detailed analyses that appear in the chapter itself.
- 6. Answer all of the end-of-chapter questions and problems that your instructor assigns. For self-check, answers to odd-numbered questions and problems can be found in the back of the book.
- 7. A study guide has been prepared to accom-

- pany this book. It contains a review of each chapter and many questions and problems that you can use to test your understanding of what you have read or heard in class.
- 8. To give you a bit of history on the evolution of economic concepts, the text contains a brief history of the economists and their ideas. The history is called "Economic Origins" and appears in three parts (after Chapters 1, 3, and 10). It can help you to understand how the various pieces of economic theory were eventually put together.
- 9. The "For Discussion" readings that follow each chapter are designed to help you apply the chapter's analysis to an interesting real world problem. These readings come from popular sources and can be fun to analyze. Each reading is followed by a few questions to help you think about its economic content. You can use the readings to test your skills in applying economic analysis.
- 10. Pay attention to the economic events going on around you. Read the local paper, The Wall Street Journal, Newsweek, Time, Business Week, or similar publications. Many of the "Perspectives" and "For Discussion" readings are based on economic news that has appeared in these sources. The more you read, the more you will convince yourself of the importance of economic analysis in making personal, business, and social decisions.

A LAST WORD

As textbook writers and professional economists we hope we have given you a product that will make learning economics relatively easy and even, at times, fun. Perhaps you will not take more than one or two economics courses beyond the principles level. At the other extreme you may find that economics interests you enough to choose it as a major, either in business or in liberal arts. Whatever your choice, we hope you will remember this book and refer back to it frequently as a reference on a broad range of economic questions and issues.

CONTENTS IN BRIEF



PART ONE Basic Economic Concepts 1 1 Economic Problems and Economic Decisions 3 2 Economic Systems and Policies 31 3 Demand and Supply 47 PART TWO The Economics of Consumer and Business 81 4 The Economics of Consumer Choice 83 5 Elasticity and Revenue 107 6 Production and Cost 131 7 Profit Maximization 159

PART THREE The Economics of Product and Input Markets 177

- 8 Perfectly Competitive Markets 179
- 9 Monopoly: The Case of a Single Seller 199
- 10 Monopolistic Competition and Oligopoly 219
- 11 The Market for Productive Resources 247
- 12 Returns to Productive Resources 275
- 13 Unions, Collective Bargaining, and the Minimum Wage 291

PART FOUR The Economics of Government-Business Relationships 315

- 14 Antitrust and Monopoly 317
- 15 Regulation and Externalities 341
- 16 Public Sector Microeconomics 359

PART FIVE The Economics of Internationalism, Trade, Payments, and Trade Barriers 383

- 17 Comparative Advantage and International Trade 385
- 18 International Payments, Investment, and Foreign Exchange 409
- 19 International Commercial Policy, Tariffs, and Trade Restrictions 439

PART SIX Continuing Economic Problems 459

- 20 Agriculture: Problems and Policies 461
- 21 Environmental Economics and Energy 485
- 22 Alternative Economic Systems 511

APPENDIX Interest Factor Tables A-1
GLOSSARY G-1

ANSWERS: ODD-NUMBERED QUESTIONS AND PROBLEMS Q-1

DETAILED CONTENTS



PART ONE Basic Economic Concepts

CHAPTER 1 ECONOMIC PROBLEMS AND ECONOMIC DECISIONS 3

Perspective The Economics Around Us 4
What is Economics? 5

Why Study Economics? 6

Social Point of View 6

Individual Point of View 6

Scarcity, Choice, and Opportunity Cost 7

Production Possibilities 8

Employment and Efficiency 8

A Production Possibilities Example 8 Production Possibilities Curve 10

Choice and Production Possibilities Curve 11

The Production Possibilities Curve as a Tool of

Analysis 12

Methodology of Economics 13

Observation of Facts 13

Formulating a Theory 13

Testing the Theory 14

Application of the Theory 14

Some Easy Mistakes 15

Positive Versus Normative Economics 15

Some Fundamental Economic Questions 16

What Is to Be Produced? 16

How Is This Output to Be Produced? 16

Distribution: Who Gets What? 16

Will Future Growth Be Facilitated? 17

Rules for Choice: The Marginal Approach 17

Macroeconomic Decisions Versus Microeconomic

Decisions 17

Summary 18

Important Terms and Concepts 19

Questions and Problems 19

For Discussion Guns Versus Butter: The Record of the United States 20

Special Topic A The World According to Graphs 22

Economic Origins I Early Ideas About

Economics 28

CHAPTER 2 ECONOMIC SYSTEMS AND POLICIES 31

Perspective How Does an Economic System Solve Its

Problems? 32

Some Preliminaries 33

The Traditional Economy 33

The Command Economy 34

Pure Capitalism 34

Characteristics of Pure Capitalism 35

Capitalistic Answers to the Fundamental Economic Questions 35 The Circular Flow of Income 37 Potential Problems Under Capitalism 38 Mixed Economic Systems 39 Mixed Capitalism 39 Other Economic Systems 41 Summary 42 Important Terms and Concepts 43 Questions and Problems 43 For Discussion How Soviet Agriculture Works . . . or Doesn't 44

CHAPTER 3 DEMAND AND SUPPLY 47

Perspective Demand and Supply During Dog Days 48 Role of Demand and Supply 49 The Demand Function 49 Definition of Demand 50 Demand Schedule and the Law of Demand 51 The Demand Curve 53 Change in Quantity Demanded 54 Change in Demand 54 Determinants of Demand 55 An Individual's Demand Versus Market Demand 57 Supply Concepts 59 Supply Function 59 Supply Schedule and Supply Curve 59 Law of Supply 60 Change in Quantity Supplied Versus Change in Supply 60 Effects of Changes in Determinants of Supply 61 Price Determination in a Competitive Market 62 Maintenance of Equilibrium 63 Change in Equilibrium 64 How Markets are Related to Each Other 68 Summary 69 Important Terms and Concepts 70 Questions and Problems 71 For Discussion Is Relief in Sight for Truffle Fanciers? 72 Special Topic B The Demand Function and the Demand Curve in Equation Form 73 Economic Origins II Adam Smith and the Classical

School 76

PART TWO

The Economics of Consumer and **Business Behavior**

CHAPTER 4 THE ECONOMICS OF CONSUMER CHOICE 83

Perspective On Budgets and Spending 84 Total, Average, and Marginal Values 85 Behind the Demand Curve 86 Total and Marginal Utility 87 Diminishing Marginal Utility 87 Utility Maximization Condition 89 The Demand Curve 92 Deriving the Demand Curve 92 Indivisibility of Goods 93 Law of Demand 94 Derivation of a Market Demand Curve 96 Market Versus Firm Demand Curves 97 A Critique of the Theory of Consumer Choice 97 Summary 99 Important Terms and Concepts 99 Questions and Problems 99 For Discussion Do We Really Get What We Want? 101 Special Topic C A Geometrical Explanation of Consumer Theory 102

CHAPTER 5 ELASTICITY AND REVENUE 107

Perspective What Price Revenue? 108 The Demand Curve and Revenue 109 Shifts in the Demand Curve 112 Elasticity: Measuring the Responsiveness of Quantity Demanded 114 Price Elasticity of Demand 114 Elasticity of Supply 122 Summary 124 Important Terms and Concepts 125 Questions and Problems 125 For Discussion Pie in the Sky? 126 Special Topic D Income and Cross Elasticity of Demand 127

CHAPTER 6 PRODUCTION AND COST 131

Perspective How Do You Build a Low-Cost Diesel? 132

The Economist's View of Cost 135 Explicit Costs 135 Implicit Costs 135 Accounting Income Versus Economic Profit 135 Private Costs Versus Social Costs 136 Inputs and the Production Function 136 Inputs 136 Production Function 137 Long Run Versus Short Run 137 Production and Cost in the Short Run 138 Product Curves of a Variable Input 138 Short-run Costs 140 Economies and Diseconomies of Scale 145 Summary 147 Important Terms and Concepts 148 Questions and Problems 149 For Discussion Score One for Small Plants 151 Special Topic E Production and Cost in the Long Run 153

CHAPTER 7 PROFIT MAXIMIZATION 159

Perspective On Having to Make a Profit 160
The Goal of the Firm 162
Approaches to Profit Maximization 163
An Example of Profit Maximization 163
General Rule for Profit Maximization 164
Graphical and Numerical Examples of Profit
Maximization 165
The Firm's Shutdown Point 169
Incremental Profit Analysis 170
Summary 170
Important Terms and Concepts 171
Questions and Problems 171
For Discussion All Eyes on the Donut 172
Special Topic F Breakeven Analysis 174

PART THREE The Economics of Product and Input Markets

CHAPTER 8 PERFECTLY COMPETITIVE MARKETS 179

Perspective Competition and the Free Market Ideology 180 Characteristics of Perfect Competition 182 Profit-Maximizing Decision Rules 184

Maximizing Profit in the Short Run 184 Maximizing Profit in the Long Run 187 Long-Run Industry Equilibrium 187 Long-Run Industry Supply Curve 188 Constant Cost Industry 189 Increasing Cost Industry 189 Decreasing Cost Industry 191 Perfect Competition: Why the Ideal? 191 P = LMC 192P = Minimum LAC 192Some Qualifications 192 Economies of Scale 192 Distribution of Income 192 Externalities 193 Does Perfect Competition Exist? 193 Summary 193 Important Terms and Concepts 194 Ouestions and Problems 194 For Discussion Boom and Bust in the Beef Market 196

CHAPTER 9 MONOPOLY: THE CASE OF A SINGLE SELLER 199

Perspective The IATA Blues 200 Characteristics of Monopoly 202 One Firm in the Industry 202 Barriers to Entry 202 Regulated Monopolies 203 Demand and Marginal Revenue 203 Profit Maximization in the Short Run 204 Prospects for the Long Run 205 Monopolies and Social Welfare 205 Underproduction 206 Economic Profit 208 Economies of Scale 208 Price Discrimination 209 Regulated Monopolies 210 A Regulatory Dilemma 210 Fair-Return Pricing 210 Summary 211 Important Terms and Concepts 212 Questions and Problems 212 For Discussion The Diamond Monopoly Just Ain't What It Used to Be 213 Special Topic G A Further Analysis of Price Discrimination 215

CHAPTER 10 MONOPOLISTIC COMPETITION AND OLIGOPOLY 219

Perspective A Towel for All Seasons? 220 Monopolistic Competition: Where Image Counts 222 Characteristics of Monopolistic Competition 222 Profit Maximization in the Short Run 222 Profit Maximization in the Long Run 223 Long-run Industry Equilibrium 223 Monopolistic Competition and the "Real" World 223 Oligopoly: Land of the Giants 225 Characteristics of Oligopoly 225 Cartel 226 Price Leadership and the Dominant Firm 228 Kinked Demand Curve Theory 229 Oligopoly and Social Welfare 230 The Four Market Structures in Review 232 Summary 233 Important Terms and Concepts 234 Questions and Problems 235 For Discussion Turf Wars 236 Special Topic H The Effects of Taxes on the Firm 238 Economic Origins III The Path to Modern Microeconomics 241

CHAPTER 11 THE MARKET FOR PRODUCTIVE RESOURCES 247

Perspective Resource Substitution in the Southwest 248 Profit-Maximizing Rules for Employment of Inputs 249 One Variable Input 249 Profit Maximization: The Output Rule Versus the Input Rule 253 Multiple Inputs and the Least Cost Rule 254 Input Demand, Product Markets, and Input Prices 257 Types of Market Structures 257 Importance of Market Structures 258 Input Demand Curve of the Firm 258 Market Demand Curve 259 Effect of Product Market Structure on Marginal Revenue Product 259 Input Pricing When Factor Markets Are Perfectly Competitive 260 Perfectly Competitive Input and Output Markets 260

Imperfectly Competitive Output Market but
Perfectly Competitive Input Market 261
Input Pricing When Factor Markets Are Not
Perfectly Competitive 265
Less Than Perfectly Competitive Output and
Input Markets 265
Bilateral Monopoly 265
Summary 267
Important Terms and Concepts 268
Questions and Problems 268
For Discussion A Bargain at \$600,000? 270
Special Topic I Components Cost and ProfitMaximizing Input Use 271

CHAPTER 12 RETURNS TO PRODUCTIVE RESOURCES 275

Perspective Some Explanations for Male-Female Income Differentials 276 Wages 278 Wage Rate Differentials 279 Skill or Educational Requirements 279 Geographical Immobility 280 Institutional Restrictions 282 Discrimination 283 Market Structures 283 Rent 283 Henry George and the Single Tax 283 Is Johnny Carson's Salary a Rent? 284 Quasi-Rents 284 Interest 284 Interest Rates 285 Variations in Interest Rates 285 Profit 286 Entrepreneurship 286 Definition of Profit 286 Economic Profit 286 Summary 287 Important Terms and Concepts 287 Questions and Problems 288 For Discussion An Idea Loonier Than Looney Tunes? 289

CHAPTER 13 UNIONS, COLLECTIVE BARGAINING, AND THE MINIMUM WAGE 291

Perspective When Labor Decides to Back Off 292
The U.S. Labor Movement 293
Status Before 1881 293
American Federation of Labor 295
Congress of Industrial Organizations 295