

Table of Contents

Preface xii

Supplements & Resources xv

Customization xvii

Part I *Introduction to Economics* 1

1 How Economists Think 2

1.1 Four Fundamental Questions: What? How? Who? For Whom? 5

1.1a *Deciding What to Produce: Opportunity Cost* 6

Applying Economic Ideas 1–1

The Opportunity Cost of a College Education 7

1.1b *Deciding How to Produce: Efficiency and Entrepreneurship* 8

1.1c *Deciding Who Will Do What Work: The Division of Labor* 10

Who Said It? Who Did It? 1–1

David Ricardo and the Theory of Comparative Advantage 12

1.1d *Deciding for Whom Goods Will Be Produced* 13

1.2 Coordinating Economic Choices 14

1.2a *A Noneconomic Example* 14

1.2b *Spontaneous Order in Markets* 15

Who Said It? Who Did It? 1–2

Adam Smith on the Invisible Hand 16

1.2c *The Role of Hierarchy* 17

1.3 Economic Method 18

1.3a *Theories and Models* 18

1.3b *Using Graphs* 18

1.3c *Theory and Evidence* 21

1.3d *Theories and Forecasts* 21

1.3e *Theory and Policy* 22

Summary 24

Key Terms 25

Problems and Topics for Discussion 25

Case for Discussion 27

Endnotes 28

Appendix to Chapter 1 29

2 Supply and Demand: The Basics 40

2.1 Demand 42

2.1a *The Demand Curve* 42

2.1b *Shifts in the Demand Curve* 43

2.2 Supply 47

2.2a *Some Tips for Learning Supply* 48

2.2b *The Supply Curve* 48

2.2c *Shifts in the Supply Curve* 50

2.3 The Interaction of Supply and Demand 52

2.3a *Market Equilibrium* 53

2.3b *Shortages* 54

2.3c *Surpluses* 54

2.3d *Changes in Market Conditions* 55

Economics in the News 2–1

Hindsight is 20/20 for Auto Manufacturers 57

2.4 Price Floors and Price Ceilings 58

2.4a *Price Supports: The Market for Milk* 58

2.4b *Price Ceilings: The Case of Rent Control* 59

2.4c *Equilibrium as Spontaneous Order* 61

2.5 Some Closing Thoughts 62

Who Said It? Who Did It? 2–1

Alfred and Mary Paley Marshall on Supply and Demand 63

Summary 64

Key Terms 65

Problems and Topics for Discussion 65

Case for Discussion 67

Endnotes 68

3 Supply and Demand Elasticities 70

- 3.1 Elasticity 72
 - 3.1a Price Elasticity of Demand 72
 - 3.1b Calculating the Price Elasticity of Demand 74
 - 3.1c Varying- and Constant-Elasticity Demand Curves 76
 - 3.1d Determinants of Elasticity of Demand 77
 - 3.1e Income Elasticity of Demand 79
 - 3.1f Cross-Price Elasticity of Demand 80
 - 3.1g Price Elasticity of Supply 80
- 3.2 Applications of Elasticity 81
 - 3.2a Gas Tax or Mileage Standards? 81
 - 3.2b Elasticity and Prohibition 83
- Summary 86
- Key Terms 86
- Problems and Topics for Discussion 87
- Case for Discussion 88
- Endnotes 89

Part 2 Consumers, Firms, and Government 91

4 A Closer Look at Choice in Markets and Government 92

- 4.1 A Simple Model of Choice 94
 - 4.1a Objectives, Constraints, and Choices 94
 - 4.1b Economic Theory and Rationality 95
 - 4.1c Rationality and Behavioral Economics 96
- Who Said It? Who Did It? 4–1
 - Daniel Kahneman: Thinking Fast and Thinking Slow 97
 - 4.1d Self-Regarding versus Other-Regarding Preferences 99
- Applying Economic Ideas 4–1
 - Ultimatums, Dictators, and Other Games 100
- 4.2 Markets and Economic Choice 101

4.2a Market Performance 101

4.2b Market Failure 102

4.3 The Economic Role of Government 105

4.3a The Market Failure Theory of Government 105

4.3b The Public Choice Theory of Government 105

4.3c Neoclassical and Other Approaches to Microeconomics 107

Summary 109

Key Terms 109

Problems and Topics for Discussion 110

Case for Discussion 111

Endnotes 112

5 Understanding the Choices Consumers Make 114

5.1 Utility and the Rational Consumer 116

5.1a Utility 116

5.1b Constraints on Opportunities 116

Economics in the News 5–1

What Makes Us Choose? 117

5.1c Diminishing Marginal Utility and Consumer Choice 118

5.1d From Consumer Equilibrium to the Law of Demand 119

5.2 Substitution and Income Effects 120

5.2a Income and Substitution Effects and the Demand Curve 120

Applying Economic Ideas 5–1

Testing Consumer Demand Theory with White Rats 122

5.2b Applications of Income and Substitution Effects 123

5.3 Consumer Surplus 125

5.3a The Demand Curve as Willingness to Pay 125

5.3b Consumer Surplus, Producer Surplus, and Gains from Exchange 126

5.3c Application: Who Really Pays Taxes? Incidence and Excess Burden 128

Summary 131

Key Terms	132
Problems and Topics for Discussion	132
Case for Discussion	133
Endnotes	134
Appendix to Chapter 5	135

6 Production and Cost 144

6.1 Costs and Profits	146
6.1a The Profit Motive	146
6.1b The Nature of Costs	147
6.1c Profit, Rents, and Entrepreneurship	150
6.1d Fixed Costs, Variable Costs, and Sunk Costs	151
6.2 Production and Costs in the Short Run	154
6.2a Production with One Variable Input in the Short Run	154
6.2b From Marginal Physical Product to Marginal Costs	156
6.2c More Than One Variable Input	157
6.2d A Set of Short-Run Cost Curves	158
6.2e Some Geometric Relationships	160
6.3 Long-Run Costs and Economies of Scale	160
6.3a Planning for Expansion	161
6.3b Economies of Scale	162
Summary	165
Key Terms	166
Problems and Topics for Discussion	166
Case for Discussion	168
Endnotes	169
Appendix to Chapter 6	170

7 Supply under Perfect Competition 176

7.1 Perfect Competition and Supply in the Short Run	179
7.1a The Constraints	179
7.1b Short-Run Profit Maximization for the Firm	181

7.1c Minimizing Short-Run Losses	184
7.1d Shutting Down to Cut Short-Run Losses	185

Economics in the News 7-1

Weathering COVID	186
7.1e The Firm's Short-Run Supply Curve	187
7.1f The Industry's Short-Run Supply Curve	188
7.2 Long-Run Equilibrium under Perfect Competition	189
7.2a Long-Run Equilibrium for a Competitive Firm	190
7.2b Industry Adjustment to Falling Demand	191
7.2c Industry Adjustment to Rising Demand	193
7.2d The Elasticity of Long-Run Supply	195

7.3 Market Performance under Perfect Competition 197

7.3a What to Produce?	197
7.3b How to Produce	198
7.3c Other Aspects of Market Performance	199

Summary 200

Key Terms 200

Problems and Topics for Discussion 201

Case for Discussion 202

Endnotes 204

8 The Theory of Monopoly 206

8.1 Varieties of Monopoly 208

Economics in the News 8-1

China's Fragile Rare Earth Monopoly	209
-------------------------------------	-----

8.2 Simple Monopoly 210

8.2a Constraints Faced by Monopoly	211
8.2b Output, Price, and Marginal Revenue under Simple Monopoly	211
8.2c Finding the Point of Maximum Profit	213
8.2d Profit Maximization or Loss Minimization?	214

8.3 Profit Maximization in the Long Run 215

8.3a *Long-Run Equilibrium without Threat of Entry* 216

8.3b *Open Monopoly, Entrepreneurship, and Limit Pricing* 216

8.3c *Closed Monopoly and Rent Seeking* 217

8.4 Complex Pricing Strategies 219

8.4a *Price Discrimination* 219

8.4b *Two-Part Pricing* 221

8.5 Market Performance under Monopoly 222

8.5a *What to Produce: Consumer and Producer Surplus* 222

8.5b *How to Produce: Average Total Cost in Monopoly Equilibrium* 225

8.5c *For Whom to Produce: Does Monopoly Promote Inequality?* 226

8.5d *The Bottom Line* 227

Summary 228

Key Terms 228

Problems and Topics for Discussion 229

Case for Discussion 230

Endnotes 231

9 Rivalry, Oligopoly, and Monopolistic Competition 232**9.1 What Determines Market Structure? 234****Applying Economic Ideas 9–1**

Measures of Market Concentration 234

9.1a *Economies of Scale* 236

9.1b *Barriers to Entry* 236

9.1c *Sunk Costs and Contestability of Markets* 237

9.2 Interdependence and Collusion in Oligopoly 238

9.2a *Oligopolistic Interdependence* 238

9.2b *Cartels* 239

9.2c *Oligopoly as a Game* 241

9.2d *Coordination without Collusion* 243

9.2e *Market Performance under Oligopoly* 245

9.3 The Theory of Monopolistic Competition 246

9.3a *Profit Maximization under Monopolistic Competition* 246

9.3b *Monopolistic Competition, Free Competition, and Market Performance* 247

Summary 249

Key Terms 249

Problems and Topics for Discussion 250

Case for Discussion 251

Endnotes 252

10 Regulating Markets 254**10.1 Antitrust Laws and Policies 256**

10.1a *Antitrust Policy* 256

Applying Economic Ideas 10–1

The Antitrust Laws 257

Economics in the News 10–1

Microsoft versus the Trustbusters 259

10.1b *Antitrust Reformers* 260

10.1c *Entrepreneurship and Antitrust* 261

Who Said It? Who Did It? 10–1

Joseph Schumpeter on Competition and Entrepreneurship 262

10.1d *The Future of Antitrust Policy* 263

10.2 Regulation of Natural Monopoly 263

10.2a *The Policy Problem* 264

10.2b *The Regulatory Solution* 265

10.3 Regulation of Competitive Industries 266

10.3a *Regulation That Reduces Competition* 267

Economics in the News 10–2

Is Big Tech Stifling Competition or Providing Convenience? 268

10.3b *Health and Safety Regulation* 269

10.3c *Benefits and Costs of Regulation* 271

10.3d Regulatory Reform	271
Summary	272
Key Terms	272
Problems and Topics for Discussion	273
Case for Discussion	274
Endnotes	275

Part 3 Resource Markets and Income Distribution 277

11 Pricing in Resource Markets	278
11.1 Demand for Inputs	280
11.1a Objectives and Constraints	280
11.1b Profit Maximization	284
11.1c Resource Demand Curves	284
11.2 The Labor Market	287
11.2a The Labor Supply Curve	287
11.2b The Equilibrium Wage in a Competitive Market	289
11.2c The Marginal Productivity Theory of Distribution	290
11.2d Monopsony	291
11.2e Why Wage Rates Differ	293
Applying Economic Ideas 11–1	
The Latest Trend in Job Perks: No Vacation Days	295
Applying Economic Ideas 11–2	
Costco versus Sam's Club in the Labor Market	298
11.3 Markets for Capital and Natural Resources	299
11.3a Capital and Interest	299
11.3b Markets for Natural Resources	302
Summary	305
Key Terms	306
Problems and Topics for Discussion	306
Case for Discussion	308
Endnotes	309
Appendix to Chapter 11	310

12 Insurance, Information, and Uncertainty 314

Who Said It? Who Did It? 12–1	
Friedrich von Hayek on Markets and Information	316
12.1 Insurance and Risk Pooling	318
12.1a Attitudes Toward Risk	318
Applying Economic Ideas 12–1	
Expected Value	318
12.1b The Principle of Risk Pooling	320
12.1c Application of Risk Pooling to Insurance	320
12.1d Asymmetrical Information, Opportunism, and Transaction Costs of Insurance	321
Economics in the News 12–1	
Adverse Selection and the Affordable Care Act	322
12.2 Speculation and Its Role in the Economy	324
12.2a Speculation and Risk	324
12.2b Futures Contracts and Options	325
Economics in the News 12–2	
Speculation versus Manipulation	326
12.2c The Social Usefulness of Speculation	327
12.3 The Economics of Auctions	328
12.3a Types of Auctions	329
12.3b The Revenue Equivalence Theorem	329
12.3c The Winner's Curse	330
Summary	332
Key Terms	333
Problems and Topics for Discussion	333
Case for Discussion	334
Endnotes	335

13 Labor Markets, Discrimination, and Public Policy 336

13.1 Labor Unions	338
13.1a Unions, Wages, and Jobs	338

Applying Economic Ideas 13–1

Labor Unions in the United States: A Brief History 339

13.1b *Unions as Political Entities* 341

13.1c *What Else Unions Do* 342

13.2 Disadvantaged Members of the Labor Force 344

13.2a *Economic Models of Discrimination* 345

Applying Economic Ideas 13–2

Discrimination and the Law in the Jim Crow South 347

13.2b *New Directions in the Economics of Discrimination* 348

13.2c *Federal Antidiscrimination Policies* 349

13.3 Competition in Labor Markets 350

13.3a *Noncompete Agreements* 350

13.3b *Occupational Licensing* 351

Economics in the News 13–1

Certification versus Licensing for Lactation Consultants 353

Summary 354

Key Terms 354

Problems and Topics for Discussion 355

Case for Discussion 356

Endnotes 357

14 Income Distribution and Poverty 358**14.1 Income Distribution:**

Measurement and Trends 360

14.1a *Measuring Income Distribution* 360

14.1b *US Income Distribution Trends and Their Causes* 362

14.2 Poverty 368**Applying Economic Ideas 14–1**

Poverty in the United States and Around the Globe 368

14.2a *Official Poverty Data in the United States* 369

14.2b *A New View of Poverty* 370

14.3 Tools for Fighting Poverty 372

14.3a *Fighting Poverty through the Labor Market* 372

14.3b *Fighting Poverty with Transfer Payments* 374

Summary 381

Key Terms 381

Problems and Topics for Discussion 382

Case for Discussion 383

Endnotes 384

Part 4 Further Topics in Microeconomic Policy 385**15 The Economics of Climate Change and Environmental Policy 386****15.1 Pollution as a Problem of Scarcity 388**

15.1a *The Costs of Pollution Abatement* 388

15.1b *Marginal External Cost* 390

15.1c *The Optimal Quantity of Pollution* 390

15.2 Controlling Externalities Through Voluntary Exchange 396

15.2a *Markets Without Transaction Costs* 396

Economics in the News 15–1

Using Property Rights to Protect Land 397

15.2b *Market Resolution of Externalities in Practice* 398

15.2c *Transaction Costs as Barriers to Voluntary Resolution of Externalities* 399

15.3 Controlling Externalities Through Regulation 400

15.3a *Command and Control* 401

15.3b *Carbon Pricing* 401

15.3c *Cap and Trade* 403

15.3d *The Green New Deal* 404

15.4 Environmental Policy and Public Choice 405

15.4a *Environmental Policy
in a Democracy* 405

15.4b *Vote Trading and Special
Interests* 406

Applying Economic Ideas 15–1

Cap and Trade for Acid Rain 409

Summary 411

Key Terms 411

Problems and Topics for Discussion 412

Case for Discussion 413

Endnotes 414

16 Global Trade and Trade Policy 416

16.1 The Theory of Comparative Advantage:
Review and Extensions 419

16.1a *Numerical Approach* 419

16.1b *Graphical Presentation* 421

16.1c *Does Comparative Advantage
Really Work?* 423

16.1d *Comparative Advantage and
“Competitiveness”* 425

16.2 Trade Policy and Protectionism 427

16.2a *Moves Toward Freer Trade
After World War II* 427

Applying Economic Ideas 16–1

The US-Mexico-Canada
Agreement (USMCA) 428

16.2b *Countertrends: Other Forms
of Protectionism* 429

Applying Economic Ideas 16–2

Buy America: When Popular Policies
Are Bad Economics 430

16.2c *Understanding
Protectionism* 430

Summary 435

Key Terms 435

Problems and Topics for
Discussion 436

Case for Discussion 437

Endnotes 438

Glossary 439

Index 449