

# BRIEF CONTENTS

Elasticity 108

Conclusion 114

Summary 114

Key Concepts 115

About the Authors xiii

Preface xiv

Walk Through Tour xx

Supplements xxii

Acknowledgements xxiv

## PART 1 Introduction 1

- 1 Ten Principles of Economics 2
- 2 Thinking Like an Economist 21
- 3 Interdependence and the Gains from Trade 52

## PART 2 Supply and Demand I: How Markets Work 67

- 4 The Market Forces of Supply and Demand 68
- 5 Elasticity and Its Application 94
- 6 Supply, Demand and Government Policies 117

## PART 3 Supply and Demand II: Markets and Welfare 137

- 7 Consumers, Producers and the Efficiency of Markets 138
- 8 Application: The Costs of Taxation 158
- 9 Application: International Trade 174

## PART 4 The Economics of the Public Sector 197

- 10 Externalities 198
- 11 Public Goods and Common Resources 221
- 12 The Design of the Tax System 237

## PART 5 Firm Behaviour and the Organization of Industry 263

- 13 The Costs of Production 264
- 14 Firms in Competitive Markets 287
- 15 Monopoly 308
- 16 Monopolistic Competition 338
- 17 Oligopoly 355

## PART 6 The Economics of Labour Markets 381

- 18 The Markets for the Factors of Production 382
- 19 Earnings and Discrimination 403
- 20 Income Inequality and Poverty 418

## PART 7 Topics for Further Study 437

- 21 The Theory of Consumer Choice 438

Key Concepts 171

Questions for Review 172

Problems and Applications 172

- 22 Frontiers of Microeconomics 466

## PART 8 The Data of Macroeconomics 485

- 23 Measuring a Nation's Income 486
- 24 Measuring the Cost of Living 506

## PART 9 The Real Economy in the Long Run 523

- 25 Production and Growth 524
- 26 Saving, Investment and the Financial System 550
- 27 The Basic Tools of Finance 572
- 28 Unemployment 592

## PART 10 Money and Prices in the Long Run 615

- 29 The Monetary System 616
- 30 Money Growth and Inflation 641

## PART 11 The Macroeconomics of Open Economies 665

- 31 Open-economy Macroeconomics: Basic Concepts 666
- 32 A Macroeconomic Theory of the Open Economy 686

## PART 12 Short-run Economic Fluctuations 705

- 33 Keynes and IS-LM Analysis 706
- 34 Aggregate Demand and Aggregate Supply 726
- 35 The Influence of Monetary and Fiscal Policy on Aggregate Demand 757
- 36 The Short-run Trade-off Between Inflation and Unemployment 782

## PART 13 Topics in International Finance and Macroeconomics 815

- 37 The Financial Crisis 816
- 38 Common Currency Areas and European Monetary Union 840

## PART 14 Final Thoughts 867

- 39 Five Debates over Macroeconomic Policy 868

Glossary 883

Index 891



# CONTENTS

About the Authors	xiii
Preface	xiv
Walk Through Tour	xx
Supplements	xxii
Acknowledgements	xxiv

## PART 1



## INTRODUCTION 1

### 1 Ten Principles of Economics 2

How People Make Decisions	3
How People Interact	8
How the Economy as a Whole Works	12
Conclusion	17
Summary	18
Key Concepts	18
Questions for Review	18
Problems and Applications	19

### 2 Thinking Like an Economist 21

The Economist as Scientist	22
The Economist as Policy Advisor	31
Why Economists Disagree	35
Let's Get Going	39
Summary	40
Key Concepts	40
Questions for Review	41
Problems and Applications	41
Appendix Graphing: A Brief Review	42

### 3 Interdependence and the Gains from Trade 52

A Parable for the Modern Economy	53
The Principle of Comparative Advantage	57
Applications of Comparative Advantage	61
Conclusion	64
Summary	64
Key Concepts	64
Questions for Review	65
Problems and Applications	65

## PART 2



### SUPPLY AND DEMAND I: HOW MARKETS WORK 67

#### 4 The Market Forces of Supply and Demand 68

Markets and Competition	68
Demand	70
Supply	76
Supply and Demand Together	80
Conclusion: How Prices Allocate Resources	89
Summary	90
Key Concepts	91
Questions for Review	91
Problems and Applications	92

#### 5 Elasticity and Its Application 94

The Elasticity of Demand	95
The Elasticity of Supply	104



Three Applications of Supply, Demand and Elasticity	108
Conclusion	114
Summary	114
Key Concepts	115
Questions for Review	115
Problems and Applications	115

## 6 Supply, Demand and Government Policies 117

Controls on Prices	118
Taxes	127
Conclusion	133
Summary	133
Key Concepts	134
Questions for Review	134
Problems and Applications	134



## SUPPLY AND DEMAND II: MARKETS AND WELFARE 137

### 7 Consumers, Producers and the Efficiency of Markets 138

Consumer Surplus	139
Producer Surplus	143
Market Efficiency	147
Conclusion: Market Efficiency and Market Failure	155
Summary	155
Key Concepts	156
Questions for Review	156
Problems and Applications	156

### 8 Application: The Costs of Taxation 158

The Deadweight Loss of Taxation	159
The Determinants of the Deadweight Loss	164
Deadweight Loss and Tax Revenue as Taxes Vary	167
Conclusion	170

Summary	171
Key Concepts	171
Questions for Review	172
Problems and Applications	172

## 9 Application: International Trade 174

The Determinants of Trade	175
The Winners and Losers from Trade	177
The Arguments for Restricting Trade	189
Conclusion	193
Summary	194
Key Concepts	194
Questions for Review	194
Problems and Applications	195



## THE ECONOMICS OF THE PUBLIC SECTOR 197

### 10 Externalities 198

Externalities and Market Inefficiency	200
Private Solutions to Externalities	205
Public Policies Towards Externalities	210
Public/Private Policies Towards Externalities	215
Conclusion	217
Summary	218
Key Concepts	218
Questions for Review	218
Problems and Applications	219

### 11 Public Goods and Common Resources 221

The Different Kinds of Goods	222
Public Goods	223
Common Resources	229
Conclusion: The Importance of Property Rights	234
Summary	235
Key Concepts	235
Questions for Review	235
Problems and Applications	235



**12 The Design of the Tax System** 237

- A Financial Overview of the UK Government 238
- Tax Systems in Other Countries 247
- Taxes and Efficiency 250
- Taxes and Equity 254
- Conclusion: The Trade-off Between Equity and Efficiency 260
- Summary 260
- Key Concepts 261
- Questions for Review 261
- Problems and Applications 261

**PART 5****FIRM BEHAVIOUR AND THE ORGANIZATION OF INDUSTRY** 263**13 The Costs of Production** 264

- What Are Costs? 265
- Production and Costs 267
- The Various Measures of Cost 271
- Costs in the Short Run and in the Long Run 278
- Conclusion 282
- Summary 283
- Key Concepts 284
- Questions for Review 284
- Problems and Applications 284

**14 Firms in Competitive Markets** 287

- What is a Competitive Market? 288
- Profit Maximization and the Competitive Firm's Supply Curve 290
- The Supply Curve in a Competitive Market 299
- Conclusion: Behind the Supply Curve 305
- Summary 305
- Key Concepts 306
- Questions for Review 306
- Problems and Applications 306

**15 Monopoly** 308

- Why Monopolies Arise 310

**How Monopolies Make Production and Pricing**

- Decisions 313
- The Welfare Cost of Monopoly 320
- Price Discrimination 323
- Public Policy Towards Monopolies 328
- Conclusion: The Prevalence of Monopoly 333
- Summary 334
- Key Concepts 334
- Questions for Review 334
- Problems and Applications 335

**16 Monopolistic Competition** 338

- Competition with Differentiated Products 339
- Advertising 344
- Conclusion 350
- Summary 352
- Key Concepts 353
- Questions for Review 353
- Problems and Applications 353

**17 Oligopoly** 355

- Between Monopoly and Perfect Competition 356
- Markets with Only a Few Sellers 357
- Game Theory and the Economics of Cooperation 364
- Public Policy Toward Oligopolies 373
- Conclusion 376
- Summary 377
- Key Concepts 377
- Questions for Review 377
- Problems and Applications 378

**PART 6****THE ECONOMICS OF LABOUR MARKETS** 381**18 The Markets for the Factors of Production** 382

- The Demand for Labour 383
- The Supply of Labour 389
- Equilibrium in the Labour Market 390



The Other Factors of Production: Land and Capital	395
Conclusion	400
Summary	400
Key Concepts	400
Questions for Review	401
Problems and Applications	401

## 19 Earnings and Discrimination 403

Some Determinants of Equilibrium Wages	404
The Economics of Discrimination	410
Conclusion	415
Summary	415
Key Concepts	416
Questions for Review	416
Problems and Applications	416

## 20 Income Inequality and Poverty 418

The Measurement of Inequality	419
The Political Philosophy of Redistributing Income	424
Conclusion	434
Summary	434
Key Concepts	434
Questions for Review	435
Problems and Applications	435



## TOPICS FOR FURTHER STUDY 437

### 21 The Theory of Consumer Choice 438

The Budget Constraint: What the Consumer Can Afford	439
Preferences: What the Consumer Wants	440
Optimization: What the Consumer Chooses	445
Three Applications	453
Conclusion: Do People Really Think This Way?	460
Summary	463

## SHORT-RUN ECONOMIC FLUCTUATIONS 705

### 33 Keynes and IS-LM Analysis 706

The Keynesian Cross	707
---------------------	-----

Key Concepts	463
Questions for Review	463
Problems and Applications	464

## 22 Frontiers of Microeconomics 466

Asymmetric Information	467
Political Economy	473
Behavioural Economics	477
Conclusion	482
Summary	483
Key Concepts	483
Questions for Review	483
Problems and Applications	483



## THE DATA OF MACROECONOMICS 485

### 23 Measuring a Nation's Income 486

The Economy's Income and Expenditure	487
The Measurement of Gross Domestic Product	489
The Components of GDP	492
Real Versus Nominal GDP	494
GDP and Economic Well-being	498
Conclusion	502
Summary	503
Key Concepts	503
Questions for Review	503
Problems and Applications	504

### 24 Measuring the Cost of Living 506

The Consumer Prices Index	507
Correcting Economic Variables for the Effects of Inflation	516
Conclusion	519
Summary	521
Key Concepts	521
Questions for Review	521
Problems and Applications	522

Conclusion	810
Summary	811
Key Concepts	811
Questions for Review	812
Problems and Applications	812



## PART 9



### THE REAL ECONOMY IN THE LONG RUN 523

#### 25 Production and Growth 524

- Economic Growth Around the World 526
- Productivity: Its Role and Determinants 530
- Economic Growth and Public Policy 534
- Conclusion: The Importance of Long-run Growth 547
- Summary 547
- Key Concepts 548
- Questions for Review 548
- Problems and Applications 548

#### 26 Saving, Investment and the Financial System 550

- Financial Institutions in the Economy 551
- Saving and Investment in the National Income Accounts 558
- The Market for Loanable Funds 561
- Conclusion 568
- Summary 569
- Key Concepts 569
- Questions for Review 570
- Problems and Applications 570

#### 27 The Basic Tools of Finance 572

- Present Value: Measuring the Time Value of Money 573
- Managing Risk 575
- Asset Valuation 582
- Conclusion 589
- Summary 589
- Key Concepts 590
- Questions for Review 590
- Problems and Applications 590

#### 28 Unemployment 592

- Identifying Unemployment 593
- Job Search 601
- Minimum Wage Laws 605
- Unions and Collective Bargaining 607
- The Theory of Efficiency Wages 609
- Conclusion 611
- Summary 611
- Key Concepts 612
- Questions for Review 612
- Problems and Applications 612

## PART 10



### MONEY AND PRICES IN THE LONG RUN 615

#### 29 The Monetary System 616

- The Meaning of Money 617
- The Role of Central Banks 622
- The European Central Bank and the Eurosystem 624
- The Bank of England 625
- The Federal Reserve System 626
- Banks and the Money Supply 627
- Conclusion 637
- Summary 638
- Key Concepts 639
- Questions for Review 639
- Problems and Applications 639

#### 30 Money Growth and Inflation 641

- The Classical Theory of Inflation 643
- The Costs of Inflation 653
- Conclusion 661
- Summary 662
- Key Concepts 662
- Questions for Review 662
- Problems and Applications 663

- The Demand for Labour 383
- The Supply of Labour 389
- Equilibrium in the Labour Market 390



## PART 11



### THE MACROECONOMICS OF OPEN ECONOMIES 665

#### 31 Open-economy Macroeconomics: Basic Concepts 666

- The International Flows of Goods and Capital 667
- The Prices for International Transactions: Real and Nominal Exchange Rates 673
- A First Theory of Exchange Rate Determination: Purchasing Power Parity 676
- Conclusion 683
- Summary 683
- Key Concepts 683
- Questions for Review 684
- Problems and Applications 684

#### 32 A Macroeconomic Theory of the Open Economy 686

- Supply and Demand for Loanable Funds and for Foreign Currency Exchange 687
- Equilibrium in the Open Economy 691
- How Policies and Events Affect an Open Economy 694
- Conclusion 702
- Summary 702
- Key Concepts 703
- Questions for Review 703
- Problems and Applications 703

## PART 12



### SHORT-RUN ECONOMIC FLUCTUATIONS 705

#### 33 Keynes and IS-LM Analysis 706

- The Keynesian Cross 707

- The Multiplier Effect 709
- The IS and LM Curves 714
- General Equilibrium Using the IS-LM Model 717
- From IS-LM to Aggregate Demand 720
- Conclusion 723
- Summary 723
- Key Concepts 724
- Questions for Review 724
- Problems and Applications 724

#### 34 Aggregate Demand and Aggregate Supply 726

- Three Key Facts about Economic Fluctuations 727
- Explaining Short-run Economic Fluctuations 732
- The Aggregate Demand Curve 734
- The Aggregate Supply Curve 739
- Two Causes of Economic Fluctuations 747
- Conclusion 753
- Summary 754
- Key Concepts 754
- Questions for Review 755
- Problems and Applications 755

#### 35 The Influence of Monetary and Fiscal Policy on Aggregate Demand 757

- How Monetary Policy Influences Aggregate Demand 758
- How Fiscal Policy Influences Aggregate Demand 768
- Using Policy to Stabilize the Economy 772
- Conclusion 778
- Summary 779
- Key Concepts 779
- Questions for Review 780
- Problems and Applications 780

#### 36 The Short-run Trade-off Between Inflation and Unemployment 782

- The Phillips Curve 783
- Shifts in the Phillips Curve: The Role of Expectations 785
- The Long-run Vertical Phillips Curve as an Argument for Central Bank Independence 793
- Shifts in the Phillips Curve: The Role of Supply Shocks 797
- The Cost of Reducing Inflation 799
- Inflation Targeting 805
- Conclusion 810
- Summary 811
- Key Concepts 811
- Questions for Review 812
- Problems and Applications 812



## PART 13



## TOPICS IN INTERNATIONAL FINANCE AND MACROECONOMICS 815

### 37 THE FINANCIAL CRISIS 816

- Bubbles and Speculation 817
- Asymmetric Information, the Bonus Culture and Risk 820
- The Bubble Bursts 822
- The Path to Global Recession 824
- Summary: The Causes of the Financial Crisis 825
- The Conduct of Monetary Policy 826
- Lesson Learned? The Role of the Regulators 832
- Conclusion 837
- Summary 837
- Key Concepts 838
- Questions for Review 838
- Problems and Applications 838

### 38 Common Currency Areas and European Monetary Union 840

- The Euro 841
- The Benefits and Costs of a Common Currency 844
- The Theory of Optimum Currency Areas 849
- Is Europe an Optimum Currency Area? 851

- Fiscal Policy and Common Currency Areas 857
- Conclusion 862
- Summary 863
- Key Concepts 864
- Questions for Review 864
- Problems and Applications 864

## PART 14



## FINAL THOUGHTS 867

### 39 Five Debates over Macroeconomic Policy 868

- If Only We Knew What We Know! 868
- Are Structural Deficits Real or Not? 870
- Should the Government Balance Its Budget? 872
- Is Macroprudential Policy the 'Missing Ingredient' from the Current Policy Framework? 874
- How Did Economists Get it So Wrong? 876
- Conclusion 879
- Summary 880
- Questions for Review 880
- Problems and Applications 881

- Glossary 883
- Index 891