

About the authors ix
 Preface x
 Supplements xi
 Acknowledgements xiii

PART 1 Introduction to economics 1

- 1 Ten principles of economics 1
- 2 Thinking like an economist 17

PART 2 Supply and demand: How markets work 41

- 3 The market forces of supply and demand 41
- 4 Elasticity and its applications 72
- 5 Background to demand: The theory of consumer choice 102
- 6 Background to supply: Firms in competitive markets 134

PART 3 Markets, efficiency and welfare 169

- 7 Consumers, producers and the efficiency of markets 169
- 8 Supply, demand and government policies 187

PART 4 The economics of the public sector 203

- 9 The tax system and the costs of taxation 203

PART 5 Inefficient market allocations 221

- 10 Public goods, common resources and merit goods 221
- 11 Externalities and market failure 239
- 12 Information and behavioural economics 264

PART 6 Firm behaviour and market structures 279

- 13 Firms' production decisions 279
- 14 Market structures I: Monopoly 290
- 15 Market structures II: Monopolistic competition 314
- 16 Market structures III: Oligopoly 329

PART 7 Factor markets 355

- 17 The economics of labour markets 355

PART 8 Inequality 385

- 18 Income inequality and poverty 385

PART 9 Trade 405

- 19 Interdependence and the gains from trade 405

PART 10 The data of macroeconomics 437

- 20 Measuring a nation's income 437
- 21 Measuring the cost of living 456

PART 11 The real economy in the long run 473

- 22 Production and growth 473
- 23 Unemployment 497

PART 12 Interest rates, money and prices in the long run 519

- 24 Saving, investment and the financial system 519
- 25 The basic tools of finance 539
- 26 The monetary system 558
- 27 Money growth and inflation 583

PART 13 The macroeconomics of open economies 605

- 28 Open-economy macroeconomics: Basic concepts 605
- 29 A macroeconomic theory of the open economy 622

PART 14 Short-run economic fluctuations 637

- 30 Business cycles 637
- 31 Keynesian economics and IS-LM analysis 655
- 32 Aggregate demand and aggregate supply 679
- 33 The influence of monetary and fiscal policy on aggregate demand 702
- 34 The short-run trade-off between inflation and unemployment 721
- 35 Supply-side policies 745

PART 15 International macroeconomics 759

- 36 Common currency areas and European monetary union 759
- 37 The financial crisis and sovereign debt 782

About the authors ix
 Preface x
 Supplements xi
 Acknowledgements xiii

PART 1 INTRODUCTION TO ECONOMICS 1

- 1 Ten principles of economics** 1
 What is economics? 1
 How people make decisions 2
 How people interact 6
 How the economy as a whole works 8
 Conclusion 12
- 2 Thinking like an economist** 17
 Introduction 17
 The economist as scientist 17
 The economist as policy advisor 23
 Why economists disagree 24
 Let's get going 28
 Appendix
 Graphing and the tools of economics: A brief review 30

PART 2 SUPPLY AND DEMAND: HOW MARKETS WORK 41

- 3 The market forces of supply and demand** 41
 Markets and competition 41
 Demand 43
 Supply 50
 Supply and demand together 56
 Conclusion: How prices allocate resources 67

- 4 Elasticity and its applications** 72
 The price elasticity of demand 72
 Other demand elasticities 81
 Price elasticity of supply 83
 Applications of supply and demand elasticity 95

- 5 Background to demand: The theory of consumer choice** 102
 The standard economic model 102
 The budget constraint: What the consumer can afford 104
 Preferences: What the consumer wants 108
 Optimization: What the consumer chooses 113
 Summary: Do people really think this way? 126
 Behavioural approaches to consumer behaviour 126

- 6 Background to supply: Firms in competitive markets** 134
 The costs of production 134
 Production and costs 135
 The various measures of cost 138
 Costs in the short run and in the long run 145
 Summary 146
 Returns to scale 147
 What is a competitive market? 150
 Profit maximization and the competitive firm's supply curve 153
 The supply curve in a competitive market 160
 Conclusion: Behind the supply curve 164

PART 3 MARKETS, EFFICIENCY AND WELFARE 169

- 7 Consumers, producers and the efficiency of markets** 169
 Consumer surplus 170
 Producer surplus 176
 Market efficiency 179
 Conclusion: Market efficiency and market failure 183

- 8 Supply, demand and government policies** 187
 Controls on prices 187
 Taxes 192
 Subsidies 198
 Conclusion 199

PART 4 THE ECONOMICS OF THE PUBLIC SECTOR 203

- 9 The tax system and the costs of taxation** 203
 Taxes and efficiency 203
 The deadweight loss of taxation 204
 Administrative burden 210
 The design of the tax system 211
 Taxes and equity 214
 Conclusion 216

PART 5 INEFFICIENT MARKET ALLOCATIONS 221

- 10 Public goods, common resources and merit goods** 221
 The different kinds of goods 222
 Public goods 223
 Common resources 230
 Merit goods 232
 Conclusion 234

- 11 Externalities and market failure** 239
 Externalities 239
 Externalities and market inefficiency 240
 Private solutions to externalities 244
 Public policies towards externalities 248
 Public/private policies towards externalities 251
 Government failure 254
 Conclusion 260

- 12 Information and behavioural economics** 264
 Principal and agent 264
 Asymmetric information 265
 Deviations from the standard economic model 271
 Conclusion 274

PART 6 FIRM BEHAVIOUR AND MARKET STRUCTURES 279

- 13 Firms' production decisions** 279
 Isoquants and isocosts 279
 The least-cost input combination 284
 Conclusion 286
- 14 Market structures I: Monopoly** 290
 Imperfect competition 290
 Why monopolies arise 291
 How monopolies make production and pricing decisions 294
 The welfare cost of monopoly 300
 Price discrimination 303
 Public policy towards monopolies 307
 Conclusion: The prevalence of monopoly 309
- 15 Market structures II: Monopolistic competition** 314
 Competition with differentiated products 315
 Advertising and branding 319
 Contestable markets 323
 Conclusion 324

- 16 Market structures III: Oligopoly** 329
 Characteristics of oligopoly 329
 Game theory and the economics of cooperation 335
 Models of oligopoly 344
 Public policy toward oligopolies 347
 Conclusion 350

PART 7 FACTOR MARKETS 355

17 The economics of labour markets 355

- The demand for labour 356
- The supply of labour 360
- Equilibrium in the labour market 364
- Wage differentials 367
- The economics of discrimination 373
- The other factors of production: Land and capital 376
- Economic rent 379
- Conclusion 380

PART 8 INEQUALITY 385

18 Income inequality and poverty 385

- The measurement of inequality 386
- The political philosophy of redistributing income 395
- Conclusion 401

PART 9 TRADE 405

19 Interdependence and the gains from trade 405

- The production possibilities frontier 405
- International trade 410
- The principle of comparative advantage 414
- The determinants of trade 418
- The winners and losers from trade 420
- Restrictions on trade 423
- Conclusion 431

PART 10 THE DATA OF MACROECONOMICS 437

20 Measuring a nation's income 437

- The economy's income and expenditure 438
- The measurement of gross domestic product 439
- The components of GDP 441
- Real versus nominal GDP 445
- GDP and economic well-being 449
- Conclusion 452

21 Measuring the cost of living 456

- The consumer prices index 456
- Correcting economic variables for the effects of inflation 465
- Conclusion 468

PART 11 THE REAL ECONOMY IN THE LONG RUN 473

22 Production and growth 473

- Economic growth around the world 474
- Growth theory 476
- Productivity: Its role and determinants 477
- Economic growth and public policy 482
- Conclusion: The importance of long-run growth 493

23 Unemployment 497

- Identifying unemployment 497
- Job search 504
- Minimum wage laws 506
- Unions and collective bargaining 508
- The theory of efficiency wages 510
- The cost of unemployment 511
- Conclusion 514

PART 12 INTEREST RATES, MONEY AND PRICES IN THE LONG RUN 519

24 Saving, investment and the financial system 519

- Financial institutions in the economy 520
- Saving and investment in the national income accounts 527
- The market for loanable funds 530
- Conclusion 535

25 The basic tools of finance 539

- Present value: Measuring the time value of money 539
- Managing risk 541
- Asset valuation 548
- Conclusion 554

26 The monetary system 558

- The meaning of money 559
- The role of central banks 565
- The European Central Bank and the Eurosystem 566
- The Bank of England 567
- Banks and the money supply 568
- Conclusion 579

27 Money growth and inflation 583

- The classical theory of inflation 584
- The costs of inflation 594
- Conclusion 599

PART 13 THE MACROECONOMICS OF OPEN ECONOMIES 605

28 Open-economy macroeconomics: Basic concepts 605

- The international flows of goods and capital 606
- The prices for international transactions: Real and nominal exchange rates 609
- A first theory of exchange rate determination: Purchasing power parity 612
- Conclusion 618

29 A macroeconomic theory of the open economy 622

- Supply and demand for loanable funds and for foreign currency exchange 622
- Equilibrium in the open economy 625
- How policies and events affect an open economy 628
- Conclusion 634

PART 14 SHORT-RUN ECONOMIC FLUCTUATIONS 637

30 Business cycles 637

- Trend growth rates 638
- Causes of changes in the business cycle 645
- Business cycle models 646
- Conclusion 650

31 Keynesian economics and IS-LM analysis 655

- The Keynesian cross 655
- The multiplier effect 659
- The IS and LM curves 665
- General equilibrium using the IS-LM model 667
- From IS-LM to aggregate demand 669
- Conclusion 675

32 Aggregate demand and aggregate supply 679

- Three key facts about economic fluctuations 679
- Explaining short-run economic fluctuations 680
- The aggregate demand curve 682
- The aggregate supply curve 686
- Two causes of economic fluctuations 691
- New Keynesian economics 697
- Conclusion 698

33 The influence of monetary and fiscal policy on aggregate demand 702

- How monetary policy influences aggregate demand 702
- How fiscal policy influences aggregate demand 709
- Using policy to stabilize the economy 713
- Conclusion 716

34 The short-run trade-off between inflation and unemployment 721

- The Phillips curve 721
- Shifts in the Phillips curve: The role of expectations 724
- The long-run vertical Phillips curve as an argument for Central Bank independence 730
- Shifts in the Phillips curve: the role of supply shocks 732
- The cost of reducing inflation 734
- Inflation targeting 739
- Conclusion 740

35 Supply-side policies 745

- Shifts in the aggregate supply curve 745
- Types of supply-side policies 749
- Conclusion 756

**PART 15
INTERNATIONAL
MACROECONOMICS** 759

36 Common currency areas and European monetary union 759

- The euro 760
- The single European market and the euro 760
- The benefits and costs of a common currency 762
- The theory of optimum currency areas 765
- Is Europe an optimum currency area? 768
- Fiscal policy and common currency areas 772
- Conclusion 777

37 The financial crisis and sovereign debt 782

- Bubbles and speculation 782
- The sovereign debt crisis 793
- Austerity policies – too far too quickly? 797

- Glossary 805
- Index 814
- Credits 820