CONTENTS

CHAPTER 1

The World of International Economics, 1

INTRODUCTION, 1
THE NATURE OF MERCHANDISE TRADE, 3
The Geographical Composition of Trade, 3
The Commodity Composition of Trade, 6
U.S. International Trade, 7
WORLD TRADE IN SERVICES, 9
THE CHANGING DEGREE OF ECONOMIC INTERDEPENDENCE, 11
SUMMARY, 12
Appendix, A General Reference List in International Economics, 12

PART 1

THE CLASSICAL THEORY OF TRADE 15

CHAPTER 2

Early Trade Theories: Mercantilism and the Transition to the **Classical World of David Ricardo**, 17 INTRODUCTION, 18 The Oracle in the 21st Century, 18 MERCANTILISM, 18 The Mercantilist Economic System, 18 The Role of Government, 19 Mercantilism and Domestic Economic Policy, 20 IN THE REAL WORLD: MERCANTILISM IS STILL ALIVE 21 THE CHALLENGE TO MERCANTILISM BY EARLY CLASSICAL WRITERS, 22 David Hume-The Price-Specie-Flow Mechanism, 22 CONCEPT BOX 1: CAPSULE SUMMARY OF THE PRICE-Specie-Flow Mechanism, 22 CONCEPT BOX 2: CONCEPT REVIEW—PRICE ELASTICITY AND TOTAL EXPENDITURES, 23 Adam Smith and the Invisible Hand, 24 TITANS OF INTERNATIONAL ECONOMICS: ADAM SMITH (1723-1790), 25 SUMMARY, 26

CHAPTER 3

The Classical World of David Ricardo and

Comparative Advantage, 28

INTRODUCTION, 29
Some Common Myths, 29
ASSUMPTIONS OF THE BASIC RICARDIAN MODEL, 29 *TITANS OF INTERNATIONAL ECONOMICS: David Ricardo* (1772–1823), 30
RICARDIAN COMPARATIVE ADVANTAGE, 30
IN THE REAL WORLD: EXPORT CONCENTRATION OF SELECTED COUNTRIES, 33
COMPARATIVE ADVANTAGE AND THE TOTAL GAINS FROM TRADE, 34
Resource Constraints, 34
Complete Specialization, 35

REPRESENTING THE RICARDIAN MODEL WITH PRODUCTION-POSSIBILITIES FRONTIERS, 36 Production Possibilities—An Example, 36 Maximum Gains from Trade, 38 COMPARATIVE ADVANTAGE—Some CONCLUDING OBSERVATIONS, 39 SUMMARY, 40

CHAPTER 4

Extensions and Tests of the Classical Model

of Trade, 42

INTRODUCTION, 43 Trade Complexities in the Real World, 43 THE CLASSICAL MODEL IN MONEY TERMS, 43 WAGE RATE LIMITS AND EXCHANGE RATE LIMITS, 44 CONCEPT BOX 1: WAGE RATE LIMITS AND EXCHANGE RATE LIMITS IN THE MONETIZED RICARDIAN FRAMEWORK, 46 **MULTIPLE COMMODITIES**, 47 The Effect of Wage Rate Changes, 48 The Effect of Exchange Rate Changes, 49 **TRANSPORTATION COSTS, 50** IN THE REAL WORLD: THE SIZE OF TRANSPORTATION COSTS, 51 **MULTIPLE COUNTRIES, 52 EVALUATING THE CLASSICAL MODEL**, 53 IN THE REAL WORLD: LABOR PRODUCTIVITY AND IMPORT PENETRATION IN THE U.S. STEEL INDUSTRY, 56 IN THE REAL WORLD: EXPORTING AND PRODUCTIVITY, 58 SUMMARY, 58 Appendix, The Dornbusch, Fischer, and Samuelson Model, 60

PART 2

NEOCLASSICAL TRADE THEORY 65

CHAPTER 5

Introduction to Neoclassical Trade Theory: Tools to Be Employed, 67 INTRODUCTION, 68

THE THEORY OF CONSUMER BEHAVIOR, 68
CONSUMER Indifference Curves, 68
TITANS OF INTERNATIONAL ECONOMICS: FRANCIS YSIDRO EDGEWORTH (1845–1926), 69
The Budget Constraint, 73
CONSUMER Equilibrium, 74
PRODUCTION THEORY, 75
Isoquants, 75
IN THE REAL WORLD: CONSUMER EXPENDITURE PATTERNS IN THE UNITED STATES, 76
Isocost Lines, 78
Producer Equilibrium, 80 THE EDGEWORTH BOX DIAGRAM AND THE PRODUCTION-POSSIBILITIES FRONTIER, 80 The Edgeworth Box Diagram, 80 The Production-Possibilities Frontier, 83 SUMMARY, 87

CHAPTER 6

Gains from Trade in Neoclassical Theory, 89 INTRODUCTION, 90 The Effects of Restrictions on U.S. Trade, 90 AUTARKY EQUILIBRIUM, 90 INTRODUCTION OF INTERNATIONAL TRADE, 92 The Consumption and Production Gains from Trade, 94 Trade in the Partner Country, 96 MINIMUM CONDITIONS FOR TRADE, 97 Trade between Countries with Identical PPFs, 97 Trade between Countries with Identical Demand Conditions, 98 Conclusions, 100 Some Important Assumptions in the Analysis, 100 Costless Factor Mobility, 100 Full Employment of Factors of Production, 100 The Indifference Curve Map Can Show Welfare Changes, 101 IN THE REAL WORLD: CHANGES IN INCOME DISTRIBUTION WITH INCREASED TRADE, 102 SUMMARY, 103 Appendix, "Actual" versus "Potential" Gains from Trade, 104

CHAPTER 7

Offer Curves and the Terms of Trade, 105

INTRODUCTION, 106 Terms-of-Trade Shocks, 106 A COUNTRY'S OFFER CURVE, 106 CONCEPT BOX 1: THE TABULAR APPROACH TO DERIVING AN OFFER CURVE, 109 TRADING EQUILIBRIUM, 110 SHIFTS OF OFFER CURVES, 112 CONCEPT BOX 2: MEASUREMENT OF THE TERMS OF TRADE, 115 ELASTICITY AND THE OFFER CURVE, 116 IN THE REAL WORLD: TERMS OF TRADE FOR MAJOR GROUPS OF COUNTRIES, 1973-2010, 117 OTHER CONCEPTS OF THE TERMS OF TRADE, 121 Income Terms of Trade, 121 Single Factoral Terms of Trade, 121 IN THE REAL WORLD: INCOME TERMS OF TRADE OF MAJOR GROUPS OF COUNTRIES, 1973-2010, 122 Double Factoral Terms of Trade, 123 SUMMARY, 123 Appendix A, Derivation of Import-Demand Elasticity on an Offer Curve, 124 Appendix B, Elasticity and Instability of Offer Curve Equilibria, 125

CHAPTER 8

The Basis for Trade: Factor Endowments and the Heckscher-Ohlin Model, 127 INTRODUCTION, 128

Do Labor Standards Affect Comparative Advantage? 128

SUPPLY, DEMAND, AND AUTARKY PRICES, 129 FACTOR ENDOWMENTS AND THE HECKSCHER-**Ohlin Theorem**, 129 Factor Abundance and Heckscher-Ohlin, 130 Commodity Factor Intensity and Heckscher-Ohlin, 131 IN THE REAL WORLD: RELATIVE FACTOR ENDOWMENTS IN Selected Countries, 132 The Heckscher-Ohlin Theorem, 133 IN THE REAL WORLD: RELATIVE FACTOR INTENSITIES IN SELECTED INDUSTRIES, 2006, 134 TITANS OF INTERNATIONAL ECONOMICS: PAUL ANTHONY SAMUELSON (1915-2009), 137 The Factor Price Equalization Theorem, 137 The Stolper-Samuelson Theorem and Income Distribution Effects of Trade in the Heckscher-Ohlin Model, 140 Conclusions, 142 THEORETICAL QUALIFICATIONS TO HECKSCHER-Ohlin, 142 Demand Reversal, 142 Factor-Intensity Reversal, 143 Transportation Costs, 144 Imperfect Competition, 146 Immobile or Commodity-Specific Factors, 148 IN THE REAL WORLD: THE EFFECTS OF INTERNATIONAL CARTELS, 149 Other Considerations, 152 CONCEPT BOX 1: THE SPECIFIC-FACTORS MODEL AND THE REAL WAGE OF WORKERS, 152 SUMMARY, 154

CHAPTER 9

Empirical Tests of the Factor Endowments Approach, 155 INTRODUCTION, 156 Theories, Assumptions, and the Role of Empirical Work, 156 THE LEONTIEF PARADOX, 156 SUGGESTED EXPLANATIONS FOR THE LEONTIEF PARADOX, 157 Demand Reversal, 157 IN THE REAL WORLD: CAPITAL/LABOR RATIOS IN LEADING EXPORT AND IMPORT INDUSTRIES—LEONTIEF TEST. 158 Factor-Intensity Reversal, 160 U.S. Tariff Structure, 161 Different Skill Levels of Labor, 161 The Role of Natural Resources, 162 OTHER TESTS OF THE HECKSCHER-OHLIN THEOREM, 162 Factor Content Approach with Many Factors, 163 Technology, Productivity, and "Home Bias", 166 IN THE REAL WORLD: HECKSCHER-OHLIN AND COMPARATIVE Advantage, 168 HECKSCHER-OHLIN AND INCOME INEQUALITY, 169 IN THE REAL WORLD: TRADE AND INCOME INEQUALITY IN A LESS DEVELOPED COUNTRY: THE CASE OF MOZAMBIOUE, 172 IN THE REAL WORLD: OUTSOURCING AND WAGE INEQUALITY IN THE UNITED STATES, 174 SUMMARY, 175

PART 3

ADDITIONAL THEORIES AND Extensions 177

CHAPTER 10

Post–Heckscher-Ohlin Theories of Trade and Intra-Industry Trade, 179

INTRODUCTION, 180 A Trade Myth, 180 POST-HECKSCHER-OHLIN THEORIES OF TRADE, 180 The Imitation Lag Hypothesis, 180 The Product Cycle Theory, 181 Vertical Specialization-Based Trade, 184 Firm-Focused Theories, 185 The Linder Theory, 186 IN THE REAL WORLD: NEW VENTURE INTERNATIONALIZATION, 188 IN THE REAL WORLD: OMITTED-COUNTRY BIAS IN TESTING THE LINDER HYPOTHESIS, 189 Economies of Scale, 190 The Krugman Model, 190 The Reciprocal Dumping Model, 193 The Gravity Model, 195 Multiproduct Exporting Firms, 196 Concluding Comments on Post-Heckscher-Ohlin Trade Theories, 197 IN THE REAL WORLD: GEOGRAPHY AND TRADE, 198 INTRA-INDUSTRY TRADE, 198 Reasons for Intra-Industry Trade in a Product Category, 199 The Level of a Country's Intra-Industry Trade, 201 SUMMARY, 203 Appendix A, Economies of Scale, 204 Appendix B, Monopolistic Competition and Price Elasticity of Demand in the Krugman Model, 206

Appendix C, Measurement of Intra-Industry Trade, 207

CHAPTER 11

Economic Growth and International Trade, 209 INTRODUCTION, 210 China-A Regional Growth Pole, 210 CLASSIFYING THE TRADE EFFECTS OF ECONOMIC GROWTH, 210 Trade Effects of Production Growth, 210 Trade Effects of Consumption Growth, 212 Sources of Growth and the Production-Possibilities FRONTIER, 214 The Effects of Technological Change, 214 IN THE REAL WORLD: LABOR AND CAPITAL REQUIREMENTS PER UNIT OF OUTPUT, 215 IN THE REAL WORLD: "Spillovers" AS A CONTRIBUTOR TO ECONOMIC GROWTH, 218 The Effects of Factor Growth, 218 FACTOR GROWTH, TRADE, AND WELFARE IN THE SMALL-COUNTRY CASE, 221 GROWTH, TRADE, AND WELFARE: THE LARGE-COUNTRY CASE, 222

CONCEPT BOX 1: LABOR FORCE GROWTH AND PER CAPITA INCOME, 223
CONCEPT BOX 2: ECONOMIC GROWTH AND THE OFFER CURVE, 225
GROWTH AND THE TERMS OF TRADE: A DEVELOPING-COUNTRY PERSPECTIVE, 227
IN THE REAL WORLD: TERMS OF TRADE OF BRAZIL, JORDAN, MOROCCO, AND THAILAND, 1980–2010, 228
SUMMARY, 229

CHAPTER 12

International Factor Movements, 231

INTRODUCTION, 232 INTERNATIONAL CAPITAL MOVEMENTS THROUGH FOREIGN DIRECT INVESTMENT AND MULTINATIONAL CORPORATIONS, 232 Foreign Investors in China: "Good" or "Bad" from the Chinese Perspective? 232 Definitions, 234 Some Data on Foreign Direct Investment and Multinational Corporations, 234 Reasons for International Movement of Capital, 237 IN THE REAL WORLD: DETERMINANTS OF FOREIGN DIRECT INVESTMENT, 239 Analytical Effects of International Capital Movements, 240 IN THE REAL WORLD: HOST-COUNTRY DETERMINANTS OF Foreign Direct Investment Inflows, 242 Potential Benefits and Costs of Foreign Direct Investment to a Host Country, 244 LABOR MOVEMENTS BETWEEN COUNTRIES, 247 Seasonal Workers in Germany, 247 Permanent Migration: A Greek in Germany, 248 IN THE REAL WORLD: MIGRATION FLOWS INTO THE UNITED STATES, 1986 AND 2010, 249 Economic Effects of Labor Movements, 250 Additional Considerations Pertaining to International Migration, 253 IN THE REAL WORLD: IMMIGRANT REMITTANCES, 254 Immigration and the United States-Recent Perspectives, 257 IN THE REAL WORLD: IMMIGRATION AND TRADE, 258 IN THE REAL WORLD: IMMIGRATION INTO THE UNITED STATES AND THE BRAIN DRAIN FROM DEVELOPING COUNTRIES, 260 SUMMARY, 261

PART 4

TRADE POLICY 263

CHAPTER 13 The Instruments of Trade Policy, 265

INTRODUCTION, 266 In What Ways Can I Interfere with Trade? 266 IMPORT TARIFFS, 267 Specific Tariffs, 267 *Ad Valorem* Tariffs, 267 Other Features of Tariff Schedules, 267 *IN THE REAL WORLD: U.S. TARIFF RATES, 269* IN THE REAL WORLD: THE U.S. GENERALIZED SYSTEM OF PREFERENCES, 271 Measurement of Tariffs, 273 IN THE REAL WORLD: NOMINAL AND EFFECTIVE TARIFFS IN THE UNITED STATES AND THE EUROPEAN UNION 275 IN THE REAL WORLD: NOMINAL AND EFFECTIVE TARIFF RATES IN VIETNAM AND EGYPT. 277 **EXPORT TAXES AND SUBSIDIES, 278** NONTARIFF BARRIERS TO FREE TRADE, 279 Import Quotas, 279 "Voluntary" Export Restraints (VERs), 279 Government Procurement Provisions, 280 Domestic Content Provisions, 280 European Border Taxes, 280 Administrative Classification, 281 Restrictions on Services Trade, 281 Trade-Related Investment Measures, 281 Additional Restrictions, 282 IN THE REAL WORLD: IS IT A CAR? IS IT A TRUCK? 282 Additional Domestic Policies That Affect Trade, 283 IN THE REAL WORLD: EXAMPLES OF CONTROL OVER TRADE, 283 IN THE REAL WORLD: THE EFFECT OF PROTECTION INSTRUMENTS ON DOMESTIC PRICES, 284 SUMMARY, 286

CHAPTER 14

The Impact of Trade Policies, 288 INTRODUCTION, 289 Gainers and Losers from Steel Tariffs, 289 TRADE RESTRICTIONS IN A PARTIAL EQUILIBRIUM SETTING: THE SMALL-COUNTRY CASE, 290 The Impact of an Import Tariff, 290 The Impact of an Import Quota and a Subsidy to Import-Competing Production, 293 The Impact of Export Policies, 296 IN THE REAL WORLD: REAL INCOME GAINS FROM TRADE LIBERALIZATION IN AGRICULTURE, 297 TRADE RESTRICTIONS IN A PARTIAL EQUILIBRIUM SETTING: THE LARGE-COUNTRY CASE, 299 Framework for Analysis, 299 The Impact of an Import Tariff, 302 The Impact of an Import Quota, 305 The Impact of an Export Tax, 307 IN THE REAL WORLD: WELFARE COSTS OF U.S. IMPORT QUOTAS AND VERS, 309 The Impact of an Export Subsidy, 310 TRADE RESTRICTIONS IN A GENERAL EQUILIBRIUM Setting, 311 Protection in the Small-Country Case, 311 Protection in the Large-Country Case, 313 **OTHER EFFECTS OF PROTECTION, 316** IN THE REAL WORLD: DOMESTIC EFFECTS OF THE SUGAR OUOTA SYSTEM, 317 SUMMARY, 318 Appendix A, The Impact of Protection in a Market with Nonhomogeneous Goods, 319

Appendix B, The Impact of Trade Policy in the Large-Country Setting Using Export Supply and Import Demand Curves, 321 CHAPTER 15 **Arguments for Interventionist Trade Policies. 326** INTRODUCTION, 327 TRADE POLICY AS A PART OF BROADER SOCIAL POLICY **OBJECTIVES FOR A NATION, 327** Trade Taxes as a Source of Government Revenue, 328 National Defense Argument for a Tariff, 328 IN THE REAL WORLD: THE RELATIVE IMPORTANCE OF TRADE TAXES AS A SOURCE OF GOVERNMENT REVENUE, 329 Tariff to Improve the Balance of Trade, 330 The Terms-of-Trade Argument for Protection, 331 Tariff to Reduce Aggregate Unemployment, 333 Tariff to Increase Employment in a Particular Industry, 334 IN THE REAL WORLD: INDUSTRY EMPLOYMENT EFFECTS OF TRADE LIBERALIZATION 334 IN THE REAL WORLD: COSTS OF PROTECTING INDUSTRY EMPLOYMENT, 335 Tariff to Benefit a Scarce Factor of Production, 335 Fostering "National Pride" in Key Industries, 336 Differential Protection as a Component of a Foreign Policy/ Aid Package, 336 PROTECTION TO OFFSET MARKET **IMPERFECTIONS**, 337 The Presence of Externalities as an Argument for Protection, 337 Tariff to Extract Foreign Monopoly Profit, 339 The Use of an Export Tax to Redistribute Profit from a Domestic Monopolist, 340 PROTECTION AS A RESPONSE TO INTERNATIONAL POLICY DISTORTIONS, 341 Tariff to Offset Foreign Dumping, 341 Tariff to Offset a Foreign Subsidy, 342 IN THE REAL WORLD: ANTIDUMPING ACTIONS IN THE UNITED STATES, 343 IN THE REAL WORLD: COUNTERVAILING DUTIES IN THE UNITED STATES, 345 MISCELLANEOUS, INVALID ARGUMENTS, 347

STRATEGIC TRADE POLICY: FOSTERING COMPARATIVE ADVANTAGE, 347 The Infant Industry Argument for Protection, 348 IN THE REAL WORLD: U.S. MOTORCYCLES—A SUCCESSFUL INFANT INDUSTRY? 349 Economies of Scale in a Duopoly Framework, 350 Research and Development and Sales of a Home Firm, 353 Export Subsidy in Duopoly, 355 Strategic Government Interaction and World Welfare, 358 IN THE REAL WORLD: AIRBUS INDUSTRIE, 359 Concluding Observations on Strategic Trade Policy, 361 SUMMARY, 362

CHAPTER 16

Political Economy and U.S. Trade Policy, 365 INTRODUCTION, 366 Contrasting Vignettes on Trade Policy, 366

THE POLITICAL ECONOMY OF TRADE POLICY, 366 The Self-Interest Approach to Trade Policy, 367 IN THE REAL WORLD: WORLD ATTITUDES TOWARD FOREIGN TRADE, 368 IN THE REAL WORLD: U.S. ATTITUDES TOWARD INTERNATIONAL TRADE. 369 IN THE REAL WORLD: POLITICS PUTS THE SOUEEZE ON TOMATO IMPORTS, 371 The Social Objectives Approach, 371 An Overview of the Political Science Take on Trade Policy, 373 A REVIEW OF U.S. TRADE POLICY, 373 Reciprocal Trade Agreements and Early GATT Rounds, 374 The Kennedy Round of Trade Negotiations, 374 The Tokyo Round of Trade Negotiations, 375 IN THE REAL WORLD: THE DETERMINANTS OF TRADE ADJUSTMENT ASSISTANCE, 377 The Uruguay Round of Trade Negotiations, 378 Trade Policy Issues after the Uruguay Round, 380 IN THE REAL WORLD: TARIFF REDUCTIONS RESULTING FROM THE URUGUAY ROUND. 381 IN THE REAL WORLD: NATIONAL SOVEREIGNTY AND THE WORLD TRADE ORGANIZATION, 384 The Doha Development Agenda, 384 Recent U.S. Actions, 387 IN THE REAL WORLD: HEALTH, SAFETY, OR PROTECTIONISM? 391 **CONCLUDING OBSERVATIONS ON TRADE POLICY**, 393 The Conduct of Trade Policy, 393 SUMMARY, 394 CHAPTER 17 **Economic Integration**, 395 INTRODUCTION, 396 An Expanded European Union, 396

Types of Economic Integration, 396

THE STATIC AND DYNAMIC EFFECTS OF ECONOMIC

IN THE REAL WORLD: ECONOMIC INTEGRATION UNITS, 399

DIVERSION IN THE EARLY STAGES OF EUROPEAN ECONOMIC

General Conclusions on Trade Creation/Diversion, 404

Static Effects of Economic Integration, 397

IN THE REAL WORLD: TRADE CREATION AND TRADE

CONCEPT BOX 1: TRADE DIVERSION IN GENERAL

Summary of Economic Integration, 406

Growth and Disappointments, 409

Completing the Internal Market, 409

U.S. Economic Integration Agreements, 411

Dynamic Effects of Economic Integration, 406

IN THE REAL WORLD: THE EAST AFRICAN COMMUNITY, 408

Free-Trade Area, 396

Customs Union, 397

Common Market, 397

Economic Union, 397

INTEGRATION, 397

INTEGRATION, 400

EOUILIBRIUM, 404

THE EUROPEAN UNION, 407

Prospects, 410

History and Structure, 407

NAFTA, 411 IN THE REAL WORLD: CANADIAN REGIONAL TRADE AGREEMENTS—IS THE EU NEXT? 412 Effects of NAFTA, 413 IN THE REAL WORLD: NAFTA—MYTHS VS. FACTS, 416 Recent U.S. Integration Agreements, 417 OTHER MAJOR ECONOMIC INTEGRATION EFFORTS, 419 MERCOSUR, 419 FTAA, 419 Chilean Trade Agreements, 420 APEC, 420 IN THE REAL WORLD: ASIAN ECONOMIC INTERDEPENDENCE LEADS TO GREATER INTEGRATION, 421 Trans-Pacific Partnership, 422 SUMMARY, 422

CHAPTER 18

International Trade and the Developing Countries, 424 INTRODUCTION, 425 Strong Recovery in East Asia, 425 AN OVERVIEW OF THE DEVELOPING COUNTRIES, 425 THE ROLE OF TRADE IN FOSTERING ECONOMIC Development, 426 The Static Effects of Trade on Economic Development, 427 The Dynamic Effects of Trade on Development, 428 Export Instability, 429 Potential Causes of Export Instability, 430 Long-Run Terms-of-Trade Deterioration, 431 TITANS OF INTERNATIONAL ECONOMICS: RAUL PREBISCH (1901–1986) AND HANS WOLFGANG SINGER (1910-2006), 433 TRADE, ECONOMIC GROWTH, AND DEVELOPMENT: THE **EMPIRICAL EVIDENCE**, 436 TRADE POLICY AND THE DEVELOPING COUNTRIES, 437 Policies to Stabilize Export Prices or Earnings, 437 Problems with International Commodity Agreements, 438 Suggested Policies to Combat a Long-Run Deterioration in the Terms of Trade, 438 IN THE REAL WORLD: MANAGING PRICE INSTABILITY, 439 IN THE REAL WORLD: THE LENGTH OF COMMODITY PRICE SHOCKS, 439 IN THE REAL WORLD: COMECON FOREIGN TRADE PRICING STRATEGIES, 442 Inward-Looking versus Outward-Looking Trade Strategies, 442 IN THE REAL WORLD: TERRORISM AND ITS EFFECT ON Developing Countries, 445 IN THE REAL WORLD: Emerging Connections between ASIA AND AFRICA, 447 THE EXTERNAL DEBT PROBLEM OF THE DEVELOPING COUNTRIES, 448 Causes of the Developing Countries' Debt Problem, 449 Possible Solutions to the Debt Problem, 450 IN THE REAL WORLD: THE MULTILATERAL DEBT RELIEF INITIATIVE, 453 SUMMARY, 456

XX

PART 5

FUNDAMENTALS OF INTERNATIONAL MONETARY ECONOMICS 459

CHAPTER 19

The Balance-of-Payments Accounts, 461

INTRODUCTION, 462 China's Trade Surpluses and Deficits, 462 RECENT GROWTH OF TRADE AND CAPITAL MOVEMENTS, 463 CREDITS AND DEBITS IN BALANCE-OF-PAYMENTS ACCOUNTING, 465 SAMPLE ENTRIES IN THE BALANCE-OF-PAYMENTS ACCOUNTS, 466 Assembling a Balance-of-Payments Summary STATEMENT, 468 IN THE REAL WORLD: CURRENT ACCOUNT DEFICITS 471 BALANCE-OF-PAYMENTS SUMMARY STATEMENT FOR THE UNITED STATES, 474 IN THE REAL WORLD: U.S. TRADE DEFICITS WITH JAPAN. CHINA, OPEC, AND CANADA, 475 INTERNATIONAL INVESTMENT POSITION OF THE UNITED

STATES, 478 IN THE REAL WORLD: TRENDS IN THE U.S. INTERNATIONAL

INVESTMENT POSITION, 481 SUMMARY, 482

CHAPTER 20

The Foreign Exchange Market, 484

INTRODUCTION, 485 The Yen Also Rises (and Falls), 485 THE FOREIGN EXCHANGE RATE AND THE MARKET FOR FOREIGN EXCHANGE, 485 Demand Side, 486 Supply Side, 486 The Market, 486 THE SPOT MARKET, 489 Principal Actors, 489 The Role of Arbitrage, 489 Different Measures of the Spot Rate, 490 IN THE REAL WORLD: NOMINAL AND REAL EXCHANGE RATES OF THE U.S. DOLLAR, 493 THE FORWARD MARKET, 496 IN THE REAL WORLD: SPOT AND PPP EXCHANGE RATES, 498 CONCEPT BOX 1: CURRENCY FUTURES **OUOTATIONS**, 502 CONCEPT BOX 2: CURRENCY FUTURES OPTION OUOTATIONS, 503 THE LINK BETWEEN THE FOREIGN EXCHANGE MARKETS AND THE FINANCIAL MARKETS, 504 The Basis for International Financial Flows, 505 Covered Interest Parity and Financial Market Equilibrium, 507 Simultaneous Adjustment of the Foreign Exchange Markets and the Financial Markets, 511 SUMMARY, 513

CHAPTER 21 **International Financial Markets and Instruments: An** Introduction, 515 INTRODUCTION, 516 Financial Globalization: A Recent Phenomenon? 516 **INTERNATIONAL BANK LENDING**, 516 THE INTERNATIONAL BOND MARKET (DEBT SECURITIES), 522 IN THE REAL WORLD: INTEREST RATES ACROSS COUNTRIES, 525 INTERNATIONAL STOCK MARKETS, 527 FINANCIAL LINKAGES AND EUROCURRENCY DERIVATIVES, 529 Basic International Financial Linkages: A Review, 530 International Financial Linkages and the Eurodollar Market, 531 IN THE REAL WORLD: U.S. DOMESTIC AND EURODOLLAR DEPOSIT AND LENDING RATES, 1989–2011, 533 Hedging Eurodollar Interest Rate Risk, 535 CONCEPT BOX 1: EURODOLLAR INTEREST RATE FUTURES MARKET QUOTATIONS, 540 CONCEPT BOX 2: EURODOLLAR INTEREST OPTION OUOTATIONS, 542 THE CURRENT GLOBAL DERIVATIVES MARKET, 544 SUMMARY, 547

CHAPTER 22

The Monetary and Portfolio Balance Approaches to **External Balance**, 549 INTRODUCTION, 550 The New Globalized Capital, 550 THE MONETARY APPROACH TO THE BALANCE OF PAYMENTS, 550 The Supply of Money, 551 The Demand for Money, 552 IN THE REAL WORLD: RELATIONSHIPS BETWEEN MONETARY Concepts in the United States, 553 Monetary Equilibrium and the Balance of Payments, 555 THE MONETARY APPROACH TO THE EXCHANGE RATE, 557 A Two-Country Framework, 558 IN THE REAL WORLD: MONEY GROWTH AND EXCHANGE RATES IN THE RUSSIAN TRANSITION, 559 THE PORTFOLIO BALANCE APPROACH TO THE BALANCE OF PAYMENTS AND THE EXCHANGE RATE, 561 Asset Demands, 561 Portfolio Balance, 563 Portfolio Adjustments, 564 EXCHANGE RATE OVERSHOOTING, 567 TITANS OF INTERNATIONAL ECONOMICS: RUDIGER Dornbusch (1942-2002), 568 SUMMARY, 573 Appendix, A Brief Look at Empirical Work on the Monetary and Portfolio Balance Approaches, 574

CHAPTER 23

Price Adjustments and Balance-of-Payments Disequilibrium, 579

INTRODUCTION, 580 Price Adjustment: The Exchange Rate Question, 580 THE PRICE ADJUSTMENT PROCESS AND THE CURRENT ACCOUNT UNDER A FLEXIBLE-RATE SYSTEM, 580 The Demand for Foreign Goods and Services and the Foreign Exchange Market, 581

Market Stability and the Price Adjustment Mechanism, 584 CONCEPT BOX 1: ELASTICITY OF IMPORT DEMAND AND THE

Supply Curve of Foreign Exchange when Demand is Linear, 588

The Price Adjustment Process: Short Run versus Long Run, 591

- IN THE REAL WORLD: ESTIMATES OF IMPORT AND EXPORT DEMAND ELASTICITIES, 592
- IN THE REAL WORLD: EXCHANGE RATE PASS-THROUGH OF FOREIGN EXPORTS TO THE UNITED STATES, 594
- IN THE REAL WORLD: JAPANESE EXPORT PRICING AND PASS-THROUGH IN THE 1990s, 595

IN THE REAL WORLD: U.S. AGRICULTURAL EXPORTS AND EXCHANGE RATE CHANGES, 599

The Price Adjustment Mechanism in a Fixed Exchange Rate System, 599 Gold Standard, 599

The Price Adjustment Mechanism and the Pegged Rate System, 602

Summary, 603

Appendix, Derivation of the Marshall-Lerner Condition, 604

CHAPTER 24

National Income and the Current Account, 606

INTRODUCTION, 607 Does GDP Growth Cause Trade Deficits? 607

THE CURRENT ACCOUNT AND NATIONAL INCOME, 607 The Keynesian Income Model, 607

TITANS OF INTERNATIONAL ECONOMICS: JOHN MAYNARD KEYNES (1883–1946), 608 Determining the Equilibrium Level of National Income, 613

IN THE REAL WORLD: AVERAGE PROPENSITIES TO IMPORT, SELECTED COUNTRIES, 614

The Autonomous Spending Multiplier, 619

- *IN THE REAL WORLD: MULTIPLIER ESTIMATES FOR INDIA, 621* The Current Account and the Multiplier, 622 Foreign Repercussions and the Multiplier Process, 623
- IN THE REAL WORLD: HISTORICAL CORRELATION OVER TIME OF COUNTRIES' GDP, 624

IN THE REAL WORLD: RECENT SYNCHRONIZATION OF GDP MOVEMENTS OF COUNTRIES, 625

An Overview of Price and Income Adjustments and Simultaneous External and Internal Balance, 626 Summary, 628

Appendix A, The Multiplier When Taxes Depend on Income, 629 Appendix B, Derivation of the Multiplier with Foreign

Repercussions, 631

PART 6

MACROECONOMIC POLICY IN THE OPEN ECONOMY 635

CHAPTER 25

Economic Policy in the Open Economy under Fixed Exchange Rates, 637

INTRODUCTION, 638

The Case of the Chinese Renminbi Yuan, 638 TITANS OF INTERNATIONAL ECONOMICS: ROBERT A. MUNDELL (BORN 1932), 639 TARGETS, INSTRUMENTS, AND ECONOMIC POLICY IN A TWO-INSTRUMENT, TWO-TARGET MODEL, 639 GENERAL EOUILIBRIUM IN THE OPEN ECONOMY: THE IS/LM/BP MODEL, 642 General Equilibrium in the Money Market: The *LM* Curve, 642 General Equilibrium in the Real Sector: The IS Curve, 646 Simultaneous Equilibrium in the Monetary and Real Sectors, 648 Equilibrium in the Balance of Payments: The BP Curve, 648 IN THE REAL WORLD: THE PRESENCE OF EXCHANGE CONTROLS IN THE CURRENT FINANCIAL SYSTEM, 653 Equilibrium in the Open Economy: The Simultaneous Use of the LM, IS, and BP Curves, 654 THE EFFECTS OF FISCAL POLICY UNDER FIXED EXCHANGE RATES, 657 THE EFFECTS OF MONETARY POLICY UNDER FIXED EXCHANGE RATES, 660 THE EFFECTS OF OFFICIAL CHANGES IN THE EXCHANGE RATE 662 IN THE REAL WORLD: THE HISTORICAL RISE AND FALL OF A CURRENCY BOARD-THE CASE OF ARGENTINA, 664 SUMMARY, 666 Appendix, The Relationship between the Exchange Rate and Income in Equilibrium, 667 CHAPTER 26 **Economic Policy in the Open Economy under**

Flexible Exchange Rates, 669

INTRODUCTION, 670 Movements to Flexible Rates, 670 THE EFFECTS OF FISCAL AND MONETARY POLICY UNDER FLEXIBLE EXCHANGE RATES WITH DIFFERENT CAPITAL **MOBILITY ASSUMPTIONS**, 670 CONCEPT BOX 1: REAL AND FINANCIAL FACTORS THAT INFLUENCE THE BP CURVE, 672 The Effects of Fiscal Policy under Different Capital Mobility Assumptions, 672 The Effects of Monetary Policy under Different Capital Mobility Assumptions, 675 Policy Coordination under Flexible Exchange Rates, 677 THE EFFECTS OF EXOGENOUS SHOCKS IN THE IS/LM/BP MODEL WITH IMPERFECT MOBILITY OF CAPITAL, 679 IN THE REAL WORLD: COMMODITY PRICES AND U.S. REAL GDP, 1972-2011, 680 IN THE REAL WORLD: EUROPEAN INSTABILITY AND U.S. GDP. 684 IN THE REAL WORLD: POLICY FRICTIONS IN AN INTERDEPENDENT WORLD, 685 IN THE REAL WORLD: MACROECONOMIC POLICY COORDINATION: THE IMF, THE G-7/G-8, AND THE G-20, 687 SUMMARY, 688 Appendix, Policy Effects, Open-Economy

Equilibrium, and the Exchange Rate under Flexible Rates, 689 CHAPTER 27 Prices and Output in the Open Economy: Aggregate Supply and Demand, 691 INTRODUCTION, 692 Crisis in Argentina, 692 Aggregate Demand and Supply in the Closed ECONOMY, 693 Aggregate Demand in the Closed Economy, 693 Aggregate Supply in the Closed Economy, 694 Equilibrium in the Closed Economy, 698 IN THE REAL WORLD: U.S. ACTUAL AND NATURAL INCOME AND UNEMPLOYMENT, 699 Aggregate Demand and Supply in the Open Economy, 700 Aggregate Demand in the Open Economy under Fixed Rates, 701 Aggregate Demand in the Open Economy under Flexible Rates, 702 THE NATURE OF ECONOMIC ADJUSTMENT AND MACROECONOMIC POLICY IN THE OPEN-ECONOMY AGGREGATE SUPPLY AND DEMAND FRAMEWORK, 703 The Effect of Exogenous Shocks on the Aggregate Demand Curve under Fixed and Flexible Rates, 703 The Effect of Monetary and Fiscal Policy on the Aggregate Demand Curve under Fixed and Flexible Rates, 704 Summary, 705 MONETARY AND FISCAL POLICY IN THE OPEN ECONOMY WITH FLEXIBLE PRICES, 706 Monetary Policy, 706 Currency Adjustments under Fixed Rates, 710 Fiscal Policy, 710 Economic Policy and Supply Considerations, 711 IN THE REAL WORLD: ECONOMIC PROGRESS IN SUB-SAHARAN AFRICA, 713 EXTERNAL SHOCKS AND THE OPEN ECONOMY, 713 IN THE REAL WORLD: INFLATION AND UNEMPLOYMENT IN THE UNITED STATES, 1970-2011, 715 SUMMARY, 718

PART 7

ISSUES IN WORLD MONETARY ARRANGEMENTS 719

CHAPTER 28

Fixed or Flexible Exchange Rates? 721

INTRODUCTION, 722
Slovenia's Changeover to the Euro—A Clear Success, 722
CENTRAL ISSUES IN THE FIXED–FLEXIBLE EXCHANGE RATE DEBATE, 722
Do Fixed or Flexible Exchange Rates Provide for Greater "Discipline" on the Part of Policymakers? 722
Would Fixed or Flexible Exchange Rates Provide for Greater Growth in International Trade and Investment? 724 IN THE REAL WORLD: EXCHANGE RISK AND INTERNATIONAL TRADE, 725 Would Fixed or Flexible Exchange Rates Provide for Greater Efficiency in Resource Allocation? 726 Is Macroeconomic Policy More Effective in Influencing National Income under Fixed or Flexible Exchange Rates? 727 Will Destabilizing Speculation in Exchange Markets Be Greater under Fixed or Flexible Exchange Rates? 729 IN THE REAL WORLD: RESERVE HOLDINGS UNDER FIXED AND FLEXIBLE EXCHANGE RATES, 729 TITANS OF INTERNATIONAL ECONOMICS: MILTON FRIEDMAN (1912-2006), 733 Will Countries Be Better Protected from External Shocks under a Fixed or a Flexible Exchange Rate System? 734 IN THE REAL WORLD: "Insulation" with Flexible RATES—THE CASE OF JAPAN, 735 **CURRENCY BOARDS**, 736 Advantages of a Currency Board, 736 IN THE REAL WORLD: CURRENCY BOARDS IN ESTONIA AND LITHUANIA, 737 Disadvantages of a Currency Board, 738 **OPTIMUM CURRENCY AREAS, 739** IN THE REAL WORLD: THE EASTERN CARIBBEAN CURRENCY UNION AND OTHER MONETARY UNIONS, 741 HYBRID SYSTEMS COMBINING FIXED AND FLEXIBLE EXCHANGE RATES, 742 Wider Bands, 742 Crawling Pegs, 743 Managed Floating, 744 IN THE REAL WORLD: COLOMBIA'S EXPERIENCE WITH A CRAWLING PEG. 745 SUMMARY, 746

CHAPTER 29

The International Monetary System: Past, Present, and Future, 748 INTRODUCTION, 749 Global Crisis Requires a Global Solution, 749 IN THE REAL WORLD: FLEXIBLE EXCHANGE RATES IN POST-WORLD WAR I EUROPE: THE UNITED KINGDOM, FRANCE, AND NORWAY, 750 THE BRETTON WOODS SYSTEM, 752 The Goals of the IMF, 752 The Bretton Woods System in Retrospect, 755 GRADUAL EVOLUTION OF A NEW INTERNATIONAL MONETARY System, 756 Early Disruptions, 756 Special Drawing Rights, 757 The Breaking of the Gold–Dollar Link and the Smithsonian Agreement, 758 The Jamaica Accords, 759 The European Monetary System, 759 Exchange Rate Fluctuations in Other Currencies in the 1990s and 2000s, 763 **CURRENT EXCHANGE RATE ARRANGEMENTS, 764** EXPERIENCE UNDER THE CURRENT INTERNATIONAL MONETARY SYSTEM, 767

The Global Financial Crisis and the Recent Recession, 771 SUGGESTIONS FOR REFORM OF THE INTERNATIONAL MONETARY SYSTEM, 773 A Return to the Gold Standard, 773 A World Central Bank, 774 CONCEPT BOX 1: A WORLD CENTRAL BANK WITHIN A THREE-CURRENCY MONETARY UNION, 774 The Target Zone Proposal, 775 Controls on Capital Flows, 777 Greater Stability and Coordination of Macroeconomic Policies across Countries, 779 IN THE REAL WORLD: POLICY COORDINATION AND THE G-20, 779 THE INTERNATIONAL MONETARY SYSTEM AND THE DEVELOPING COUNTRIES, 780 SUMMARY, 782

References for Further Reading, 783 Photo Credits, 802 Index, 803