International Economics

THEORY & POLICY

ELEVENTH EDITION GLOBAL EDITION

Paul R. Krugman
Princeton University

Maurice Obstfeld University of California, Berkeley

Marc J. Melitz
Harvard University



Preface.	19
Introduction	29
What Is International Economics About?	31
The Gains from Trade	32
The Pattern of Trade	33
How Much Trade?	33
Balance of Payments	34
	35
	35
	36
International Economics: Trade and Money	37
International Trade Theory	38
World Trade: An Overview	38
Who Trades with Whom?	38
Size Matters: The Gravity Model	39
Using the Gravity Model: Looking for Anomalies	41
Impediments to Trade: Distance, Barriers, and Borders	42
The Changing Pattern of World Trade	44
Has the World Gotten Smaller?	44
What Do We Trade?	46
Service Offshoring	47
Do Old Rules Still Apply?	49
Summary	50
Labor Productivity and Comparative Advantage:	52
	52
The Concept of Comparative Advantage	53
A One-Factor Economy	54
Relative Prices and Supply	56
	57
	58
	61
	62
e e e e e e e e e e e e e e e e e e e	63
	64
• •	65
	65
The state of the s	66
	67
	67
	68
	68 68
• .	70
	Introduction What Is International Economics About? The Gains from Trade The Pattern of Trade How Much Trade? Balance of Payments Exchange Rate Determination International Policy Coordination The International Capital Market International Economics: Trade and Money International Trade Theory World Trade: An Overview Who Trades with Whom? Size Matters: The Gravity Model Using the Gravity Model: Looking for Anomalies Impediments to Trade: Distance, Barriers, and Borders The Changing Pattern of World Trade Has the World Gotten Smaller? What Do We Trade? Service Offshoring Do Old Rules Still Apply? Summary Labor Productivity and Comparative Advantage: The Ricardian Model The Concept of Comparative Advantage A One-Factor Economy

	Adding Transport Costs and Nontraded Goods	72
	Empirical Evidence on the Ricardian Model	73
	Summary	76
4	Specific Factors and Income Distribution	79
	The Specific Factors Model	80
	BOX: What Is a Specific Factor?	81
	Assumptions of the Model	81
	Production Possibilities	82
	Prices, Wages, and Labor Allocation	85
	Relative Prices and the Distribution of Income	89
	International Trade in the Specific Factors Model	91
	Income Distribution and the Gains from Trade	92
	The Political Economy of Trade: A Preliminary View	95
	Income Distribution and Trade Politics	96
	CASE STUDY: Trade and Unemployment	96
	International Labor Mobility	100
	CASE STUDY: Wage Convergence in the European Union	102
	CASE STUDY: Immigration and the U.S. Economy: Future Prospects	104
	Summary	107
5	Resources and Trade: The Heckscher-Ohlin Model	115
	Model of a Two-Factor Economy	116
	Prices and Production	116
	Choosing the Mix of Inputs	119
	Factor Prices and Goods Prices	121
	Resources and Output	124
	Effects of International Trade between Two-Factor Economies	125
	Relative Prices and the Pattern of Trade	126
	Trade and the Distribution of Income	127
	CASE STUDY: North-South Trade and Income Inequality	128
	Skill-Biased Technological Change and Income Inequality	130
	BOX: The Declining Labor Share of Income and Capital-Skill Complementarity	134
	Factor-Price Equalization	135
	Empirical Evidence on the Heckscher-Ohlin Model	136
	Trade in Goods as a Substitute for Trade in Factors: Factor Content of Trade	137
	Patterns of Exports between Developed and Developing Countries	140
	Implications of the Tests	142
	Summary	143
6	The Standard Trade Model	151
	A Standard Model of a Trading Economy	152
	Production Possibilities and Relative Supply	152
	Relative Prices and Demand	153
	The Welfare Effect of Changes in the Terms of Trade	156
	Determining Relative Prices	157
	CASE STUDY: Unequal Gains from Trade across the Income Distribution	157
	Economic Growth: A Shift of the RS Curve	160
	Growth and the Production Possibility Frontier	160
	World Relative Supply and the Terms of Trade	162
	International Effects of Growth	163

	CASE STUDY: Has the Growth of Newly Industrialized Economies	
	Hurt Advanced Nations?	164
	Tariffs and Export Subsidies: Simultaneous Shifts in RS and RD	166
	Relative Demand and Supply Effects of a Tariff	166
	Effects of an Export Subsidy	167
	Implications of Terms of Trade Effects: Who Gains and Who Loses?	168
	International Borrowing and Lending	169
	Intertemporal Production Possibilities and Trade	169
	The Real Interest Rate	170
	Intertemporal Comparative Advantage	172
	Summary	172
7	External Economies of Scale and the International	
	Location of Production	179
	Economies of Scale and International Trade: An Overview	180
	Economies of Scale and Market Structure	181
	The Theory of External Economies	182
	Specialized Suppliers	182
	Labor Market Pooling	183
	Knowledge Spillovers	184
	External Economies and Market Equilibrium	185
	External Economies and International Trade	186
	External Economies, Output, and Prices	186
	External Economies and the Pattern of Trade	187
	BOX: Holding the World Together	189
	Trade and Welfare with External Economies	190
	Dynamic Increasing Returns	191
	Interregional Trade and Economic Geography	192
	BOX: Soccer and the English Premiere League	194
	Summary	195
8	Firms in the Global Economy: Export Decisions,	
	Outsourcing, and Multinational Enterprises	198
	The Theory of Imperfect Competition	199
	Monopoly: A Brief Review	200
	Monopolistic Competition	202
	Monopolistic Competition and Trade	207
	The Effects of Increased Market Size	207
	Gains from an Integrated Market: A Numerical Example	208
	The Significance of Intra-Industry Trade	212
	CASE STUDY: Automobile Intra-Industry Trade within ASEAN-4:1998-2002	214
	Firm Responses to Trade: Winners, Losers, and Industry Performance	215
	Performance Differences across Producers The Effects of Increased Market Size	216 218
	Trade Costs and Export Decisions	210
	Dumping	220
	CASE STUDY: Antidumping as Protectionism	223
	Multinationals and Outsourcing	225
	CASE STUDY: Patterns of Foreign Direct Investment	223
	Flows around the World	225

Contents

	The Firm's Decision Regarding Foreign Direct Investment	229
	Outsourcing	230
	BOX: Whose Trade Is It?	231
	CASE STUDY: Shipping Jobs Overseas? Offshoring and Labor Market Outcomes	
	in Germany	233
	Consequences of Multinationals and Foreign Outsourcing	236
	Summary	237
2	International Trade Policy	243
9	The Instruments of Trade Policy	243
	Basic Tariff Analysis	243
	Supply, Demand, and Trade in a Single Industry	244
	Effects of a Tariff	246
	Measuring the Amount of Protection	247
	Costs and Benefits of a Tariff	249
	Consumer and Producer Surplus	249
	Measuring the Costs and Benefits	251
	BOX: Tariffs and Retaliation	253
	Other Instruments of Trade Policy	255
	Export Subsidies: Theory	255
	CASE STUDY: Europe's Common Agricultural Policy	256
	Import Quotas: Theory	257
	CASE STUDY: Tariff-Rate Quota Origin and its Application in Practice with Oilseeds	258 262
	Voluntary Export Restraints CASE STUDY: A Voluntary Export Restraint in Practice	262 262
	Local Content Requirements	263
	BOX: Healthcare Protection with Local Content Requirements	264
	Other Trade Policy Instruments	265
	The Effects of Trade Policy: A Summary	265 265
	Summary	266
10	The Political Economy of Trade Policy	274
	The Case for Free Trade	275
	Free Trade and Efficiency Additional Gains from Free Trade	275 276
	Rent Seeking	270
	Political Argument for Free Trade	277
	National Welfare Arguments against Free Trade	278
	The Terms of Trade Argument for a Tariff	278
	The Domestic Market Failure Argument against Free Trade	279
	How Convincing Is the Market Failure Argument?	281
	Income Distribution and Trade Policy	282
	Electoral Competition	283
	Collective Action	284
	BOX: Politicians for Sale: Evidence from the 1990s	285
	Modeling the Political Process	286
	Who Gets Protected?	286
	International Negotiations and Trade Policy	288
	The Advantages of Negotiation	289
	International Trade Agreements: A Brief History	290
	The Uruguay Round	292

Contents	11
Contents	11

	Trade Liberalization Administrative Reforms: From the GATT to the WTO Benefits and Costs	292 293 294
	BOX: Settling a Dispute—And Creating One	294
	CASE STUDY: Testing the WTO's Metal	296
	The End of Trade Agreements?	297
	BOX: DO Agricultural Subsidies Hurt the Third World?	298
	Preferential Trading Agreements	299
	BOX: Free Trade Area Versus Customs Union	300
	BOX: Brexit	301
	CASE STUDY: Trade Diversion in South America	302
	The Trans-Pacific Partnership	303
	Summary	304
11	Trade Policy in Developing Countries	311
	Import-Substituting Industrialization	312
	The Infant Industry Argument	312
	Promoting Manufacturing through Protection	314
	CASE STUDY: Export-Led Strategy	316
	Results of Favoring Manufacturing: Problems of Import-Substituting Industrialization	317
	Trade Liberalization since 1985	319
	Trade and Growth: Takeoff in Asia	321
	BOX: India's Boom	323
	Summary	324
12	Controversies in Trade Policy	326
	Sophisticated Arguments for Activist Trade Policy	327
	Technology and Externalities	327
	Imperfect Competition and Strategic Trade Policy	330
	BOX: A Warning from Intel's Founder	332
	CASE STUDY: When the Chips Were Up	333
	Globalization and Low-Wage Labor	335
	The Anti-Globalization Movement	335
	Trade and Wages Revisited	336
	Labor Standards and Trade Negotiations	338
	Environmental and Cultural Issues The WTO and National Independence	338 339
	CASE STUDY: A Tragedy in Bangladesh	340
	Globalization and the Environment	341
	Globalization, Growth, and Pollution	341
	The Problem of "Pollution Havens"	343
	The Carbon Tariff Dispute	344
	Trade Shocks and Their Impact on Communities	345
	Summary	346
PART 3	Exchange Rates and Open-Economy Macroeconomics	349
13	National Income Accounting and the Balance of Payments	349
	The National Income Accounts	351
	National Product and National Income	352

	Capital Depreciation and International Transfers	353
	Gross Domestic Product	353
	National Income Accounting for an Open Economy	354
	Consumption	354
	Investment	354
	Government Purchases	355
	The National Income Identity for an Open Economy	355
	An Imaginary Open Economy	356
	The Current Account and Foreign Indebtedness	356
	Saving and the Current Account	358
	Private and Government Saving	359
	BOX: The Mystery of the Missing Deficit	360
	The Balance of Payments Accounts	362
	Examples of Paired Transactions	363
	The Fundamental Balance of Payments Identity	364
	The Current Account, Once Again	365
	The Capital Account	366
	The Financial Account	366
	Statistical Discrepancy	367
	Official Reserve Transactions	368
	CASE STUDY: The Assets and Liabilities of the World's Biggest Debtor	369
	Summary	373
14	Exchange Rates and the Foreign Exchange Market:	
	An Asset Approach	378
	Exchange Rates and International Transactions	379
	Domestic and Foreign Prices	379
	Exchange Rates and Relative Prices	381
	The Foreign Exchange Market	382
	The Actors	382
	BOX: Exchange Rates, Auto Prices, and Currency Wars	383
	Characteristics of the Market	384
	Spot Rates and Forward Rates	386
	Foreign Exchange Swaps	387
	Futures and Options	387
	The Demand for Foreign Currency Assets	388
	Assets and Asset Returns	388
	BOX: Offshore Currency Markets: The Case of the Chinese Yuan	389
	Risk and Liquidity	391
	Interest Rates	392
	Exchange Rates and Asset Returns	392
	A Simple Rule	394
	Return, Risk, and Liquidity in the Foreign Exchange Market	395
	Equilibrium in the Foreign Exchange Market	396
	Interest Parity: The Basic Equilibrium Condition	396
	How Changes in the Current Exchange Rate Affect Expected Returns	397
	The Equilibrium Exchange Rate	399
	Interest Rates, Expectations, and Equilibrium	401
	The Effect of Changing Interest Rates on the Current Exchange Rate	401
	The Effect of Changing Expectations on the Current Exchange Rate	403
	CASE STUDY: What Explains the Carry Trade?	403
	Summary	406

15	Money, Interest Rates, and Exchange Rates	414
	Money Defined: A Brief Review	415
	Money as a Medium of Exchange	415
	Money as a Unit of Account	415
	Money as a Store of Value	416
	What Is Money?	416
	How the Money Supply Is Determined	416
	The Demand for Money by Individuals	417
	Expected Return	417
	Risk	418
	Liquidity	418
	Aggregate Money Demand	418
	The Equilibrium Interest Rate: The Interaction of Money Supply and Demand	420
	Equilibrium in the Money Market	421
	Interest Rates and the Money Supply	422
	Output and the Interest Rate	423
	The Money Supply and the Exchange Rate in the Short Run	424
	Linking Money, the Interest Rate, and the Exchange Rate	424
	U.S. Money Supply and the Dollar/Euro Exchange Rate	427
	Europe's Money Supply and the Dollar/Euro Exchange Rate	427
	Money, the Price Level, and the Exchange Rate in the Long Run	430
	Money and Money Prices	430
	The Long-Run Effects of Money Supply Changes	431
	Empirical Evidence on Money Supplies and Price Levels	432
	Money and the Exchange Rate in the Long Run	433
	Inflation and Exchange Rate Dynamics	434
	Short-Run Price Rigidity versus Long-Run Price Flexibility	434
	BOX: Money Supply Growth and Hyperinflation in Zimbabwe	436
	Permanent Money Supply Changes and the Exchange Rate	438
	Exchange Rate Overshooting	441
	CASE STUDY: Inflation Targeting and Exchange Rate in Emerging Countries	441
	Summary	444
16	Price Levels and the Exchange Rate in the Long Run	449
	The Law of One Price	450
	Purchasing Power Parity	451
	The Relationship between PPP and the Law of One Price	451
	Absolute PPP and Relative PPP	452
	A Long-Run Exchange Rate Model Based on PPP	453
	The Fundamental Equation of the Monetary Approach	453
	Ongoing Inflation, Interest Parity, and PPP	455
	The Fisher Effect	456
	Empirical Evidence on PPP and the Law of One Price	459
	Explaining the Problems with PPP	461
	Trade Barriers and Nontradables	461
	Departures from Free Competition	462
	Differences in Consumption Patterns and Price Level Measurement	463
	BOX: Measuring and Comparing Countries' Wealth Worldwide: The International	
	Comparison Program (ICP)	463
	PPP in the Short Run and in the Long Run	466
	CASE STUDY: Why Price Levels Are Lower in Poorer Countries	467
	Beyond Purchasing Power Parity: A General Model of Long-Run Exchange Rates	469

Contents

	The Real Exchange Rate	469
	Demand, Supply, and the Long-Run Real Exchange Rate	471
	BOX: Sticky Prices and the Law of One Price: Evidence from Scandinavian Duty-Free Shops	472
	Nominal and Real Exchange Rates in Long-Run Equilibrium	474
	International Interest Rate Differences and the Real Exchange Rate	476
	Real Interest Parity	477
	Summary	479
17	Output and the Exchange Rate in the Short Run	487
	Determinants of Aggregate Demand in an Open Economy	488
	Determinants of Consumption Demand	488
	Determinants of the Current Account	489
	How Real Exchange Rate Changes Affect the Current Account	490
	How Disposable Income Changes Affect the Current Account	491
	The Equation of Aggregate Demand	491
	The Real Exchange Rate and Aggregate Demand	491
	Real Income and Aggregate Demand	492
	How Output Is Determined in the Short Run	493
	Output Market Equilibrium in the Short Run: The DD Schedule	494
	Output, the Exchange Rate, and Output Market Equilibrium	494
	Deriving the DD Schedule	495
	Factors That Shift the <i>DD</i> Schedule	496 499
	Asset Market Equilibrium in the Short Run: The AA Schedule Output, the Exchange Rate, and Asset Market Equilibrium	499
	Deriving the AA Schedule	501
	Factors That Shift the A A Schedule	501
	Short-Run Equilibrium for an Open Economy: Putting the <i>DD</i> and <i>A A</i>	501
	Schedules Together	502
	Temporary Changes in Monetary and Fiscal Policy	504
	Monetary Policy	505
	Fiscal Policy	505
	Policies to Maintain Full Employment	506
	Inflation Bias and Other Problems of Policy Formulation	508
	Permanent Shifts in Monetary and Fiscal Policy	509
	A Permanent Increase in the Money Supply	509
	Adjustment to a Permanent Increase in the Money Supply	510
	A Permanent Fiscal Expansion	512
	Macroeconomic Policies and the Current Account	513
	Gradual Trade Flow Adjustment and Current Account Dynamics	515
	The J-Curve	515
	Exchange Rate Pass-Through and Inflation	516
	The Current Account, Wealth, and Exchange Rate Dynamics	517
	BOX: Understanding Pass-Through to Import and Export Prices	518
	The Liquidity Trap	519
	CASE STUDY: How Big Is the Government Spending Multiplier?	522
	Summary	524
18	Fixed Exchange Rates and Foreign Exchange Intervention	534
	Why Study Fixed Exchange Rates?	535
	Central Bank Intervention and the Money Supply	536
	The Central Bank Balance Sheet and the Money Supply	536
	Foreign Exchange Intervention and the Money Supply	538

Contents	15
Contents	10

	Sterilization	539
	The Balance of Payments and the Money Supply	539
	How the Central Bank Fixes the Exchange Rate	540
	Foreign Exchange Market Equilibrium under a Fixed Exchange Rate	541
	Money Market Equilibrium under a Fixed Exchange Rate	541
	A Diagrammatic Analysis	542
	Stabilization Policies with a Fixed Exchange Rate	543
	Monetary Policy	544
	Fiscal Policy	545
	Changes in the Exchange Rate	546
	Adjustment to Fiscal Policy and Exchange Rate Changes	547
	Balance of Payments Crises and Capital Flight	548
	Managed Floating and Sterilized Intervention	551
	Perfect Asset Substitutability and the Ineffectiveness of Sterilized Intervention	551
	CASE STUDY: Can Markets Attack a Strong Currency? The Case of Switzerland	552
	Foreign Exchange Market Equilibrium under Imperfect Asset Substitutability	555
	The Effects of Sterilized Intervention with Imperfect Asset Substitutability	555
	Evidence on the Effects of Sterilized Intervention	557
	Reserve Currencies in the World Monetary System	558
	The Mechanics of a Reserve Currency Standard	558
	The Asymmetric Position of the Reserve Center	559
	The Gold Standard	560
	The Mechanics of a Gold Standard	560
	Symmetric Monetary Adjustment under a Gold Standard	560
	Benefits and Drawbacks of the Gold Standard	561
	The Bimetallic Standard	562
	The Gold Exchange Standard	562
	CASE STUDY: The Cost to Become an International Currency: The Renminbi Case	563
	Summary	567
PART 4	International Macroeconomic Policy	579
19	International Monetary Systems: An Historical Overview	579
	Macroeconomic Policy Goals in an Open Economy	580
	Internal Balance: Full Employment and Price Level Stability	581
	External Balance: The Optimal Level of the Current Account	582
	BOX: Can a Country Borrow Forever? The Case of New Zealand	584
	Classifying Monetary Systems: The Open-Economy Monetary Trilemma	588
	International Macroeconomic Policy under the Gold Standard, 1870-1914	589
	Origins of the Gold Standard	590
	External Balance under the Gold Standard	590
	The Price-Specie-Flow Mechanism	591
	The Gold Standard "Rules of the Game": Myth and Reality	592
	Internal Balance under the Gold Standard	592
	CASE STUDY: The Political Economy of Exchange Rate Regimes: Conflict	
	over America's Monetary Standard during the 1890s	593
	The Interwar Years, 1918-1939	595
	The Fleeting Return to Gold	595
	International Economic Disintegration	596
	CASE STUDY: The International Gold Standard and the Great Depression	597
	The Bretton Woods System and the International Monetary Fund	598
	Goals and Structure of the IMF	598

	Convertibility and the Expansion of Private Financial Flows	599
	Speculative Capital Flows and Crises	600
	Analyzing Policy Options for Reaching Internal and External Balance	601
	Maintaining Internal Balance	602
	Maintaining External Balance	603
	Expenditure-Changing and Expenditure-Switching Policies	604
	The External Balance Problem of the United States under Bretton Woods	605
	CASE STUDY: The End of Bretton Woods, Worldwide Inflation, and the Transition to	
	Floating Rates	606
	The Mechanics of Imported Inflation	608
	Assessment	609
	The Case for Floating Exchange Rates	610
	Monetary Policy Autonomy	610
	Symmetry	611
	Exchange Rates as Automatic Stabilizers	612
	Exchange Rates and External Balance	614
	CASE STUDY: The First Years of Floating Rates, 1973-1990	614
	Macroeconomic Interdependence under a Floating Rate	619
	CASE STUDY: Transformation and Crisis in the World Economy	620
	CASE STUDY: The Dangers of Deflation	626
	What Has Been Learned Since 1973?	628
	Monetary Policy Autonomy	628
	Symmetry	630
	The Exchange Rate as an Automatic Stabilizer	630
	External Balance	631
	The Problem of Policy Coordination	631
	Are Fixed Exchange Rates Even an Option for Most Countries?	632
	Summary	633
20	Financial Globalization: Opportunity and Crisis	642
	The International Capital Market and the Gains from Trade	643
	Three Types of Gain from Trade	643
	Risk Aversion	644
	Portfolio Diversification as a Motive for International Asset Trade	645
	The Menu of International Assets: Debt versus Equity	646
	International Banking and the International Capital Market	647
	The Structure of the International Capital Market	647
	Offshore Banking and Offshore Currency Trading	648
	The Shadow Banking System	649
	Banking and Financial Fragility	650
	The Problem of Bank Failure	650
	Government Safeguards against Financial Instability	652
	Moral Hazard and the Problem of "Too Big to Fail"	655
	BOX: Does the IMF Cause Moral Hazard?	656
	The Challenge of Regulating International Banking	657
	The Financial Trilemma	658
	International Regulatory Cooperation through 2007	659
	CASE STUDY: The Global Financial Crisis of 2007-2009	660
	BOX: Foreign Exchange Instability and Central Bank Swap Lines	663
	International Regulatory Initiatives after the Global Financial Crisis	665
	How Well Have International Financial Markets Allocated	
	Capital and Risk?	667

Contents	17
Contents	

	The Extent of International Portfolio Diversification	668
	The Extent of Intertemporal Trade	670
	Onshore-Offshore Interest Differentials	671
	The Efficiency of the Foreign Exchange Market	671
	Summary	676
21	Optimum Currency Areas and the Euro	681
	How the European Single Currency Evolved	683
	What Has Driven European Monetary Cooperation?	683
	BOX: Brexit	684
	The European Monetary System, 1979-1998	686
	German Monetary Dominance and the Credibility Theory of the EMS	687
	Market Integration Initiatives	689
	European Economic and Monetary Union	689
	The Euro and Economic Policy in the Euro Zone	690
	The Maastricht Convergence Criteria and the Stability and Growth Pact	691
	The European Central Bank and the Eurosystem	692
	The Revised Exchange Rate Mechanism	692
	The Theory of Optimum Currency Areas	693
	Economic Integration and the Benefits of a Fixed Exchange Rate Area:	
	The GG Schedule	693
	Economic Integration and the Costs of a Fixed Exchange Rate Area:	
	The LL Schedule	695
	The Decision to Join a Currency Area: Putting the GG and LL Schedules Together	698
	What Is an Optimum Currency Area?	699
	Other Important Considerations	699
	CASE STUDY: IS Europe an Optimum Currency Area?	701
	The Euro Crisis and the Future of EMU	704
	Origins of the Crisis	704
	Self-Fulfilling Government Default and the "Doom Loop"	710
	A Broader Crisis and Policy Responses	712
	ECB Outright Monetary Transactions The Future of EMU	713
		714
	Summary	715
22	Developing Countries: Growth, Crisis, and Reform	720
	Income, Wealth, and Growth in the World Economy	721
	The Gap between Rich and Poor	721
	Has the World Income Gap Narrowed Over Time?	722
	The Importance of Developing Countries for Global Growth	724
	Structural Features of Developing Countries	725
	BOX: The Commodity Supercycle	727
	Developing-Country Borrowing and Debt	730
	The Economics of Financial Inflows to Developing Countries	731
	The Problem of Default	732
	Alternative Forms of Financial Inflow	734
	The Problem of "Original Sin"	735
	The Debt Crisis of the 1980s	737
	Reforms, Capital Inflows, and the Return of Crisis	738
	East Asia: Success and Crisis	741
	The East Asian Economic Miracle	742
	BOX: Why Have Developing Countries Accumulated Such High Levels	
	of International Reserves?	742

Contents

Asian Weaknesses	744
BOX: What Did East Asia Do Right?	746
The Asian Financial Crisis	747
Lessons of Developing-Country Crises	748
Reforming the World's Financial "Architecture"	749
Capital Mobility and the Trilemma of the Exchange Rate Regime	750
"Prophylactic" Measures	752
Coping with Crisis	753
Understanding Global Capital Flows and the Global Distribution of Income:	
Is Geography Destiny?	754
BOX: Capital Paradoxes	755
Summary	759
Mathematical Postscripts	764
Postscript to Chapter 5: The Factor-Proportion Model	764
Factor Prices and Costs	764
Goods Prices and Factor Prices	766
Factor Supplies and Outputs	767
Postscript to Chapter 6: The Trading World Economy	768
Supply, Demand, and Equilibrium	768
Supply, Demand, and the Stability of Equilibrium	770
Effects of Changes in Supply and Demand Economic Growth	772
A Transfer of Income	772 773
A Tariff	773
Postscript to Chapter 8: The Monopolistic Competition Model	776
Postscript to Chapter 30: File Monopoistic Competition Model Postscript to Chapter 20: Risk Aversion and International Portfolio Diversification	778
An Analytical Derivation of the Optimal Portfolio	778
A Diagrammatic Derivation of the Optimal Portfolio	779
The Effects of Changing Rates of Return	781
The Breek of Changing Pares of Relative	, 01
Index	785
Credits	C-1
ONLINE APPENDICES (www.pearsonglobaleditions. com/Krugman)	
Appendix A to Chapter 6: International Transfers of Income and the Terms of Trade	
The Transfer Problem	
Effects of a Transfer on the Terms of Trade	
Presumptions about the Terms of Trade Effects of Transfers	
Appendix B to Chapter 6: Representing International Equilibrium with Offer Curves	
Deriving a Country's Offer Curve	
International Equilibrium	
Appendix A to Chapter 9: Tariff Analysis in General Equilibrium	
A Tariff in a Small Country	
A Tariff in a Large Country	
Appendix A to Chapter 17: The <i>IS-LM</i> Model and the <i>DD-AA</i> Model	
Appendix A to Chapter 18: The Monetary Approach to the Balance of Payments	