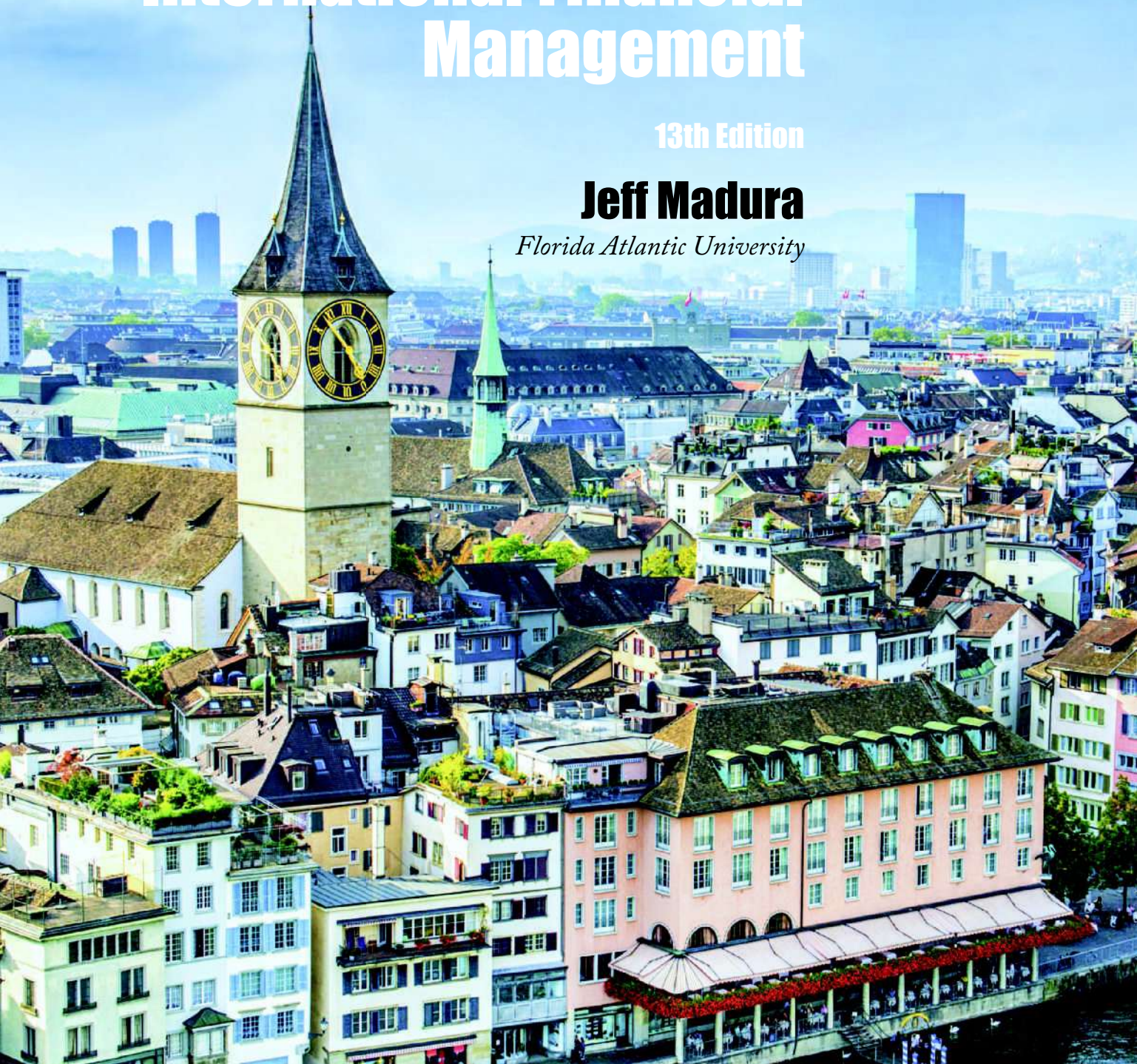


International Financial Management

13th Edition

Jeff Madura

Florida Atlantic University



 CENGAGE
Learning®

Australia • Brazil • Mexico • Singapore • United Kingdom • United States

Copyright 2018 Cengage Learning. All Rights Reserved. May not be copied, scanned, or duplicated, in whole or in part. WCN 02-200-203

Brief Contents

PART 1: The International Financial Environment	1
1	Multinational Financial Management: An Overview 3
2	International Flow of Funds 33
3	International Financial Markets 63
4	Exchange Rate Determination 103
5	Currency Derivatives 131
PART 2: Exchange Rate Behavior	185
6	Government Influence on Exchange Rates 187
7	International Arbitrage and Interest Rate Parity 227
8	Relationships among Inflation, Interest Rates, and Exchange Rates 257
PART 3: Exchange Rate Risk Management	295
9	Forecasting Exchange Rates 297
10	Measuring Exposure to Exchange Rate Fluctuations 325
11	Managing Transaction Exposure 355
12	Managing Economic Exposure and Translation Exposure 393
PART 4: Long-Term Asset and Liability Management	415
13	Direct Foreign Investment 417
14	Multinational Capital Budgeting 437
15	International Corporate Governance and Control 477
16	Country Risk Analysis 503
17	Multinational Capital Structure and Cost of Capital 527
18	Long-Term Debt Financing 551
PART 5: Short-Term Asset and Liability Management	575
19	Financing International Trade 577
20	Short-Term Financing 595
21	International Cash Management 611
Appendix A: Answers to Self-Test Questions 643	
Appendix B: Supplemental Cases 656	
Appendix C: Using Excel to Conduct Analysis 676	
Appendix D: International Investing Project 684	
Appendix E: Discussion in the Boardroom 687	
Appendix F: Use of Bitcoin to Conduct International Transactions 695	
Glossary 697	
Index 705	

Contents

Preface, xix

About the Author, xxvi

PART 1: The International Financial Environment **1**

1: MULTINATIONAL FINANCIAL MANAGEMENT: AN OVERVIEW **3**

1-1 Managing the MNC, 4

1-1a How Business Disciplines Are Used to Manage the MNC, 4

1-1b Agency Problems, 4

1-1c Management Structure of an MNC, 6

1-2 Why MNCs Pursue International Business, 8

1-2a Theory of Comparative Advantage, 8

1-2b Imperfect Markets Theory, 8

1-2c Product Cycle Theory, 9

1-3 Methods to Conduct International Business, 10

1-3a International Trade, 10

1-3b Licensing, 10

1-3c Franchising, 11

1-3d Joint Ventures, 11

1-3e Acquisitions of Existing Operations, 11

1-3f Establishment of New Foreign Subsidiaries, 12

1-3g Summary of Methods, 12

1-4 Valuation Model for an MNC, 13

1-4a Domestic Model, 14

1-4b Multinational Model, 14

1-4c Uncertainty Surrounding an MNC's Cash Flows, 17

1-4d Summary of International Effects, 20

1-4e How Uncertainty Affects the MNC's Cost of Capital, 21

1-5 Organization of the Text, 21

2: INTERNATIONAL FLOW OF FUNDS **33**

2-1 Balance of Payments, 33

2-1a Current Account, 33

2-1b Financial Account, 35

2-1c Capital Account, 36

2-1d Relationship between the Accounts, 37

2-2 Growth in International Trade, 37

2-2a Events That Increased Trade Volume, 37

2-2b Impact of Outsourcing on Trade, 39

2-2c Trade Volume among Countries, 40

2-2d Trend in U.S. Balance of Trade, 42

2-3 Factors Affecting International Trade Flows, 43

2-3a Cost of Labor, 43

- 2-3b Inflation, 44
- 2-3c National Income, 44
- 2-3d Credit Conditions, 44
- 2-3e Government Policies, 44
- 2-3f Exchange Rates, 48

2-4 International Capital Flows, 52

- 2-4a Factors Affecting Direct Foreign Investment, 52
- 2-4b Factors Affecting International Portfolio Investment, 53
- 2-4c Impact of International Capital Flows, 53

2-5 Agencies That Facilitate International Flows, 55

- 2-5a International Monetary Fund, 55
- 2-5b World Bank, 56
- 2-5c World Trade Organization, 57
- 2-5d International Finance Corporation, 57
- 2-5e International Development Association, 57
- 2-5f Bank for International Settlements, 57
- 2-5g OECD, 58
- 2-5h Regional Development Agencies, 58

3: INTERNATIONAL FINANCIAL MARKETS

63

3-1 Foreign Exchange Market, 63

- 3-1a History of Foreign Exchange, 63
- 3-1b Foreign Exchange Transactions, 64
- 3-1c Foreign Exchange Quotations, 70
- 3-1d Derivative Contracts in the Foreign Exchange Market, 74

3-2 International Money Market, 75

- 3-2a European and Asian Money Markets, 76
- 3-2b Money Market Interest Rates among Currencies, 76
- 3-2c Risk of International Money Market Securities, 77

3-3 International Credit Market, 78

- 3-3a Syndicated Loans in the Credit Market, 78
- 3-3b Bank Regulations in the Credit Market, 79
- 3-3c Impact of the Credit Crisis, 79

3-4 International Bond Market, 80

- 3-4a Eurobond Market, 80
- 3-4b Development of Other Bond Markets, 81
- 3-4c Risk of International Bonds, 81
- 3-4d Impact of the Greece Crisis, 82

3-5 International Stock Markets, 83

- 3-5a Issuance of Stock in Foreign Markets, 83
- 3-5b Issuance of Foreign Stock in the United States, 84
- 3-5c Comparing the Size among Stock Markets, 85
- 3-5d How Governance Varies among Stock Markets, 86
- 3-5e Integration of International Stock Markets and Credit Markets, 87

3-6 How Financial Markets Serve MNCs, 88

Appendix 3: Investing in International Financial Markets, 95

4: EXCHANGE RATE DETERMINATION

103

4-1 Measuring Exchange Rate Movements, 103

4-2 Exchange Rate Equilibrium, 104

- 4-2a Demand for a Currency, 105
- 4-2b Supply of a Currency for Sale, 106

- 4-2c Equilibrium Exchange Rate, 106
- 4-2d Change in the Equilibrium Exchange Rate, 107
- 4-3 Factors That Influence Exchange Rates, 108**
 - 4-3a Relative Inflation Rates, 109
 - 4-3b Relative Interest Rates, 110
 - 4-3c Relative Income Levels, 111
 - 4-3d Government Controls, 112
 - 4-3e Expectations, 112
 - 4-3f Interaction of Factors, 114
 - 4-3g Influence of Factors across Multiple Currency Markets, 115
 - 4-3h Impact of Liquidity on Exchange Rate Adjustments, 116
- 4-4 Movements in Cross Exchange Rates, 116**
- 4-5 Capitalizing on Expected Exchange Rate Movements, 117**
 - 4-5a Institutional Speculation Based on Expected Appreciation, 118
 - 4-5b Institutional Speculation Based on Expected Depreciation, 119
 - 4-5c Speculation by Individuals, 120
 - 4-5d The “Carry Trade”, 120

5: CURRENCY DERIVATIVES

131

- 5-1 Forward Market, 131**
 - 5-1a How MNCs Use Forward Contracts, 131
 - 5-1b Bank Quotations on Forward Rates, 132
 - 5-1c Premium or Discount on the Forward Rate, 133
 - 5-1d Movements in the Forward Rate over Time, 134
 - 5-1e Offsetting a Forward Contract, 134
 - 5-1f Using Forward Contracts for Swap Transactions, 135
 - 5-1g Non-Deliverable Forward Contracts, 135
- 5-2 Currency Futures Market, 136**
 - 5-2a Contract Specifications, 136
 - 5-2b Trading Currency Futures, 137
 - 5-2c Credit Risk of Currency Futures Contracts, 138
 - 5-2d Comparing Currency Futures and Forward Contracts, 138
 - 5-2e How MNCs Use Currency Futures, 139
 - 5-2f Speculation with Currency Futures, 141
- 5-3 Currency Options Market, 142**
 - 5-3a Currency Options Exchanges, 142
 - 5-3b Over-the-Counter Currency Options Market, 142
- 5-4 Currency Call Options, 142**
 - 5-4a Factors Affecting Currency Call Option Premiums, 143
 - 5-4b How MNCs Use Currency Call Options, 144
 - 5-4c Speculating with Currency Call Options, 145
- 5-5 Currency Put Options, 148**
 - 5-5a Factors Affecting Currency Put Option Premiums, 149
 - 5-5b How MNCs Use Currency Put Options, 149
 - 5-5c Speculating with Currency Put Options, 150
- 5-6 Other Forms of Currency Options, 152**
 - 5-6a Conditional Currency Options, 152
 - 5-6b European Currency Options, 154

Appendix 5A: Currency Option Pricing, 165

Appendix 5B: Currency Option Combinations, 169

Part 1 Integrative Problem: The International Financial Environment, 183

PART 2: Exchange Rate Behavior	185
6: GOVERNMENT INFLUENCE ON EXCHANGE RATES	187
6-1 Exchange Rate Systems, 187	
6-1a Fixed Exchange Rate System, 187	
6-1b Freely Floating Exchange Rate System, 189	
6-1c Managed Float Exchange Rate System, 190	
6-1d Pegged Exchange Rate System, 191	
6-1e Dollarization, 197	
6-1f Black Markets for Currencies, 197	
6-2 A Single European Currency, 198	
6-2a Monetary Policy in the Eurozone, 198	
6-2b Impact on Firms in the Eurozone, 199	
6-2c Impact on Financial Flows in the Eurozone, 199	
6-2d Impact of Eurozone Country Crisis on Other Eurozone Countries, 199	
6-2e Impact of a Country Abandoning the Euro, 202	
6-3 Direct Intervention, 203	
6-3a Reasons for Direct Intervention, 203	
6-3b The Direct Intervention Process, 204	
6-3c Direct Intervention as a Policy Tool, 207	
6-3d Speculating on Direct Intervention, 208	
6-4 Indirect Intervention, 209	
6-4a Government Control of Interest Rates, 209	
6-4b Government Use of Foreign Exchange Controls, 210	
Appendix 6: Government Intervention during the Asian Crisis, 218	
7: INTERNATIONAL ARBITRAGE AND INTEREST RATE PARITY	227
7-1 Locational Arbitrage, 227	
7-1a Gains from Locational Arbitrage, 228	
7-1b Realignment due to Locational Arbitrage, 228	
7-2 Triangular Arbitrage, 229	
7-2a Gains from Triangular Arbitrage, 230	
7-2b Realignment due to Triangular Arbitrage, 232	
7-3 Covered Interest Arbitrage, 232	
7-3a Covered Interest Arbitrage Process, 232	
7-3b Realignment due to Covered Interest Arbitrage, 234	
7-3c Arbitrage Example When Accounting for Spreads, 235	
7-3d Covered Interest Arbitrage by Non-U.S. Investors, 236	
7-3e Comparing Different Types of Arbitrage, 236	
7-4 Interest Rate Parity (IRP), 236	
7-4a Derivation of Interest Rate Parity, 237	
7-4b Determining the Forward Premium, 238	
7-4c Graphic Analysis of Interest Rate Parity, 240	
7-4d How to Test Whether Interest Rate Parity Holds, 242	
7-4e Does Interest Rate Parity Hold?, 242	
7-4f Considerations When Assessing Interest Rate Parity, 243	
7-5 Variation in Forward Premiums, 244	
7-5a Forward Premiums across Maturities, 244	
7-5b Changes in Forward Premiums over Time, 245	

8: RELATIONSHIPS AMONG INFLATION, INTEREST RATES, AND EXCHANGE RATES	257
8-1 Purchasing Power Parity (PPP), 257	
8-1a Interpretations of Purchasing Power Parity, 257	
8-1b Rationale behind Relative PPP Theory, 258	
8-1c Derivation of Purchasing Power Parity, 258	
8-1d Using PPP to Estimate Exchange Rate Effects, 259	
8-1e Graphic Analysis of Purchasing Power Parity, 260	
8-1f Testing the Purchasing Power Parity Theory, 263	
8-1g Does Purchasing Power Parity Exist?, 265	
8-2 International Fisher Effect (IFE), 266	
8-2a Deriving a Country's Expected Inflation Rate, 266	
8-2b Estimating the Expected Exchange Rate Movement, 267	
8-2c Implications of the International Fisher Effect, 267	
8-2d Derivation of the International Fisher Effect, 270	
8-2e Graphic Analysis of the International Fisher Effect, 272	
8-2f Testing the International Fisher Effect, 273	
8-2g Limitations of the IFE Theory, 274	
8-2h IFE Theory versus Reality, 275	
8-2i Comparison of IRP, PPP, and IFE Theories, 275	
Part 2 Integrative Problem: Exchange Rate Behavior, 286	
Midterm Self-Exam, 287	
 PART 3: Exchange Rate Risk Management	 295
9: FORECASTING EXCHANGE RATES	297
9-1 Why Firms Forecast Exchange Rates, 297	
9-2 Forecasting Techniques, 299	
9-2a Technical Forecasting, 299	
9-2b Fundamental Forecasting, 299	
9-2c Market-Based Forecasting, 303	
9-2d Mixed Forecasting, 306	
9-3 Assessment of Forecast Performance, 307	
9-3a Measurement of Forecast Error, 307	
9-3b Forecast Errors among Time Horizons, 308	
9-3c Forecast Errors over Time Periods, 308	
9-3d Forecast Errors among Currencies, 308	
9-3e Comparing Forecast Errors among Forecast Techniques, 309	
9-3f Graphic Evaluation of Forecast Bias, 309	
9-3g Statistical Test of Forecast Bias, 311	
9-3h Shifts in Forecast Bias over Time, 312	
9-4 Accounting for Uncertainty Surrounding Forecasts, 312	
9-4a Sensitivity Analysis Applied to Fundamental Forecasting, 313	
9-4b Interval Forecasts, 313	
 10: MEASURING EXPOSURE TO EXCHANGE RATE FLUCTUATIONS	 325
10-1 Relevance of Exchange Rate Risk, 325	
10-2 Transaction Exposure, 326	
10-2a Estimating "Net" Cash Flows in Each Currency, 328	
10-2b Transaction Exposure of an MNC's Portfolio, 329	

10-2c Transaction Exposure Based on Value at Risk, 332	
10-3 Economic Exposure, 335	
10-3a Exposure to Foreign Currency Depreciation, 336	
10-3b Exposure to Foreign Currency Appreciation, 337	
10-3c Measuring Economic Exposure, 337	
10-4 Translation Exposure, 340	
10-4a Determinants of Translation Exposure, 340	
10-4b Exposure of an MNC's Stock Price to Translation Effects, 342	
11: MANAGING TRANSACTION EXPOSURE	355
11-1 Policies for Hedging Transaction Exposure, 355	
11-1a Hedging Most of the Exposure, 355	
11-1b Selective Hedging, 355	
11-2 Hedging Exposure to Payables, 356	
11-2a Forward or Futures Hedge on Payables, 356	
11-2b Money Market Hedge on Payables, 357	
11-2c Call Option Hedge on Payables, 357	
11-2d Comparison of Techniques for Hedging Payables, 360	
11-2e Evaluating Past Decisions on Hedging Payables, 363	
11-3 Hedging Exposure to Receivables, 363	
11-3a Forward or Futures Hedge on Receivables, 363	
11-3b Money Market Hedge on Receivables, 364	
11-3c Put Option Hedge on Receivables, 364	
11-3d Comparison of Techniques for Hedging Receivables, 367	
11-3e Evaluating Past Decisions on Hedging Receivables, 370	
11-3f Summary of Hedging Techniques, 370	
11-4 Limitations of Hedging, 371	
11-4a Limitation of Hedging an Uncertain Payment, 371	
11-4b Limitation of Repeated Short-Term Hedging, 371	
11-5 Alternative Methods to Reduce Exchange Rate Risk, 373	
11-5a Leading and Lagging, 374	
11-5b Cross-Hedging, 374	
11-5c Currency Diversification, 374	
Appendix 11: Nontraditional Hedging Techniques, 388	
12: MANAGING ECONOMIC EXPOSURE AND TRANSLATION EXPOSURE	393
12-1 Managing Economic Exposure, 393	
12-1a Assessing Economic Exposure, 394	
12-1b Restructuring to Reduce Economic Exposure, 395	
12-1c Limitations of Restructuring Intended to Reduce Economic Exposure, 398	
12-2 A Case Study on Hedging Economic Exposure, 398	
12-2a Savor Co.'s Assessment of Economic Exposure, 398	
12-2b Possible Strategies for Hedging Economic Exposure, 400	
12-3 Managing Exposure to Fixed Assets, 401	
12-4 Managing Translation Exposure, 402	
12-4a Hedging Translation Exposure with Forward Contracts, 403	
12-4b Limitations of Hedging Translation Exposure, 403	
Part 3 Integrative Problem: Exchange Risk Management, 412	

PART 4: Long-Term Asset and Liability Management	415
13: DIRECT FOREIGN INVESTMENT	417
13-1 Motives for Direct Foreign Investment, 417	
13-1a Revenue-Related Motives, 417	
13-1b Cost-Related Motives, 418	
13-1c Comparing Benefits of DFI among Countries, 420	
13-2 Benefits of International Diversification, 421	
13-2a Diversification Analysis of International Projects, 422	
13-2b Diversification among Countries, 424	
13-3 Host Government Impact on DFI, 424	
13-3a Incentives to Encourage DFI, 425	
13-3b Barriers to DFI, 425	
13-4 Assessing Potential DFI, 427	
13-4a A Case Study of Assessing Potential DFI, 427	
13-4b Evaluating DFI Opportunities That Pass the First Screen, 429	
14: MULTINATIONAL CAPITAL BUDGETING	437
14-1 Subsidiary versus Parent Perspective, 437	
14-1a Tax Differentials, 437	
14-1b Restrictions on Remitted Earnings, 438	
14-1c Exchange Rate Movements, 438	
14-1d Summary of Factors That Distinguish the Parent Perspective, 438	
14-2 Input for Multinational Capital Budgeting, 439	
14-3 Multinational Capital Budgeting Example, 441	
14-3a Background, 441	
14-3b Analysis, 442	
14-4 Other Factors to Consider, 443	
14-4a Exchange Rate Fluctuations, 444	
14-4b Inflation, 447	
14-4c Financing Arrangement, 447	
14-4d Blocked Funds, 450	
14-4e Uncertain Salvage Value, 451	
14-4f Impact of Project on Prevailing Cash Flows, 452	
14-4g Host Government Incentives, 453	
14-4h Real Options, 453	
14-5 Adjusting Project Assessment for Risk, 454	
14-5a Risk-Adjusted Discount Rate, 454	
14-5b Sensitivity Analysis, 454	
14-5c Simulation, 457	
Appendix 14: Incorporating International Tax Law in Multinational Capital Budgeting, 469	
15: INTERNATIONAL CORPORATE GOVERNANCE AND CONTROL	477
15-1 International Corporate Governance, 477	
15-1a Governance by Board Members, 477	
15-1b Governance by Institutional Investors, 478	
15-1c Governance by Shareholder Activists, 478	
15-2 International Corporate Control, 479	
15-2a Motives for International Acquisitions, 479	
15-2b Trends in International Acquisitions, 479	

15-2c Barriers to International Corporate Control, 480	
15-2d Model for Valuing a Foreign Target, 481	
15-3 Factors Affecting Target Valuation, 482	
15-3a Target-Specific Factors, 482	
15-3b Country-Specific Factors, 483	
15-4 A Case Study of Valuing a Foreign Target, 484	
15-4a International Screening Process, 484	
15-4b Estimating the Target's Value, 485	
15-4c Uncertainty Surrounding the Target's Valuation, 487	
15-4d Changes in Market Valuation of Target over Time, 487	
15-5 Disparity in Foreign Target Valuations, 488	
15-5a Expected Cash Flows of the Foreign Target, 488	
15-5b Exchange Rate Effects on Remitted Earnings, 489	
15-5c Required Return of Acquirer, 489	
15-6 Other Corporate Control Decisions, 490	
15-6a International Partial Acquisitions, 490	
15-6b International Acquisitions of Privatized Businesses, 490	
15-6c International Divestitures, 491	
15-7 Corporate Control Decisions as Real Options, 492	
15-7a Call Option on Real Assets, 492	
15-7b Put Option on Real Assets, 493	
16: COUNTRY RISK ANALYSIS	503
16-1 Country Risk Characteristics, 503	
16-1a Political Risk Characteristics, 503	
16-1b Financial Risk Characteristics, 506	
16-2 Measuring Country Risk, 507	
16-2a Techniques for Assessing Country Risk, 508	
16-2b Deriving a Country Risk Rating, 509	
16-2c Comparing Risk Ratings among Countries, 511	
16-3 Incorporating Risk in Capital Budgeting, 512	
16-3a Adjustment of the Discount Rate, 512	
16-3b Adjustment of the Estimated Cash Flows, 512	
16-3c Analysis of Existing Projects, 515	
16-4 Preventing Host Government Takeovers, 516	
16-4a Use a Short-Term Horizon, 516	
16-4b Rely on Unique Supplies or Technology, 516	
16-4c Hire Local Labor, 516	
16-4d Borrow Local Funds, 516	
16-4e Purchase Insurance, 517	
16-4f Use Project Finance, 517	
17: MULTINATIONAL CAPITAL STRUCTURE AND COST OF CAPITAL	527
17-1 Components of Capital, 527	
17-1a Retained Earnings, 527	
17-1b Sources of Debt, 528	
17-1c External Sources of Equity, 529	
17-2 The MNC's Capital Structure Decision, 530	
17-2a Influence of Corporate Characteristics, 531	
17-2b Influence of Host Country Characteristics, 531	
17-2c Response to Changing Country Characteristics, 532	

17-3 Subsidiary versus Parent Capital Structure Decisions, 533*17-3a Impact of Increased Subsidiary Debt Financing, 533**17-3b Impact of Reduced Subsidiary Debt Financing, 533**17-3c Limitations in Offsetting a Subsidiary's Leverage, 534***17-4 Multinational Cost of Capital, 534***17-4a MNC's Cost of Debt, 534**17-4b MNC's Cost of Equity, 534**17-4c Estimating an MNC's Cost of Capital, 535**17-4d Comparing Costs of Debt and Equity, 535**17-4e Cost of Capital for MNCs versus Domestic Firms, 536**17-4f Cost-of-Equity Comparison Using the CAPM, 537***17-5 Cost of Capital across Countries, 539***17-5a Country Differences in the Cost of Debt, 540**17-5b Country Differences in the Cost of Equity, 541***18: LONG-TERM DEBT FINANCING****551****18-1 Debt Denomination Decision of Foreign Subsidiaries, 551***18-1a Foreign Subsidiary Borrows Its Local Currency, 551**18-1b Foreign Subsidiary Borrows Dollars, 553***18-2 Debt Denomination Analysis: A Case Study, 553***18-2a Identifying Debt Denomination Alternatives, 553**18-2b Analyzing Debt Denomination Alternatives, 554***18-3 Loans Facilitate Financing, 555***18-3a Using Currency Swaps, 555**18-3b Using Parallel Loans, 556***18-4 Debt Maturity Decision, 559***18-4a Assessment of the Yield Curve, 559**18-4b Financing Costs of Loans with Different Maturities, 559***18-5 Fixed versus Floating Rate Debt Decision, 560***18-5a Financing Costs of Fixed versus Floating Rate Loans, 560**18-5b Hedging Interest Payments with Interest Rate Swaps, 561***Part 4 Integrative Problem: Long-Term Asset and Liability Management, 572****PART 5: Short-Term Asset and Liability Management****575****19: FINANCING INTERNATIONAL TRADE****577****19-1 Payment Methods for International Trade, 577***19-1a Prepayment, 577**19-1b Letters of Credit, 578**19-1c Drafts, 580**19-1d Consignment, 581**19-1e Open Account, 581**19-1f Impact of the Credit Crisis on Payment Methods, 581***19-2 Trade Finance Methods, 581***19-2a Accounts Receivable Financing, 582**19-2b Factoring, 582**19-2c Letters of Credit (L/Cs), 583**19-2d Banker's Acceptances, 583**19-2e Medium-Term Capital Goods Financing (Forfaiting), 586**19-2f Countertrade, 586*

19-3 Agencies That Facilitate International Trade, 587	
19-3a Export-Import Bank of the United States, 587	
19-3b Private Export Funding Corporation, 589	
19-3c Overseas Private Investment Corporation, 589	
20: SHORT-TERM FINANCING	595
20-1 Sources of Foreign Financing, 595	
20-1a Internal Short-Term Financing, 595	
20-1b External Short-Term Financing, 596	
20-1c Access to Funding during a Credit Crisis, 596	
20-2 Financing with a Foreign Currency, 596	
20-2a Motive for Financing with a Foreign Currency, 597	
20-2b Potential Cost Savings from Financing with a Foreign Currency, 597	
20-2c Risk of Financing with a Foreign Currency, 598	
20-2d Hedging the Foreign Currency Borrowed, 599	
20-2e Reliance on the Forward Rate for Forecasting, 600	
20-2f Use of Probability Distributions to Enhance the Financing Decision, 601	
20-3 Financing with a Portfolio of Currencies, 602	
21: INTERNATIONAL CASH MANAGEMENT	611
21-1 Multinational Working Capital Management, 611	
21-1a Subsidiary Expenses, 611	
21-1b Subsidiary Revenue, 612	
21-1c Subsidiary Dividend Payments, 612	
21-1d Subsidiary Liquidity Management, 612	
21-2 Centralized Cash Management, 613	
21-2a Accommodating Cash Shortages, 614	
21-3 Optimizing Cash Flows, 614	
21-3a Accelerating Cash Inflows, 614	
21-3b Minimizing Currency Conversion Costs, 615	
21-3c Managing Blocked Funds, 617	
21-3d Managing Intersubsidiary Cash Transfers, 617	
21-3e Complications in Optimizing Cash Flow, 617	
21-4 Investing Excess Cash, 618	
21-4a Benefits of Investing in a Foreign Currency, 618	
21-4b Risk of Investing in a Foreign Currency, 619	
21-4c Hedging the Investment in a Foreign Currency, 620	
21-4d Break-Even Point from Investing in a Foreign Currency, 621	
21-4e Using a Probability Distribution to Enhance the Investment Decision, 622	
21-4f Investing in a Portfolio of Currencies, 623	
21-4g Dynamic Hedging, 625	
Part 5 Integrative Problem: Short-Term Asset and Liability Management, 631	
Final Self-Exam, 633	
Appendix A: Answers to Self-Test Questions, 643	
Appendix B: Supplemental Cases, 656	
Appendix C: Using Excel to Conduct Analysis, 676	
Appendix D: International Investing Project, 684	
Appendix E: Discussion in the Boardroom, 687	
Appendix F: Use of Bitcoin to Conduct International Transactions, 695	
Glossary, 697	
Index, 705	