

Contents

Preface, xvii

About the Author, xxiii

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, 10

1-3d Joint Ventures, 10

1-3e Acquisitions of Existing Operations, 11

1-3f Establishment of New Foreign Subsidiaries, 11

1-3g Summary of Methods, 12

1-4 Valuation Model for an MNC, 13

1-4a Domestic Valuation Model, 13

1-4b Multinational Valuation Model, 14

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

1-4d How Uncertainty Affects the MNC's Cost of Capital, 20

1-5 Organization of the Text, 20

2: INTERNATIONAL FLOW OF FUNDS

31

2-1 Balance of Payments, 31

2-1a Current Account, 31

2-1b Financial Account, 32

2-1c Capital Account, 33

2-2 Growth in International Trade, 34

2-2a Events That Increased Trade Volume, 34

2-2b Impact of Outsourcing on Trade, 36

2-2c Trade Volume among Countries, 37

2-2d Trend in U.S. Balance of Trade, 37

2-3 Factors Affecting International Trade Flows, 39

2-3a Cost of Labor, 40

2-3b Inflation, 40

2-3c National Income, 40

| | |
|--|-----------|
| 2-3d Credit Conditions, 41 | |
| 2-3e Government Policies, 41 | |
| 2-3f Exchange Rates, 46 | |
| 2-4 International Capital Flows, 49 | |
| 2-4a Factors Affecting Direct Foreign Investment, 49 | |
| 2-4b Factors Affecting International Portfolio Investment, 50 | |
| 2-4c Impact of International Capital Flows, 50 | |
| 2-5 Agencies that Facilitate International Flows, 51 | |
| 2-5a International Monetary Fund, 52 | |
| 2-5b World Bank, 53 | |
| 2-5c World Trade Organization, 53 | |
| 2-5d International Finance Corporation, 54 | |
| 2-5e International Development Association, 54 | |
| 2-5f Bank for International Settlements, 54 | |
| 2-5g OECD, 54 | |
| 2-5h Regional Development Agencies, 54 | |
| | |
| 3: INTERNATIONAL FINANCIAL MARKETS | 61 |
| 3-1 Foreign Exchange Market, 61 | |
| 3-1a History of Foreign Exchange, 62 | |
| 3-1b Foreign Exchange Transactions, 63 | |
| 3-1c Foreign Exchange Quotations, 68 | |
| 3-1d Derivative Contracts in the Foreign Exchange Market, 72 | |
| 3-2 International Money Market, 73 | |
| 3-2a Dollar-Denominated Bank Accounts in Europe and Asia, 74 | |
| 3-2b Money Market Interest Rates among Currencies, 74 | |
| 3-2c Risk of International Money Market Securities, 75 | |
| 3-3 International Credit Market, 76 | |
| 3-3a Syndicated Loans in the Credit Market, 76 | |
| 3-4 International Bond Market, 76 | |
| 3-4a Eurobond Market, 77 | |
| 3-4b Development of Other Bond Markets, 78 | |
| 3-4c Risk of International Bonds, 78 | |
| 3-5 International Stock Markets, 79 | |
| 3-5a Issuance of Stock in Foreign Markets, 79 | |
| 3-5b Issuance of Foreign Stock in the United States, 79 | |
| 3-5c How Governance Varies among Stock Markets, 81 | |
| 3-5d Integration of International Stock Markets and Credit Markets, 82 | |
| 3-6 International Financial Market Crises, 82 | |
| 3-6a Contagion Effects, 83 | |
| 3-7 How Financial Markets Serve MNCs, 85 | |
| Appendix 3: Investing in International Financial Markets, 93 | |

4: EXCHANGE RATE DETERMINATION

101

| | |
|---|--|
| 4-1 Measuring Exchange Rate Movements, 101 | |
| 4-2 Exchange Rate Equilibrium, 102 | |
| 4-2a Demand for a Currency, 103 | |
| 4-2b Supply of a Currency for Sale, 104 | |
| 4-2c Equilibrium Exchange Rate, 105 | |
| 4-2d Change in the Equilibrium Exchange Rate, 106 | |

- 4-3 Factors That Influence Exchange Rates, 108**
 - 4-3a Relative Inflation Rates, 108
 - 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, 113
 - 4-3g Influence of Factors across Multiple Currency Markets, 115
 - 4-3h Impact of Liquidity on Exchange Rate Adjustments, 115

- 4-4 Movements in Cross Exchange Rates, 116**

- 4-5 Capitalizing on Expected Exchange Rate Movements, 118**

- 4-5a Institutional Speculation Based on Expected Appreciation, 118
- 4-5b Institutional Speculation Based on Expected Depreciation, 119
- 4-5c Speculation by Individuals, 119
- 4-5d Carry Trades, 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, 140

- 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, 197 | |
| 6-2a Monetary Policy in the Eurozone, 198 | |
| 6-2b Impact on Firms in the Eurozone, 198 | |
| 6-2c Impact on Financial Flows in the Eurozone, 199 | |
| 6-2d Impact of a Eurozone Country Crisis on Other Eurozone Countries, 199 | |
| 6-2e Impact of a Country Abandoning the Euro, 201 | |
| 6-3 Direct Intervention, 202 | |
| 6-3a Reasons for Direct Intervention, 202 | |
| 6-3b The Direct Intervention Process, 203 | |
| 6-3c Direct Intervention as a Policy Tool, 205 | |
| 6-3d Speculating on Direct Intervention, 206 | |
| 6-4 Indirect Intervention, 208 | |
| 6-4a Government Control of Interest Rates, 208 | |
| 6-4b Government Use of Foreign Exchange Controls, 209 | |
| Appendix 6: Government Intervention during the Asian Crisis, 217 | |
| 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, 233 | |
| 7-3a Covered Interest Arbitrage Process, 233 | |
| 7-3b Realignment Due to Covered Interest Arbitrage, 234 | |
| 7-3c Arbitrage Example When Accounting for Spreads, 236 | |
| 7-3d Covered Interest Arbitrage by Non-U.S. Investors, 236 | |
| 7-3e Comparing Different Types of Arbitrage, 237 | |
| 7-4 Interest Rate Parity (IRP), 238 | |
| 7-4a Derivation of Interest Rate Parity, 238 | |
| 7-4b Determining the Forward Premium, 239 | |
| 7-4c Graphic Analysis of Interest Rate Parity, 241 | |
| 7-4d Does Interest Rate Parity Hold?, 244 | |
| 7-4e Considerations When Assessing Interest Rate Parity, 244 | |
| 7-5 Variation in Forward Premiums, 245 | |
| 7-5a Forward Premiums across Maturities, 245 | |
| 7-5b Changes in Forward Premiums over Time, 246 | |

| | |
|---|----------------|
| 8: RELATIONSHIPS AMONG INFLATION, INTEREST RATES, AND EXCHANGE RATES | 259 |
| 8-1 Purchasing Power Parity (PPP), 259 | |
| 8-1a Interpretations of Purchasing Power Parity, 259 | |
| 8-1b Derivation of Purchasing Power Parity, 261 | |
| 8-1c Using PPP to Estimate Exchange Rate Effects, 262 | |
| 8-1d Graphic Analysis of Purchasing Power Parity, 263 | |
| 8-1e Testing the Purchasing Power Parity Theory, 266 | |
| 8-1f Why Deviations from PPP Exist, 267 | |
| 8-2 International Fisher Effect, 268 | |
| 8-2a Deriving a Country's Expected Inflation Rate, 268 | |
| 8-2b Estimating the Expected Exchange Rate Movement, 270 | |
| 8-2c Implications of the International Fisher Effect, 270 | |
| 8-2d Derivation of the International Fisher Effect, 272 | |
| 8-2e Graphic Analysis of the International Fisher Effect, 275 | |
| 8-2f Testing the International Fisher Effect, 276 | |
| 8-2g Limitations of IFE Theory, 277 | |
| 8-2h Comparison of IRP, PPP, and IFE Theories, 277 | |
| Part 2 Integrative Problem: Exchange Rate Behavior, 288 | |
| Midterm Self-Exam, 289 | |
| PART 3: Exchange Rate Risk Management | 297 |
| 9: FORECASTING EXCHANGE RATES | 299 |
| 9-1 Why Firms Forecast Exchange Rates, 299 | |
| 9-2 Forecasting Techniques, 301 | |
| 9-2a Technical Forecasting, 301 | |
| 9-2b Fundamental Forecasting, 301 | |
| 9-2c Market-Based Forecasting, 305 | |
| 9-2d Mixed Forecasting, 307 | |
| 9-3 Assessment of Forecast Performance, 309 | |
| 9-3a Measurement of Forecast Error, 309 | |
| 9-3b Forecast Errors among Time Horizons, 309 | |
| 9-3c Forecast Errors among Currencies, 310 | |
| 9-3d Comparing Forecast Errors among Forecast Techniques, 310 | |
| 9-3e Graphic Evaluation of Forecast Bias, 311 | |
| 9-3f Statistical Test of Forecast Bias, 313 | |
| 9-3g Shifts in Forecast Bias over Time, 313 | |
| 9-4 Accounting for Uncertainty Surrounding Forecasts, 313 | |
| 9-4a Sensitivity Analysis Applied to Fundamental Forecasting, 314 | |
| 9-4b Interval Forecasts, 314 | |
| 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, 331 | |

10-3 Economic Exposure, 334

10-3a Exposure to Foreign Currency Depreciation, 335

10-3b Exposure to Foreign Currency Appreciation, 336

10-3c Measuring Economic Exposure, 336

10-4 Translation Exposure, 339

10-4a Determinants of Translation Exposure, 339

10-4b Exposure of an MNC's Stock Price to Translation Effects, 341

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, 358

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, 364

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, 373

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, 393

12-1b Restructuring to Reduce Economic Exposure, 394

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 Using a Financing Strategy to Hedge Economic Exposure, 400

12-3 Managing Exposure to Fixed Assets, 400

12-4 Managing Translation Exposure, 401

12-4a Hedging Translation Exposure with Forward Contracts, 401

12-4b Limitations of Hedging Translation Exposure, 402

Part 3 Integrative Problem: Exchange Risk Management, 411

| | |
|---|------------|
| PART 4: Long-Term Asset and Liability Management | 413 |
| 13: DIRECT FOREIGN INVESTMENT | 415 |
| 13-1 Motives for Direct Foreign Investment, 415 | |
| 13-1a Revenue-Related Motives, 415 | |
| 13-1b Cost-Related Motives, 416 | |
| 13-1c Comparing Benefits of DFI among Countries, 418 | |
| 13-2 Benefits of International Diversification, 418 | |
| 13-2a Diversification Analysis of International Projects, 420 | |
| 13-3 Host Government Impact on DFI, 422 | |
| 13-3a Incentives to Encourage DFI, 422 | |
| 13-3b Barriers to DFI, 422 | |
| 13-4 Assessing the Feasibility of Potential DFI, 424 | |
| 13-4a A Case Study of Assessing Potential DFI, 424 | |
| 13-4b Evaluating DFI Opportunities That Pass the First Screen, 426 | |
| 14: MULTINATIONAL CAPITAL BUDGETING | 435 |
| 14-1 Subsidiary versus Parent Perspective, 435 | |
| 14-1a Tax Differentials, 435 | |
| 14-1b Restrictions on Remitted Earnings, 436 | |
| 14-1c Exchange Rate Movements, 436 | |
| 14-1d Summary of Factors That Distinguish the Parent Perspective, 436 | |
| 14-2 Input for Multinational Capital Budgeting, 437 | |
| 14-3 Multinational Capital Budgeting Example, 439 | |
| 14-3a Background, 439 | |
| 14-3b Analysis, 440 | |
| 14-4 Other Factors to Consider, 442 | |
| 14-4a Exchange Rate Fluctuations, 442 | |
| 14-4b Inflation, 445 | |
| 14-4c Financing Arrangement, 446 | |
| 14-4d Blocked Funds, 448 | |
| 14-4e Uncertain Salvage Value, 450 | |
| 14-4f Impact of Project on Prevailing Cash Flows, 451 | |
| 14-4g Host Government Incentives, 451 | |
| 14-4h Real Options, 452 | |
| 14-5 Adjusting Project Assessment for Risk, 452 | |
| 14-5a Risk-Adjusted Discount Rate, 452 | |
| 14-5b Sensitivity Analysis, 453 | |
| 14-5c Simulation, 456 | |
| Appendix 14: Incorporating International Tax Law in Multinational Capital Budgeting, 468 | |
| 15: INTERNATIONAL CORPORATE GOVERNANCE AND CONTROL | 475 |
| 15-1 International Corporate Governance, 475 | |
| 15-1a Governance by Board Members, 475 | |
| 15-1b Governance by Institutional Investors, 476 | |
| 15-1c Governance by Shareholder Activists, 476 | |

15-2 International Corporate Control, 47715-2a *Motives for International Acquisitions*, 47715-2b *International Acquisition Process*, 47715-2c *Barriers to International Corporate Control*, 47815-2d *Model for Valuing a Foreign Target*, 478**15-3 Factors Affecting Target Valuation, 480**15-3a *Target-Specific Factors*, 48015-3b *Country-Specific Factors*, 481**15-4 A Case Study of Valuing a Foreign Target, 482**15-4a *International Screening Process*, 48215-4b *Estimating the Target's Value*, 48315-4c *Uncertainty Surrounding the Target's Valuation*, 48415-4d *Changes in Market Valuation of the Target over Time*, 485**15-5 Disparity in Foreign Target Valuations, 486**15-5a *Expected Cash Flows of the Foreign Target*, 48615-5b *Exchange Rate Effects on Remitted Earnings*, 48615-5c *Required Return of Acquirer*, 487**15-6 Other Corporate Control Decisions, 487**15-6a *International Partial Acquisitions*, 48715-6b *International Acquisitions of Privatized Businesses*, 48815-6c *International Divestitures*, 488**15-7 Corporate Control Decisions as Real Options, 490**15-7a *Call Option on Real Assets*, 49015-7b *Put Option on Real Assets*, 491**16: COUNTRY RISK ANALYSIS**

501

16-1 Country Risk Characteristics, 50116-1a *Political Risk Characteristics*, 50116-1b *Financial Risk Characteristics*, 504**16-2 Measuring Country Risk, 505**16-2a *Techniques for Assessing Country Risk*, 50616-2b *Deriving a Country Risk Rating*, 50716-2c *Comparing Risk Ratings among Countries*, 509**16-3 Incorporating Risk in Capital Budgeting, 510**16-3a *Adjustment of the Discount Rate*, 51016-3b *Adjustment of the Estimated Cash Flows*, 51016-3c *Analysis of Existing Projects*, 513**16-4 Preventing Host Government Takeovers, 514**16-4a *Use a Short-Term Horizon*, 51416-4b *Rely on Unique Supplies or Technology*, 51416-4c *Hire Local Labor*, 51416-4d *Borrow Local Funds*, 51416-4e *Purchase Insurance*, 51516-4f *Use Project Finance*, 515**17: MULTINATIONAL CAPITAL STRUCTURE AND COST OF CAPITAL**

525

17-1 Components of Capital, 52517-1a *Retained Earnings*, 52517-1b *Sources of Debt*, 52617-1c *External Sources of Equity*, 527**17-2 The MNC's Capital Structure Decision, 528**17-2a *Influence of Corporate Characteristics*, 529

| | |
|--|------------|
| 17-2b Influence of Host Country Characteristics, 529 | |
| 17-2c Response to Changing Country Characteristics, 530 | |
| 17-3 Subsidiary versus Parent Capital Structure Decisions, 531 | |
| 17-3a Impact of Increased Subsidiary Debt Financing, 531 | |
| 17-3b Impact of Reduced Subsidiary Debt Financing, 531 | |
| 17-3c Limitations in Offsetting a Subsidiary's Leverage, 532 | |
| 17-4 Multinational Cost of Capital, 532 | |
| 17-4a MNC's Cost of Debt, 532 | |
| 17-4b MNC's Cost of Equity, 532 | |
| 17-4c Estimating an MNC's Cost of Capital, 533 | |
| 17-4d Comparing Costs of Debt and Equity, 533 | |
| 17-4e Cost of Capital for MNCs versus Domestic Firms, 534 | |
| 17-4f Cost-of-Equity Comparison Using the CAPM, 536 | |
| 17-5 Cost of Capital Across Countries, 537 | |
| 17-5a Country Differences in the Cost of Debt, 538 | |
| 17-5b Country Differences in the Cost of Equity, 540 | |
| 18: LONG-TERM DEBT FINANCING | 551 |
| 18-1 Debt Denomination Decisions 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 Analyzing Debt Denomination Alternatives, 554 | |
| 18-3 Strategies to Hedge Foreign 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, 560 | |
| 18-5 Fixed-Rate versus Floating-Rate Debt Decision, 561 | |
| 18-5a Financing Costs of Fixed-Rate versus Floating-Rate Loans, 561 | |
| 18-5b Hedging Interest Payments with Interest Rate Swaps, 562 | |
| Part 4 Integrative Problem: Long-Term Asset and Liability Management, 573 | |
| 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, 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

20-2 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, 612

21-2a Accommodating Cash Shortages, 613

21-3 Optimizing Cash Flows, 614

21-3a Accelerating Cash Inflows, 614

21-3b Minimizing Currency Conversion Costs, 614

21-3c Managing Blocked Funds, 616

21-3d Managing Intersubsidiary Cash Transfers, 617

21-4 Investing Excess Cash, 617

21-4a Benefits of Investing in a Foreign Currency, 617

21-4b Risk of Investing in a Foreign Currency, 618

21-4c Hedging the Investment in a Foreign Currency, 619

21-4d Break-Even Point from Investing in a Foreign Currency, 620

21-4e Using a Probability Distribution to Enhance the Investment Decision, 621

21-4f Investing in a Portfolio of Currencies, 622

21-4g Dynamic Hedging, 624

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, 698

Index, 705