International Financial Management

Cheol S. Eun

Eighth Edition

Georgia Institute of Technology

E

0 D

Bruce G. Resnick

Wake Forest University



Contents in Brief

PART ONE	Foundations of International Financial Management
	1 Globalization and the Multinational Firm, 4
	2 International Monetary System, 27
	3 Balance of Payments, 62
	4 Corporate Governance Around the World, 82
PART TWO	The Foreign Exchange Market, Exchange Rate
	Determination, and Currency Derivatives
	5 The Market for Foreign Exchange, 112
	6 International Parity Relationships and Forecasting Foreign
	Exchange Rates, 140
	7 Futures and Options on Foreign Exchange, 173
PART THREE	Foreign Exchange Exposure and Management
	8 Management of Transaction Exposure, 198
	9 Management of Economic Exposure, 225
	10 Management of Translation Exposure, 244
PART FOUR	World Financial Markets and Institutions
	11 International Banking and Money Market, 264
	12 International Bond Market, 304
	13 International Equity Markets, 323
	14 Interest Rate and Currency Swaps, 347
	15 International Portfolio Investment, 365
DART CIVE	Financial Management of the Multinational Firm
PART FIVE	
	16 Foreign Direct Investment and Cross-Border Acquisitions, 404
	17 International Capital Structure and the Cost of Capital, 431
	18 International Capital Budgeting, 458
	19 Multinational Cash Management, 477
	20 International Trade Finance, 488
	21 International Tax Environment and Transfer Pricing, 499
	Glossary, 521
	Index, 528
	much, 520

Contents

PART ONE

Foundations of International Financial Management

Globalization and the Multinational Firm, 4

What's Special about International Finance?, 5
Foreign Exchange and Political Risks, 5
Market Imperfections, 6
Expanded Opportunity Set, 7
Goals for International Financial Management, 8
Globalization of the World Economy:
Major Trends and Developments, 10
Emergence of Globalized Financial Markets, 10
Emergence of the Euro as a Global Currency, 11

Europe's Sovereign Debt Crisis of 2010, 12
Trade Liberalization and Economic Integration, 13
Privatization, 16
Global Financial Crisis of 2008–2009, 17
Multinational Corporations, 19
Summary, 21
MINI CASE: Nike and Sweatshop Labor, 23
APPENDIX 1A: Gain from Trade: The Theory

CHAPTER 2 International Monetary System, 27

Evolution of the International Monetary System, 27 Bimetallism: Before 1875, 28 Classical Gold Standard: 1875–1914, 28 Interwar Period: 1915–1944, 30 Bretton Woods System: 1945–1972, 31 The Flexible Exchange Rate Regime: 1973–Present, 34 The Current Exchange Rate Arrangements, 36

European Monetary System, 41
The Euro and the European Monetary Union, 43
A Brief History of the Euro, 43

What Are the Benefits of Monetary Union?, 44

Costs of Monetary Union, 46

Prospects of the Euro: Some Critical Questions, 47

INTERNATIONAL FINANCE IN PRACTICE: Mundell

Wins Nobel Prize in Economics, 48
The Mexican Peso Crisis, 50
The Asian Currency Crisis, 51
Origins of the Asian Currency Crisis, 52
Lessons from the Asian Currency Crisis, 54
The Argentine Peso Crisis, 55

Fixed versus Flexible Exchange Rate Regimes, 56 Summary, 58

MINI CASE: Grexit or Not? 60

of Comparative Advantage, 25

Balance of Payments, 62

Balance-of-Payments Accounting, 62 Balance-of-Payments Accounts, 64

The Current Account, 64
The Capital Account, 66
Statistical Discrepancy, 68
Official Reserve Account, 69
The Balance-of-Payments Identity, 72

Balance-of-Payments Trends in Major Countries, 72

 $\ensuremath{\mathsf{INTERNATIONAL}}$ finance in practice: The Dollar and the

Deficit, 74 Summary, 77

MINI CASE: Mexico's Balance-of-Payments Problem, 80

APPENDIX 3a: The Relationship Between Balance of Payments and National Income Accounting, 81

CHAPTER 4 Corporate Governance Around the World, 82

Governance of the Public Corporation:

Key Issues, 83

The Agency Problem, 84

Remedies for the Agency Problem, 86

Board of Directors, 87

Incentive Contracts, 87

INTERNATIONAL FINANCE IN PRACTICE: When Boards

Are All in the Family, 88

Concentrated Ownership, 88

Accounting Transparency, 90

Debt, 90

Overseas Stock Listings, 90

Market for Corporate Control, 91

Law and Corporate Governance, 92

Consequences of Law, 95

Ownership and Control Pattern, 95

Private Benefits of Control, 99

Capital Markets and Valuation, 99

Corporate Governance Reform, 100

Objectives of Reform, 100

Political Dynamics, 101

The Sarbanes-Oxley Act, 101

The Cadbury Code of Best Practice, 102

The Dodd-Frank Act. 103

Summary, 104

MINI CASE: Parmalat: Europe's Enron, 107

PART TWO

The Foreign Exchange Market, Exchange Rate Determination, and Currency Derivatives

CHAPTER 5The Market for Foreign Exchange, 112

Function and Structure of the FX Market, 113

INTERNATIONAL FINANCE IN PRACTICE: The Mouse Takes Over the Floor, 114

FX Market Participants, 114

Correspondent Banking Relationships, 116

The Spot Market, 117

Spot Rate Quotations, 117

INTERNATIONAL FINANCE IN PRACTICE: Where Money Talks Very Loudly, 118

Cross-Exchange Rate Quotations, 122

Alternative Expressions for the

Cross-Exchange Rate, 123

The Bid-Ask Spread, 123

Spot FX Trading, 124

The Cross-Rate Trading Desk, 125

Triangular Arbitrage, 127

Spot Foreign Exchange Market

Microstructure, 127

The Forward Market, 129

Forward Rate Quotations, 129

Long and Short Forward Positions, 130

Non-Deliverable Forward Contracts, 130

Forward Cross-Exchange Rates, 130

Forward Premium, 132

Swap Transactions, 132

Exchange-Traded Currency

Funds, 135

Summary, 135

MINI CASE: Shrewsbury Herbal

Products, Ltd., 139

CHAPTER 6

International Parity Relationships and Forecasting Foreign Exchange Rates, 140 Interest Rate Parity, 140

Covered Interest Arbitrage, 142

Interest Rate Parity and Exchange Rate

Determination, 145

Currency Carry Trade, 146

Reasons for Deviations from Interest

Rate Parity, 147

Purchasing Power Parity, 149

PPP Deviations and the Real Exchange Rate, $\,151$

Evidence on Purchasing Power Parity, 151

INTERNATIONAL FINANCE IN PRACTICE: McCurrencies, 152

Fisher Effects, 156

Forecasting Exchange Rates, 158

Efficient Market Approach, 159

Fundamental Approach, 160

Technical Approach, 161

Performance of the Forecasters, 162

Summary, 166

MINI CASE: Turkish Lira and Purchasing

Power Parity, 171

APPENDIX 6A: Purchasing Power Parity and

Exchange Rate Determination, 172

CONTENTS xix

CHAPTER 7

Futures and Options on Foreign Exchange, 173

Futures Contracts: Some Preliminaries, 174 Currency Futures Markets, 176

INTERNATIONAL FINANCE IN PRACTICE: FX Market Volumes Surge, 177

Basic Currency Futures Relationships, 178 Options Contracts: Some Preliminaries, 181

Currency Options Markets, 181 Currency Futures Options, 182

Basic Option-Pricing Relationships at

Expiration, 182

American Option-Pricing Relationships, 185 European Option-Pricing Relationships, 187 Binomial Option-Pricing Model, 189

European Option-Pricing Formula, 191 Empirical Tests of Currency Options, 192

MINI CASE: The Options Speculator, 195

PART THREE

Foreign Exchange Exposure and Management

CHAPTER 8

Management of Transaction Exposure, 198

Three Types of Exposure, 198

Forward Market Hedge, 200

Money Market Hedge, 202

Options Market Hedge, 203

Hedging Foreign Currency Payables, 205

Forward Contracts, 206

Money Market Instruments, 206

Currency Options Contracts, 207

Cross-Hedging Minor Currency

Exposure, 208

Hedging Contingent Exposure, 208

Hedging Recurrent Exposure with Swap

Contracts, 209

Summary, 193

Hedging through Invoice Currency, 210

Hedging via Lead and Lag, 210

Exposure Netting, 211

Should the Firm Hedge?, 211

What Risk Management Products Do

Firms Use?, 213

Summary, 214

MINI CASE: Airbus' Dollar Exposure, 218

CASE APPLICATION: Richard May's Options, 218

CHAPTER 9

Management of Economic Exposure, 225 How to Measure Economic Exposure, 226

Operating Exposure: Definition, 230 Illustration of Operating Exposure, 231

Determinants of Operating Exposure, 233

Managing Operating Exposure, 235

Selecting Low-Cost Production

Sites 236

Flexible Sourcing Policy, 236

Diversification of the Market, 237

R&D Efforts and Product Differentiation, 237

Financial Hedging, 238

CASE APPLICATION: Exchange Risk Management

at Merck, 238 Summary, 240

MINI CASE: Economic Exposure of Albion Computers

PLC. 242

CHAPTER 10

Management of Translation Exposure, 244 Translation Methods, 244

Current/Noncurrent Method, 244

Monetary/Nonmonetary Method, 245

Temporal Method, 245

Current Rate Method. 245

Financial Accounting Standards Board

Statement 8, 246

Financial Accounting Standards Board

Statement 52, 246

The Mechanics of the FASB 52 Translation

Process, 249

Highly Inflationary Economies, 250

International Accounting Standards, 250

CASE APPLICATION: Consolidation of

Accounts according to FASB 52: The Centralia

Corporation, 250

Management of Translation Exposure, 254

Translation Exposure versus Transaction Exposure, 254

Hedging Translation Exposure, 255

Balance Sheet Hedge, 255

Derivatives Hedge, 256

Translation Exposure versus Operating Exposure, 257

Empirical Analysis of the Change from

FASB 8 to FASB 52, 257

Summary, 258

MINI CASE: Sundance Sporting Goods, Inc., 259

PART FOUR World Financial Markets and Institutions

CHAPTER 11 International Banking and Money Market, 264

International Banking Services, 264

The World's Largest Banks, 265

Reasons for International Banking, 266

Types of International Banking Offices, 266

Correspondent Bank, 267 Representative Offices, 267 Foreign Branches, 267 Subsidiary and Affiliate Banks, 268

Edge Act Banks, 268

Offshore Banking Centers, 268
International Banking Facilities, 269

Capital Adequacy Standards, 269 International Money Market, 272 Eurocurrency Market, 272

ICE LIBOR, 274 Eurocredits, 274

INTERNATIONAL FINANCE IN PRACTICE: The Rotten Heart

of Finance, 276

Forward Rate Agreements, 276

Euronotes, 279

Eurocommercial Paper, 279

Eurodollar Interest Rate Futures Contracts, 279

International Debt Crisis, 281

History, 281

Debt-for-Equity Swaps, 282

The Solution: Brady Bonds, 284

The Asian Crisis, 284

Global Financial Crisis, 285

The Credit Crunch, 285

Impact of the Financial Crisis, 289

Economic Stimulus, 291

The Aftermath, 293

Summary, 294

MINI CASE: Detroit Motors' Latin American

Expansion, 299

APPENDIX 11a: Eurocurrency Creation, 301

CHAPTER 12 International Bond Market, 304

The World's Bond Markets: A Statistical Perspective, 304

Foreign Bonds and Eurobonds, 305

Bearer Bonds and Registered Bonds, 305

National Security Regulations, 306

Withholding Taxes, 306

Security Regulations that Ease Bond Issuance, 306

Global Bonds, 307

Types of Instruments, 307

INTERNATIONAL FINANCE IN PRACTICE: SOX and

Bonds, 308

Straight Fixed-Rate Issues, 308 Euro-Medium-Term Notes, 308 Floating-Rate Notes, 309 Equity-Related Bonds, 309

Dual-Currency Bonds, 309

Currency Distribution, Nationality, and

Type of Issuer, 310

International Bond Market Credit Ratings, 311

INTERNATIONAL FINANCE IN PRACTICE: Heineken Refreshes Euromarket with Spectacular Unrated Bonds, 312

Eurobond Market Structure and Practices, 314

Primary Market, 314
Secondary Market, 314

Clearing Procedures, 316

International Bond Market Indexes, 318

Summary, 320

MINI CASE: Sara Lee Corporation's Eurobonds, 321

CHAPTER 13 International Equity Markets, 323

A Statistical Perspective, 323

Market Capitalization, 323

Measure of Liquidity, 326

 ${\sf Market\ Structure, Trading\ Practices, and\ Costs,\ 326}$

Market Consolidations and Mergers, 330

Trading in International Equities, 330

Cross-Listing of Shares, 331

Yankee Stock Offerings, 333

American Depository Receipts, 334

Global Registered Shares, 337

Empirical Findings on Cross-Listing and ADRs, 338

International Equity Market Benchmarks, 339

iShares MSCI, 340

Factors Affecting International Equity Returns, 340

Macroeconomic Factors. 340

INTERNATIONAL FINANCE IN PRACTICE: Foreign Interest in

South Africa Takes Off, 342

Exchange Rates, 342

Industrial Structure, 342

Summary, 343

MINI CASE: San Pico's New Stock Exchange, 345

CONTENTS xxi

CHAPTER 14 Interest Rate and Currency Swaps, 347

Types of Swaps, 347

 $\textbf{INTERNATIONAL FINANCE IN PRACTICE:} \ The \ World \ Bank's \ First$

Currency Swap, 348

Size of the Swap Market, 348

The Swap Bank, 349

Swap Market Quotations, 349

INTERNATIONAL FINANCE IN PRACTICE: Double-Crossed 350

Interest Rate Swaps, 351

Basic Interest Rate Swap, 351

Pricing the Basic Interest Rate Swap, 353

Currency Swaps, 354

Basic Currency Swap, 354

Equivalency of Currency Swap Debt Service Obligations, 355

Pricing the Basic Currency Swap, 356

A Basic Currency Swap Reconsidered, 357

 $\label{thm:continuous} \mbox{Variations of Basic Interest Rate and}$

Currency Swaps, 358

Risks of Interest Rate and Currency Swaps, 359

Is the Swap Market Efficient?, 359

Summary, 360

MINI CASE: The Centralia Corporation's Currency

Swap, 364

CHAPTER 15 International Portfolio Investment, 365

International Correlation Structure and Risk Diversification, 366

Optimal International Portfolio Selection, 368 Effects of Changes in the Exchange Rate, 375

International Bond Investment, 377

International Mutual Funds: A Performance Evaluation, 378

International Diversification through Country Funds, 380

International Diversification with ADRs, 383

International Diversification with Exchange-Traded Funds, 384

International Diversification with Hedge Funds, 385

Why Home Bias in Portfolio Holdings?, 386 International Diversification with Small-Cap

Stocks, 387

Summary, 389

 $\begin{tabular}{ll} \textbf{mini case:} & Solving for the Optimal International \\ \end{tabular}$

Portfolio, 394

APPENDIX 15a: International Investment with

Exchange Risk Hedging, 397

APPENDIX 158: Solving for the Optimal

Portfolio, 399

PART FIVE Financial Management of the Multinational Firm

CHAPTER 16Foreign Direct

Investment and Cross-Border Acquisitions, 404 Global Trends in FDI, 405

Why Do Firms Invest Overseas?, 408

Trade Barriers, 409

Imperfect Labor Market, 409

Intangible Assets, 410

Vertical Integration, 411

INTERNATIONAL FINANCE IN PRACTICE: Linear Sequence in Manufacturing: Singer & Company, 412

Product Life Cycle, 412

Shareholder Diversification Services, 413

Cross-Border Mergers and Acquisitions, 413

Political Risk and FDI, 418

Summary, 425

MINI CASE: Enron versus Bombay

Politicians, 427

CHAPTER 17

International Capital Structure and the Cost of Capital, 431 Cost of Capital, 431

Cost of Capital in Segmented versus Integrated Markets, 434

Does the Cost of Capital Differ among Countries?. 435

CASE APPLICATION: Novo Industri, 437

Cross-Border Listings of Stocks, 439

Capital Asset Pricing under Cross-Listings, 444

The Effect of Foreign Equity Ownership Restrictions, 446

Pricing-to-Market Phenomenon, 446

CASE APPLICATION: Nestlé, 447

Asset Pricing under Foreign Ownership Restrictions. 448

The Financial Structure of Subsidiaries, 451

Summary, 452

APPENDIX 17A: Pricing of Nontradable Assets:

Numerical Simulations, 457

CHAPTER 18 International Capital Budgeting, 458

Review of Domestic Capital Budgeting, 459
The Adjusted Present Value Model, 460
Capital Budgeting from the Parent Firm's
Perspective, 462

Generality of the APV Model, 464

Estimating the Future Expected Exchange Rate, 465

CASE APPLICATION: The Centralia Corporation, 465
Risk Adjustment in the Capital Budgeting
Analysis, 469

Sensitivity Analysis, 470

Purchasing Power Parity Assumption, 470

Real Options, 470

Summary, 472

MINI CASE 1: Dorchester, Ltd., 474

MINI CASE 2: Strik-it-Rich Gold Mining

Company, 475

CHAPTER 19 Multinational Cash Management, 477

The Management of International Cash Balances. 477

CASE APPLICATION: Teltrex's Cash Management System, 477

Bilateral Netting of Internal and External Net Cash Flows, 482

Reduction in Precautionary Cash Balances, 483

Cash Management Systems in Practice, 485

Summary, 486

MINI CASE 1: Efficient Funds Flow at Eastern

Trading Company, 487

MINI CASE 2: Eastern Trading Company's New MBA, 487

CHAPTER 20 International Trade Finance, 488

A Typical Foreign Trade Transaction, 488

Forfaiting, 491

Government Assistance in Exporting, 491

INTERNATIONAL FINANCE IN PRACTICE: First Islamic Forfaiting

Fund Set Up, 492

The Export-Import Bank and Affiliated Organizations, 492

Countertrade, 493

Forms of Countertrade, 493

INTERNATIONAL FINANCE IN PRACTICE: Armed Forces Tops in Countertrade List, 495

Some Generalizations about Countertrade, 495 Summary, 496

MINI CASE: American Machine Tools, Inc., 498

International Tax Environment and Transfer Pricing, 499

The Objectives of Taxation, 499

Tax Neutrality, 499

Tax Equity, 500

Types of Taxation, 500

Income Tax, 500

Withholding Tax, 502

Value-Added Tax, 502

National Tax Environments, 504

Worldwide Taxation, 504

Territorial Taxation, 504

Foreign Tax Credits, 505

Organizational Structures, 505

Branch and Subsidiary Income, 505

Tax Havens, 506

Controlled Foreign Corporation, 507

Tax Inversion, 507

Glossary, 521 Index, 528 INTERNATIONAL FINANCE IN PRACTICE: On or Off?

It's a Matter of Degree, 508

Transfer Pricing and Related Issues, 509

CASE APPLICATION: Mintel Products Transfer Pricing Strategy, 509

INTERNATIONAL FINANCE IN PRACTICE: Transfer Pricing: An Important International Tax Issue, 512

Miscellaneous Factors, 514

INTERNATIONAL FINANCE IN PRACTICE: Wake Up and Smell the $\,$

Coffee, 515

Advance Pricing Agreement, 516

Blocked Funds, 516

Summary, 517

MINI CASE 1: Sigma Corp.'s Location

Decision, 519

MINI CASE 2: Eastern Trading Company's Optimal

Transfer Pricing Strategy, 520