# Fundamentals of

# **Multinational Finance**

Sixth Edition Global Edition

### MICHAEL H. MOFFETT

Thunderbird School of Global Management at Arizona State University

# **ARTHUR I. STONEHILL**

Oregon State University and University of Hawaii at Manoa

# **DAVID K. EITEMAN**

University of California, Los Angeles





# **Brief Contents**

PART 1	Global Financial Environment 21					
	Chapter 1	Multinational Financial Management: Opportunities and Challenges	22			
	Chapter 2	The International Monetary System 48				
	Chapter 3	The Balance of Payments 80				
	Chapter 4	Financial Goals and Corporate Governance 110				
PART 2	Foreign Exchange Theory and Markets 141					
	Chapter 5	The Foreign Exchange Market 142				
	Chapter 6	International Parity Conditions 172				
	Chapter 7	Foreign Currency Derivatives: Futures and Options 206				
	Chapter 8	Interest Rate Risk and Swaps 230				
	Chapter 9	Foreign Exchange Rate Determination and Intervention 261				
PART 3	Foreign Exchange Exposure 291					
	Chapter 10	Transaction Exposure 292				
	Chapter 11	Translation Exposure 321				
	Chapter 12	Operating Exposure 341				
PART 4	Financing the Global Firm 369					
	Chapter 13	Global Cost and Availability of Capital 370				
	Chapter 14	Funding the Multinational Firm 397				
	Chapter 15	Multinational Tax Management 427				
	Chapter 16	International Trade Finance 458				
PART 5	Foreign Investments and Operations 483					
	Chapter 17	Foreign Direct Investment and Political Risk 484				
	Chapter 18	Multinational Capital Budgeting and Cross-Border Acquisitions 5	609			
	Answers A-1					
	Glossary G-1					
	Index I-1					



# Contents

#### PART 1 Global Financial Environment 21

Observation 4	Multipolional Finan	alal Managament	Onnovivusition and	Obellennes	00
Chapter 1	Multinational Finar	iciai manauement:	opportunities and	Guanenues	~~

- 1.1 Financial Globalization and Risk 23
- 1.2 The Global Financial Marketplace 24

**GLOBAL FINANCE IN PRACTICE 1.1** The Rocketing Swiss Franc 28

- 1.3 The Theory of Comparative Advantage 31
- 1.4 What Is Different About International Financial Management? 32

**GLOBAL FINANCE IN PRACTICE 1.2** The Peso, Dollar, Yen—and Pokémon Go 33

1.5 The Globalization Process 35

**GLOBAL FINANCE IN PRACTICE 1.3** ESG Investment 39

Summary Points 39

MINI-CASE: Crowdfunding Kenya 40

Questions 43 Problems 43

Internet Exercises 47

#### **Chapter 2** The International Monetary System 48

2.1 History of the International Monetary System 48

**GLOBAL FINANCE IN PRACTICE 2.1** Hammering Out an Agreement at Bretton Woods 51

**GLOBAL FINANCE IN PRACTICE 2.2** Supranational Currencies 52

- 2.2 Fixed Versus Flexible Exchange Rates 58
- 2.3 The Impossible Trinity 58
- 2.4 A Single Currency for Europe: The Euro 60
- 2.5 Emerging Markets and Regime Choices 62

GLOBAL FINANCE IN PRACTICE 2.3 Bulgarian Currency Board and Accession to the Euro Zone 66

Summary Points 70

MINI-CASE: Iceland—A Small Country in a Global Crisis 71

Questions 76 Problems 76

Internet Exercises 78

## Chapter 3 The Balance of Payments 80

- 3.1 Fundamentals of BOP Accounting 81
- 3.2 The Accounts of the Balance of Payments 83

GLOBAL FINANCE IN PRACTICE 3.1 The Global Current Account Surplus 85

GLOBAL FINANCE IN PRACTICE 3.2 Germany's Net International Investment Position (NIIP) 88

- 3.3 BOP Impacts on Key Macroeconomic Rates 91
- 3.4 Trade Balances and Exchange Rates 92
- 3.5 Capital Mobility 95

Summary Points 100

MINI-CASE: Global Remittances 101

Questions 105 Problems 106

Internet Exercises 109

#### Chapter 4 Financial Goals and Corporate Governance 110

4.1 Ownership 110

GLOBAL FINANCE IN PRACTICE 4.1 Why Did Apple Start Paying a Dividend and Raising Debt? 117

4.2 Publicly Traded Versus Privately Held: The Global Shift 119

4.3 Corporate Governance 122

**GLOBAL FINANCE IN PRACTICE 4.2** Why Did Dell Go Private? 122

GLOBAL FINANCE IN PRACTICE 4.3 Italian Cross-Shareholding and the End of the Salatto Buono 127

**GLOBAL FINANCE IN PRACTICE 4.4** Corporate Governance Models 129

Summary Points 130

MINI-CASE: Volkswagen's Defeat Devices and Stakeholder Control 131

Questions 135 Problems 136 Internet Exercises 139

#### PART 2 Foreign Exchange Theory and Markets 141

#### Chapter 5 The Foreign Exchange Market 142

5.1 Functions of the Foreign Exchange Market 142

5.2 Structure of the Foreign Exchange Market 143

**GLOBAL FINANCE IN PRACTICE 5.1** Bankhaus Herstatt and Herstatt Risk 144

GLOBAL FINANCE IN PRACTICE 5.2 Malware, Bangladesh Bank, and Banker's Hours—2016 150

5.3 Transactions in the Foreign Exchange Market 151

**GLOBAL FINANCE IN PRACTICE 5.3** The FX Global Code of Conduct 2016 151

5.4 Foreign Exchange Rates and Quotations 156

Summary Points 164

MINI-CASE: The Venezuelan Bolivar Black Market 164

Questions 167 Problems 168 Internet Exercises 171

#### **Chapter 6** International Parity Conditions 172

6.1 Prices and Exchange Rates 173

**GLOBAL FINANCE IN PRACTICE 6.1** The Immiseration of the North Korean People—The "Revaluation" of the North Korean Won 175

6.2 Interest Rates and Exchange Rates 179

GLOBAL FINANCE IN PRACTICE 6.2 Was 2016 the Year of Textbook Failure? 181

6.3 Forward Rate as an Unbiased Predictor of the Future Spot Rate 189

**GLOBAL FINANCE IN PRACTICE 6.3** Mortgages and the Swiss Franc 190

6.4 Prices, Interest Rates, and Exchange Rates in Equilibrium 191

Summary Points 193

MINI-CASE: Mrs. Watanabe and the Japanese Yen Carry Trade 193

Questions 196 Problems 197

Internet Exercises 201

Appendix: An Algebraic Primer to International Parity Conditions 203

#### Chapter 7 Foreign Currency Derivatives: Futures and Options 206

7.1 Foreign Currency Futures 207

7.2 Currency Options 209

**GLOBAL FINANCE IN PRACTICE 7.1** Euro-Renminbi (EUR-RMB) Options Growth 211 **GLOBAL FINANCE IN PRACTICE 7.2** The New Zealand Kiwi, Key, and Krieger 217

Contents 17

7.3 Option Pricing and Valuation 217

Summary Points 222

MINI-CASE: KiKos and the South Korean Won 223

Questions 225 Problems 226

Internet Exercises 228

#### Chapter 8 Interest Rate Risk and Swaps 230

8.1 Interest Rate Foundations 230

**GLOBAL FINANCE IN PRACTICE 8.1** The Trouble with LIBOR 231

**GLOBAL FINANCE IN PRACTICE 8.2** European Sovereign Debt 236

8.2 Interest Rate Risk 237

8.3 Interest Rate Futures and FRAs 240

8.4 Interest Rate Swaps 242

**GLOBAL FINANCE IN PRACTICE 8.3** Procter & Gamble and Bankers Trust 250

Summary Points 251

MINI-CASE: Argentina and the Vulture Funds 251

Questions 256 Problems 256

Internet Exercises 260

#### **Chapter 9** Foreign Exchange Rate Determination and Intervention 261

9.1 Exchange Rate Determination: The Theoretical Thread 262

**GLOBAL FINANCE IN PRACTICE 9.1** Technical Analysis of the JPY/USD Rate (Jan 2011–Feb 2014) 265

9.2 Currency Market Intervention 266

**GLOBAL FINANCE IN PRACTICE 9.2** Rules of Thumb for Effective Intervention 269

9.3 Disequilibrium: Exchange Rates in Emerging Markets 271

**GLOBAL FINANCE IN PRACTICE 9.3** The European Monetary System's "Snake in a Tunnel" 272

GLOBAL FINANCE IN PRACTICE 9.4 Was George Soros to Blame for the Asian Crisis? 275

9.4 Forecasting in Practice 277

Summary Points 281

MINI-CASE: Russian Ruble Roulette 282

Questions 284 Problems 285

Internet Exercises 289

## PART 3 Foreign Exchange Exposure 291

#### **Chapter 10 Transaction Exposure 292**

10.1 Types of Foreign Exchange Exposure 292

10.2 Why Hedge? 293

**GLOBAL FINANCE IN PRACTICE 10.1** Hedging and the German Automobile Industry 296

10.3 Transaction Exposure 296

10.4 Transaction Exposure Management: The Case of Aidan 298

**GLOBAL FINANCE IN PRACTICE 10.2** Currency Losses at Greenpeace 301

**GLOBAL FINANCE IN PRACTICE 10.3** Forward Rates and the Cost of Hedging 306

10.5 Risk Management in Practice 307

GLOBAL FINANCE IN PRACTICE 10.4 The Credit Crisis and Option Volatilities in 2009 308

Summary Points 309

MINI-CASE: China Noah Corporation 309

Questions 315 Problems 315

Internet Exercises 320

#### **Chapter 11 Translation Exposure 321**

11.1 Overview of Translation 321

11.2 Translation Methods 324

11.3 Aidan Corporation's Translation Exposure 328

GLOBAL FINANCE IN PRACTICE 11.1 When the Hedge Becomes the Problem 329

**GLOBAL FINANCE IN PRACTICE 11.2** Foreign Subsidiary Valuation 332

11.4 Managing Translation Exposure 332

GLOBAL FINANCE IN PRACTICE 11.3 Foreign Currency Hedge Accounting 334

Summary Points 334

MINI-CASE: McDonald's, Hoover Hedges, and Cross-Currency Swaps 335

Questions 337 Problems 338

Internet Exercises 339

#### **Chapter 12 Operating Exposure 341**

12.1 A Multinational's Operating Exposure 341

GLOBAL FINANCE IN PRACTICE 12.1 Expecting the Devaluation—Ford and Venezuela 344

12.2 Measuring Operating Exposure: Aidan Turkey 346

12.3 Strategic Management of Operating Exposure 350

**GLOBAL FINANCE IN PRACTICE 12.2** Do Fixed Exchange Rates Increase Corporate Currency Risk in Emerging Markets? 351

GLOBAL FINANCE IN PRACTICE 12.3 The United Kingdom and Europe: Trans-Channel Currency Shifts 352

12.4 Proactive Management of Operating Exposure 353

**GLOBAL FINANCE IN PRACTICE 12.4** Hedging Hogs: Risk Sharing at Harley-Davidson 356

Summary Points 359

MINI-CASE: Brexit and Rolls-Royce 359

Questions 363 Problems 364

Internet Exercises 367

# PART 4 Financing the Global Firm 369

#### Chapter 13 Global Cost and Availability of Capital 370

13.1 Financial Globalization and Strategy 370

**GLOBAL FINANCE IN PRACTICE 13.1** Ferrari's IPO—The Potential of the Prancing Horse 372

13.2 International Portfolio Theory and Diversification 374

13.3 The Role of International Portfolio Investors 380

GLOBAL FINANCE IN PRACTICE 13.2 Emerging Market Growth Companies—IPOs and Corporate Governance 381

GLOBAL FINANCE IN PRACTICE 13.3 Culture and Investment Behavior 384

13.4 The Cost of Capital for MNEs Compared to Domestic Firms 384

Summary Points 388

MINI-CASE: Novo Industri A/S (Novo) 388

Questions 392 Problems 392

Internet Exercises 396

#### Chapter 14 Funding the Multinational Firm 397

14.1 Designing a Strategy to Source Capital Globally 398

14.2 Optimal Financial Structure 399

14.3 Raising Equity Globally 402

14.4 Depositary Receipts 405

GLOBAL FINANCE IN PRACTICE 14.1 Evolution of Global Financing in the Shale Sector 405

Contents 19

14.5 Private Placement 410
14.6 Raising Debt Globally 412
14.7 Financing Foreign Subsidiaries 413
GLOBAL FINANCE IN PRACTICE 14.2 Islamic Finance 414
GLOBAL FINANCE IN PRACTICE 14.3 Financial Structure of a Russian Joint Venture 418
Summary Points 419
MINI-CASE: Petrobrás of Brazil and the Cost of Capital 419
Questions 422
Problems 423
Internet Exercises 426

#### **Chapter 15 Multinational Tax Management 427**

**GLOBAL FINANCE IN PRACTICE 15.1** The Impact of Tax on Business Decisions 428 15.1 Tax Principles and Practices 428

**GLOBAL FINANCE IN PRACTICE 15.2** The Panama Papers 435

**GLOBAL FINANCE IN PRACTICE 15.3** Offshore Profits and Dividend Repatriation 437

15.3 Google: An Illustrative Case of Profit Repositioning 445

GLOBAL FINANCE IN PRACTICE 15.4 Hewlett-Packard's Offshore Cash and Staggered Loan Program 446

15.4 Global Tax Competitiveness 447

Summary Points 449

MINI-CASE: Apple's Global iTax Strategy 450

Questions 454 Problems 455

Internet Exercises 457

#### **Chapter 16 International Trade Finance 458**

16.1 The Trade Relationship 458

16.2 Key Documents 463

**GLOBAL FINANCE IN PRACTICE 16.1** Florence—The Birthplace of Trade Financing 465

16.3 Government Programs to Help Finance Exports 469

16.4 Trade Financing Alternatives 470

**GLOBAL FINANCE IN PRACTICE 16.2** Factoring in Practice 472

16.5 Forfaiting 473 Summary Points 475

MINI-CASE: Crosswell International and Brazil 476

Questions 479
Problems 479
Internet Exercises 481

# PART 5 Foreign Investments and Operations 483

#### Chapter 17 Foreign Direct Investment and Political Risk 484

17.1 The Foreign Direct Investment Decision 484

17.2 Structural Choices for Foreign Market Entry 485

**GLOBAL FINANCE IN PRACTICE 17.1** Drugs, Public Policy, and the Death Penalty 491

17.3 Political Risk: Definition and Classification 491

17.4 Financial Impacts of Political Risk 492

17.5 Political Risk Mitigation 496

GLOBAL FINANCE IN PRACTICE 17.2 Selective Examples of Expropriation in the Global Oil and Gas Industry 497

GLOBAL FINANCE IN PRACTICE 17.3 Structuring Incentives in Foreign Direct Investments 502

Summary Points 502

MINI-CASE: Tengiz—The Definition of Political Risk 503

Questions 506

Internet Exercises 507

#### Chapter 18 Multinational Capital Budgeting and Cross-Border Acquisitions 509

18.1 Complexities of Budgeting for a Foreign Project 510

18.2 Illustrative Case: Cemex Enters Indonesia 513

GLOBAL FINANCE IN PRACTICE 18.1 Venezuelan Currency and Capital Controls Force Devaluation of Business 523

18.3 Real Option Analysis 525

18.4 Project Financing 526

18.5 Cross-Border Mergers and Acquisitions 527

**GLOBAL FINANCE IN PRACTICE 18.2** Values Change: GE Appliances and Electrolux 529

**GLOBAL FINANCE IN PRACTICE 18.3** Statoil of Norway's Acquisition of Esso of Sweden 533

Summary Points 533

MINI-CASE: Elan and Royalty Pharma 534

Questions 538 Problems 538

Internet Exercises 541

Answers A-1

Glossary G-1

Index I-1