INTERNATIONAL Financial Management

CHEOL EUN | BRUCE RESNICK

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Eighth Edition

International
Financial
Management
Eighth Edition

The McGraw-Hill/Irwin Series in Finance, Insurance, and Real Estate

Stephen A. Ross
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International Financial Management

Eighth Edition

Cheol S. Eun
Georgia Institute of Technology

Bruce G. Resnick
Wake Forest University

Mc Graw Hill Education

INTERNATIONAL FINANCIAL MANAGEMENT, EIGHTH EDITION

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To Elizabeth

C.S.E.

To Donna

B.G.R.

About the Authors

Cheol S. Eun,

Georgia Institute of Technology

Cheol S. Eun (Ph.D., NYU) is the Thomas R. Williams Chair and Professor of Finance at the Scheller College of Business, Georgia Institute of Technology. Before joining Georgia Tech, he taught at the University of Minnesota and the University of Maryland. He also taught at the Wharton School of the University of Pennsylvania, Korea Advanced Institute of Science and Technology (KAIST), Singapore Management University, and the Esslingen University of Technology (Germany) as a visiting professor. He has published extensively on international finance issues in such major journals as the *Journal of Finance, Journal of Financial Economics, JFQA, Journal of Banking and Finance, Journal of International Money and Finance, Management Science,* and *Oxford Economic Papers*. Also, he has served on the editorial boards of the *Journal of Banking and Finance, Journal of Financial Research, Journal of International Business Studies,* and *European Financial Management*. His research is widely quoted and referenced in various scholarly articles and textbooks in the United States as well as abroad.

Dr. Eun is the founding chair of the *Fortis/Georgia Tech Conference on International Finance.* The key objectives of the conference are to promote research on international finance and provide a forum for interactions among academics, practitioners, and regulators who are interested in vital current issues of international finance.

Dr. Eun has taught a variety of courses at the undergraduate, graduate, and executive levels, and was the winner of the Krowe Teaching Excellence Award at the University of Maryland. He also has served as a consultant to many national and international organizations, including the World Bank, Apex Capital, and the Korean Development Institute, advising on issues relating to capital market liberalization, global capital raising, international investment, and exchange risk management. In addition, he has been a frequent speaker at academic and professional meetings held throughout the world.

Bruce G. Resnick,

Wake Forest University

Bruce G. Resnick is the Joseph M. Bryan Jr. Professor of Banking and Finance at the Wake Forest University School of Business in Winston-Salem, North Carolina. He has a D.B.A. (1979) in finance from Indiana University. Additionally, he has an M.B.A. from the University of Colorado and a B.B.A. from the University of Wisconsin at Oshkosh. Prior to coming to Wake Forest, he taught at Indiana University for ten years, the University of Minnesota for five years, and California State University for two years. He has also taught as a visiting professor at Bond University, Gold Coast, Queensland, Australia, and at the Helsinki School of Economics and Business Administration in Finland. Additionally, he served as the Indiana University resident director at the Center for European Studies at Maastricht University, the Netherlands. He also served as an external examiner to the Business Administration Department of Singapore Polytechnic and as the faculty advisor on Wake Forest University study trips to Japan, China, and Hong Kong.

Dr. Resnick teaches M.B.A. courses at Wake Forest University. He specializes in the areas of investments, portfolio management, and international financial management. Dr. Resnick's research interests include market efficiency studies of options and financial futures markets and empirical tests of asset pricing models. A major interest has been the optimal design of internationally diversified portfolios constructed to control for parameter uncertainty and exchange rate risk. In recent years, he has focused on information transmission in the world money markets and yield spread comparisons of domestic and international bonds. His research articles have been published in most of the major academic journals in finance. His research is widely referenced by other researchers and textbook authors. He is an associate editor for the *Emerging Markets Review, Journal of Economics and Business,* and the *Journal of Multinational Financial Management*.

Preface

Our Reason for Writing this Textbook

Both of us have been teaching international financial management to undergraduates and M.B.A. students at Georgia Institute of Technology, Wake Forest University, and at other universities we have visited for three decades. During this time period, we conducted many research studies, published in major finance and statistics journals, concerning the operation of international financial markets. As one might imagine, in doing this we put together an extensive set of teaching materials that we used successfully in the classroom. As the years went by, we individually relied more on our own teaching materials and notes and less on any one of the major existing textbooks in international finance (most of which we tried at some point).

As you may be aware, the scope and content of international finance have been fast evolving due to deregulation of financial markets, product innovations, and technological advancements. As capital markets of the world are becoming more integrated, a solid understanding of international finance has become essential for astute corporate decision making. Reflecting the growing importance of international finance as a discipline, we have seen a sharp increase in the demand for experts in the area in both the corporate and academic worlds.

In writing *International Financial Management,* Eighth Edition, our goal was to provide well-organized, comprehensive, and up-to-date coverage of the topics that take advantage of our many years of teaching and research in this area. We hope the text is challenging to students. This does not mean that it lacks readability. The text discussion is written so that a self-contained treatment of each subject is presented in a *user-friendly* fashion. The text is intended for use at both the advanced undergraduate and M.B.A. levels.

The Underlying Philosophy

International Financial Management, Eighth Edition, like the first seven editions, is written based on two tenets: emphasis on the basics and emphasis on a managerial perspective.

Emphasis on the Basics

We believe that any subject is better learned if one first is well grounded in the basics. Consequently, we initially devote several chapters to the fundamental concepts of international finance. After these are learned, the remaining material flows easily from them. We always bring the reader back, as the more advanced topics are developed, to their relationship to the fundamentals. By doing this, we believe students will be left with a framework for analysis that will serve them well when they need to apply this material in their careers in the years ahead.

We believe this approach has produced a successfuI textbook: *International Financial Management* is used in many of the best business schools in the world. Various editions of the text have been translated into Spanish and two dialects of Chinese. There is a global edition. In addition, local co-authors have assisted in preparing a Canadian, Malaysian, Indonesian, and Indian adaptations.

Eighth Edition Organization

International Financial Management, Eighth Edition, has been completely updated. All data tables and statistics are the most current available when the text went to press. Additionally, the chapters incorporate several new International Finance in Practice boxes that contain real-world illustrations of chapter topics and concepts. In the margins below, we highlight specific changes in the Eighth Edition.

This part lays the macroeconomic foundation for all the topics to follow.

Part ONE Foundations of International Financial Management 2

Recent economic developments such as the global financial crisis and sovereign debt crisis of Europe, and Brexit.

1 Globalization and the Multinational Firm 4

Updated coverage of monetary developments, including the euro zone crisis.

2 International Monetary System 27

Updated balance-of-payments statistics.

3 Balance of Payments 62

Review of corporate governance systems in different countries, the Dodd-Frank Act, and managerial implications.

4 Corporate Governance Around the World 82

This part describes the market for foreign exchange and introduces currency derivatives that can be used to manage foreign exchange exposure.

Part TWO The Foreign Exchange Market, Exchange Rate Determination, and Currency Derivatives 110

Fully updated market data and examples.

5 The Market for Foreign Exchange 112

Integrated coverage of key parity conditions and currency carry trade.

6 International Parity Relationships and Forecasting Foreign Exchange Rates 140

Fully updated market data and examples.

7 Futures and Options on Foreign Exchange 173

This part describes the various types of foreign exchange risk and discusses methods available for risk management.

Part THREE Foreign Exchange Exposure and Management 196

Systematic coverage of foreign currency transaction exposure management and a new case application.

8 Management of Transaction Exposure 198

Conceptual and managerial analysis of economic exposure to currency risk.

9 Management of Economic Exposure 225

10 Management of Translation Exposure 244

A Managerial Perspective

The text presentation never loses sight of the fact that it is teaching students how to make managerial decisions. *International Financial Management,* Eighth Edition, is founded in the belief that the fundamental job of the financial manager is to maximize shareholder wealth. This belief permeates the decision-making process we present from cover to cover. To reinforce the managerial perspective, we provide numerous "real-world" stories whenever appropriate.

Part FOUR
World Financial Markets and Institutions 262

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

Part FIVE
Financial Management of the Multinational Firm 402

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

This part provides a thorough discussion of international financial institutions, assets, and marketplaces.

Fully updated market data and statistics. Updated discussion on Basel III capital adequacy standards. Updated discussion on the causes and consequences of the global financial crisis. New section on ICE Libor.

Fully updated market data and examples.

New statistical presentation of market capitalizations and liquidity measurement in developed and developing countries. Updated discussion of market consolidations and mergers.

Fully updated market data and statistics. New discussion on swap trading practices under new financial regulation. New International Finance in Practice box on trading swaps via a clearing-house.

Updated statistical analysis of international markets and diversification with small-cap stocks.

This part covers topics on financial management practices for the multinational firm.

Updated trends in cross-border investment and M&A deals. Updated political risk scores for countries.

New analysis of home bias and the cost of capital around the world. Also, comparison of capital structure across countries.

Fully updated comparative national income tax rate table with updated examples. New section on tax inversion maneuvers.

Key Features

Examples—These are integrated throughout the text, providing students with immediate application of the text concepts.

EXAMPLE | 11.1: Rollover Pricing of a Eurocredit

Teltrex International can borrow $3,000,000 at LIBOR plus a lending margin of 0.75 percent per annum on a three-month rollover basis from Barclays in London. Suppose that three-month LIBOR is currently 5.53 percent. Further suppose that over the second three-month interval LIBOR falls to 5.12 percent. How much will Teltrex pay in interest to Barclays over the six-month period for the Eurodollar loan?

Solution: $3,000,000 × (.0553 + .0075)/4 + $3,000,000 × (.0512 + .0075)/4 = $47,100 + $44,025 = $91,125

International Finance in Practice Boxes—Selected chapters contain International Finance in Practice boxes. These real-world illustrations offer students a practical look at the major concepts presented in the chapter.

INTERNATIONAL FINANCE IN PRACTICE

FX Market Volumes Surge

The FX market is growing at record levels, according to figures released by the CME Group, the largest regulated foreign exchange market in the world.

Last month the CME Group reported average daily notional volume at a record level of $121 billion, up 82 percent compared to a year earlier.

With a number of indicators at play, like the news of Greece's credit concerns and the continued appetite for high-yielding currencies like the Australian dollar and the Canadian dollar, the CME saw record volumes and notional values in the euro and Australian and Canadian dollars. Euro FX futures and options saw total average daily volume of 362,000 contracts with total notional ADV of slightly over $62 billion.

Australian dollar futures and options climbed to nearly 119,000 contracts in average daily volume with almost $11 billion in total notional ADV, and Canadian dollar futures and options surpassed 88,000 contracts in ADV and $8 billion in total notional ADV.

With foreign currency futures going from strength to strength, the CME Group recently published a white paper outlining the benefits of FX futures.

"These contracts provide an ideal tool to manage currency or FX risks in an uncertain world," it said. "Product innovation, liquidity, and financial surety are the three pillars upon which the CME Group has built its world-class derivatives market. The CME Group provides products based on a wide range of frequently transacted currencies, liquidity offered on the state-of-the-art CME Globex electronic trading platform, and financial sureties afforded by its centralized clearing system."

Source: Global Investor, March 2010. All rights reserved. Used with permission.

In More Depth—Some topics are by nature more complex than others. The chapter sections that contain such material are indicated by the section heading "In More Depth" and are in *colored text*. These sections may be skipped without loss of continuity, enabling the instructor to easily tailor the reading assignments to the students. End-of-chapter Questions and Problems relating to the In More Depth sections of the text are also indicated by *blue type*.

In More Depth

European Option-Pricing Formula

In the last section, we examined a simple one-step version of binomial option-pricing model. Instead, we could have assumed the stock price followed a multiplicative binomial process by subdividing the option period into many subperiods. In this case, S_T and C_T could be many different values. When the number of subperiods into which the option period is subdivided goes to infinity, the European call and put pricing formulas presented in this section are obtained. Exact European call and put pricing formulas are:[5]

$$C_e = S_t e^{-r_i T} N(d_1) - E e^{-r_\$ T} N(d_2) \quad \textbf{(7.12)}$$

and

$$P_e = E e^{-r_\$ T} N(-d_2) - S_t e^{-r_i T} N(-d_1) \quad \textbf{(7.13)}$$

The interest rates r_i and $r_\$$ are assumed to be annualized and constant over the term-to-maturity T of the option contract, which is expressed as a fraction of a year.

Invoking IRP, where with continuous compounding $F_T = S_t e^{(r_\$ - r_i)T}$, C_e and P_e in Equations 7.12 and 7.13 can be, respectively, restated as:

$$C_e = [F_T N(d_1) - E N(d_2)] e^{-r_\$ T} \quad \textbf{(7.14)}$$

and

$$P_e = [E N(-d_2) - F_T N(-d_1)] e^{-r_\$ T} \quad \textbf{(7.15)}$$

where

$$d_1 = \frac{\ln(F_T/E) + .5\sigma^2 T}{\sigma\sqrt{T}}$$

and

$$d_2 = d_1 - \sigma\sqrt{T}$$

$N(d)$ denotes the cumulative area under the standard normal density function from $-\infty$ to d_1 (or d_2). The variable σ is the annualized volatility of the change in exchange rate $\ln(S_{t+1}/S_t)$. Equations 7.14 and 7.15 indicate that C_e and P_e are functions of only five variables: F_T, E, $r_\$$, T, and σ. It can be shown that both C_e and P_e increase when σ becomes larger.

QUESTIONS

1. How would you define *transaction exposure*? How is it different from economic exposure?
2. Discuss and compare hedging transaction exposure using the forward contract versus money market instruments. When do alternative hedging approaches produce the same result?
3. Discuss and compare the costs of hedging by forward contracts and options contracts.

PROBLEMS

The spreadsheet TRNSEXP.xls may be used in solving parts of problems 2, 3, 4, and 6.

1. Cray Research sold a supercomputer to the Max Planck Institute in Germany on credit and invoiced €10 million payable in six months. Currently, the six-month forward exchange rate is $1.10/€ and the foreign exchange adviser for Cray Research predicts that the spot rate is likely to be $1.05/€ in six months.
   a. What is the expected gain/loss from a forward hedge?
   b. If you were the financial manager of Cray Research, would you recommend hedging this euro receivable? Why or why not?

Questions and Problems—Each chapter contains a set of Questions and Problems. This material can be used by students on their own to test their understanding of the material, or as homework exercises assigned by the instructor. Questions and Problems relating to the In More Depth sections of the text are indicated by *blue type*.

Questions with Excel Software—An icon in the margin indicates that the end-of-chapter question is linked to an Excel program created by the authors. See the Ancillary Materials section for more information on the software.

CFA Questions—Many chapters include problems from CFA Program Curriculum study materials. These CFA problems, indicated with the CFA logo, show students the relevancy of what is expected of certified professional analysts.

Case Applications—Case Applications are incorporated within selected chapters throughout the text in order to enhance specific topics and help students apply theories and concepts to "real-world" situations.

CASE APPLICATION

Richard May's Options

It is Tuesday afternoon, February 14, 2012. Richard May, Assistant Treasurer at American Digital Graphics (ADG), sits in his office on the thirty-fourth floor of the building that dominates Rockefeller Plaza's west perimeter. It's Valentine's Day, and Richard and his wife have dinner reservations with another couple at Balthazar at 7:30. I must get this hedging memo done, thinks May, and get out of here. Foreign exchange options? I had better get the story straight before someone in the Finance Committee starts asking questions. Let's see, there are two ways in which I can envision us using options now. One is to hedge a dividend due on September 15th from ADG Germany. The other is to hedge our upcoming payment to Matsumerda for their spring RAM chip statement. With the yen at 78 and increasing I'm glad we haven't covered the payment so far, but now I'm getting nervous and I would like to protect my posterior. An option to buy yen on June 10 might be just the thing.

MINI CASE

Airbus' Dollar Exposure

Airbus sold an A400 aircraft to Delta Airlines, a U.S. company, and billed $30 million payable in six months. Airbus is concerned about the euro proceeds from international sales and would like to control exchange risk. The current spot exchange rate is $1.05/€ and the six-month forward exchange rate is $1.10/€. Airbus can buy a six-month put option on U.S. dollars with a strike price of €0.95/$ for a premium of €0.02 per U.S. dollar. Currently, six-month interest rate is 2.5 percent in the euro zone and 3.0 percent in the United States.

1. Compute the guaranteed euro proceeds from the American sale if Airbus decides to hedge using a forward contract.
2. If Airbus decides to hedge using money market instruments, what action does Airbus need to take? What would be the guaranteed euro proceeds from the American sale in this case?
3. If Airbus decides to hedge using put options on U.S. dollars, what would be the "expected" euro proceeds from the American sale? Assume that Airbus regards the current forward exchange rate as an unbiased predictor of the future spot exchange rate.
4. At what future spot exchange do you think Airbus will be indifferent between the option and money market hedge?

Mini Cases—Almost every chapter includes a mini case for student analysis of multiple concepts covered throughout the chapter. These Mini Case problems are "real-world" in nature to show students how the theory and concepts in the textbook relate to the everyday world.

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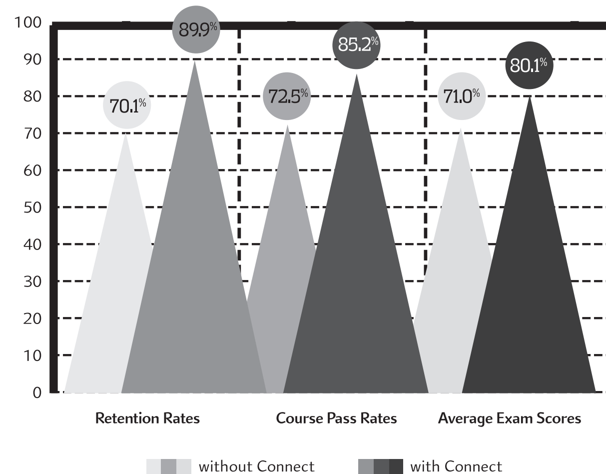

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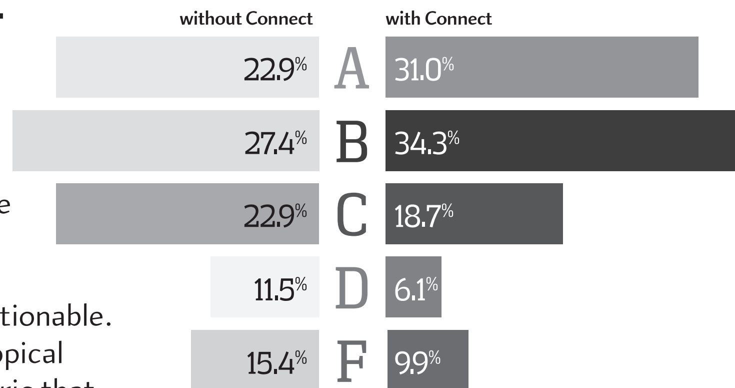

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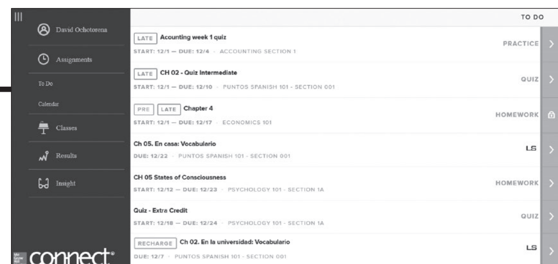

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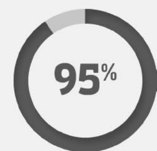

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of students reported having reliable access to off-campus wifi.

of students say they would purchase **SmartBook** over print alone.

of students reported that **SmartBook** would impact their study skills in a positive way.

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*Findings based on 2015 focus group results administered by McGraw-Hill Education

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Ancillary Materials

To assist in course preparation, the following instructor ancillaries are within the Instructor Library in Connect:

- **Solutions Manual**—Includes detailed suggested answers and solutions to the end-of-chapter questions and problems, written by the authors.
- **Lecture Outlines**—Chapter outlines, learning objectives, and teaching notes for each chapter.
- **Test Bank**—True/false and multiple-choice test questions for each chapter prepared by Courtney Baggett, Butler University. Available as Word documents and assignable within Connect.
- **PowerPoint Presentations**—PowerPoint slides for each chapter to use in classroom lecture settings, created by John Stansfield, University of Missouri.

The resources also include the International Finance Software that can be used with this book. This Excel software has four main programs:

- A currency options pricing program allows students to price put and call options on foreign exchange.
- A hedging program allows the student to compare forward, money market instruments, futures, and options for hedging exchange risk.
- A currency swap program allows students to calculate the cash flows and notional values associated with swapping fixed-rate debt from one currency into another.
- A portfolio optimization program based on the Markowitz model allows for examining the benefits of international portfolio diversification.

The four programs can be used to solve certain end-of-chapter problems (marked with an Excel icon) or assignments the instructor devises. A User's Manual and sample projects are included in the Instructor Resources.

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We hope that you enjoy using *International Financial Management,* Eighth Edition. In addition, we welcome your comments for improvement. Please let us know either through McGraw-Hill Education, c/o Editorial, or at our e-mail addresses provided below.

Cheol S. Eun
cheol.eun@scheller.gatech.edu

Bruce G. Resnick
resnickbg@wfu.edu

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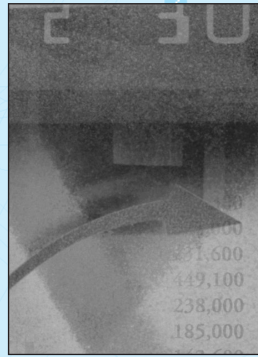
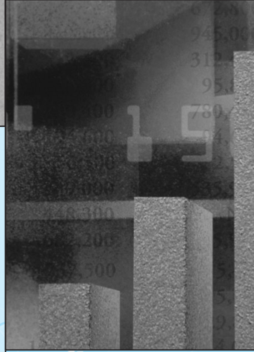

PART ONE

OUTLINE

1 Globalization and the Multinational Firm

2 International Monetary System

3 Balance of Payments

4 Corporate Governance Around the World

Foundations of International Financial Management

PART ONE lays the macroeconomic and institutional foundation for all the topics to follow. A thorough understanding of this material is essential for understanding the advanced topics covered in the remaining sections.

CHAPTER 1 provides an introduction to *International Financial Management*. The chapter discusses why it is important to study international finance and distinguishes international finance from domestic finance.

CHAPTER 2 introduces the various types of international monetary systems under which the world economy can function and has functioned at various times. The chapter traces the historical development of the world's international monetary systems from the early 1800s to the present. Additionally, a detailed discussion of the European Monetary Union is presented.

CHAPTER 3 presents balance-of-payment concepts and accounting. The chapter shows that even a country must keep its "economic house in order" or else it will experience current account deficits that will undermine the value of its currency.

CHAPTER 4 provides an overview of corporate governance around the world. Corporate governance structure varies greatly across countries, reflecting diverse cultural, economic, political, and legal environments.

CHAPTER

1 Globalization and the Multinational Firm

CHAPTER OUTLINE

What's Special about International Finance?
- Foreign Exchange and Political Risks
- Market Imperfections
- Expanded Opportunity Set

Goals for International Financial Management

Globalization of the World Economy: Major Trends and Developments
- Emergence of Globalized Financial Markets
- Emergence of the Euro as a Global Currency
- Europe's Sovereign Debt Crisis of 2010
- Trade Liberalization and Economic Integration
- Privatization
- Global Financial Crisis of 2008–2009

Multinational Corporations

Summary

Key Words

Questions

Internet Exercises

Mini Case: Nike and Sweatshop Labor

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Appendix 1A: Gain from Trade: The Theory of Comparative Advantage

AS THE TITLE *International Financial Management* indicates, in this book we are concerned with financial management in an international setting. Financial management is mainly concerned with how to *optimally* make various corporate financial decisions, such as those pertaining to investment, financing, dividend policy, and working capital management, with a view to achieving a set of given corporate objectives. In Anglo-American countries as well as in many advanced countries with well-developed capital markets, maximizing shareholder wealth is generally considered the most important corporate objective.

Why do we need to study "international" financial management? The answer to this question is straightforward: We are now living in a highly **globalized and integrated world economy**. American consumers, for example, routinely purchase oil imported from Saudi Arabia and Nigeria, TV sets from Korea, automobiles from Germany and Japan, garments from China, shoes from Indonesia, handbags from Italy, and wine from France. Foreigners, in turn, purchase American-made aircraft, software, movies, jeans, smartphones, and other products. Continued liberalization of international trade is certain to further internationalize consumption patterns around the world.

Like consumption, production of goods and services has become highly globalized. To a large extent, this has happened as a result of multinational corporations' (MNCs) relentless efforts to source inputs and locate production anywhere in the world where costs are lower and profits are higher. For example, personal computers sold in the world market might have been assembled in Malaysia with Taiwanese-made monitors, Korean-made keyboards, U.S.-made chips, and preinstalled software packages that were jointly developed by U.S. and Indian engineers. It has often become difficult to clearly associate a product with a single country of origin.

Recently, financial markets have also become highly integrated. This development allows investors to diversify their investment portfolios internationally. In 2016, for instance, U.S. investors collectively invested $154 billion in foreign securities, such as stocks and bonds, whereas foreigners invested $276 billion in U.S. securities.[1] In particular, Asian and Middle Eastern investors are investing heavily in U.S. and other foreign financial markets in efforts to recycle their large trade surpluses. In addition, many major corporations of the world, such as IBM, Toyota, and British Petroleum, have their shares cross-listed on foreign stock exchanges, thereby rendering their shares internationally tradable and gaining access to foreign capital as well. Consequently, Toyota's venture, say, in China can be financed partly by American investors who purchase Toyota shares traded on the New York Stock Exchange.

[1]This information is from *International Financial Statistics*, 2016.

Undoubtedly, we are now living in a world where all the major economic functions—consumption, production, and investment—are highly globalized. It is thus essential for financial managers to fully understand vital international dimensions of financial management. This *global shift* is in marked contrast to a few decades ago, when the authors of this book were learning finance. At that time, most professors customarily (and safely, to some extent) ignored international aspects of finance. This parochial attitude has become untenable since then.

What's Special about International Finance?

Although we may be convinced of the importance of studying international finance, we still have to ask ourselves, what's special about international finance? Put another way, how is international finance different from purely domestic finance (if such a thing exists)? Three major dimensions set international finance apart from domestic finance. They are:

1. Foreign exchange and political risks.
2. Market imperfections.
3. Expanded opportunity set.

As we will see, these major dimensions of international finance largely stem from the fact that sovereign nations have the right and power to issue currencies, formulate their own economic policies, impose taxes, and regulate movements of people, goods, and capital across their borders. Before we move on, let us briefly describe each of the key dimensions of international financial management.

Foreign Exchange and Political Risks

Suppose Mexico is a major export market for your company and the Mexican peso depreciates drastically against the U.S. dollar, as it did in December 1994. This means that your company's products can be priced out of the Mexican market, as the peso price of American imports will rise following the peso's fall. If such countries as Indonesia, Thailand, and Korea are major export markets, your company would have faced the same difficult situation in the wake of the Asian currency crisis of 1997. In integrated financial markets, individuals or households may also be seriously exposed to uncertain exchange rates. For example, since the EU accession, many Hungarians have borrowed in terms of the euro or Swiss franc to purchase houses. They were initially attracted by the easy availability and low interest rates for foreign currency mortgage loans. However, as the Hungarian currency, forint, was falling against the euro and Swiss franc during the recent global financial crisis, the burden of mortgage payments in terms of forint has increased sharply, forcing many borrowers to default. The preceding examples suggest that when firms and individuals are engaged in cross-border transactions, they are potentially exposed to **foreign exchange risk** that they would not normally encounter in purely domestic transactions.

https:// www.cia.gov/library/publications/the-world-factbook

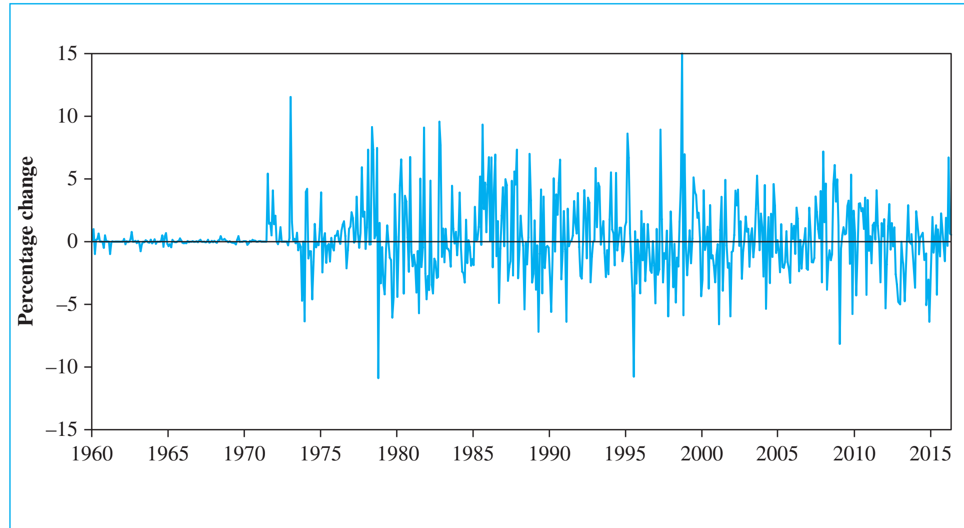
Website of *The World Factbook* published by the CIA provides background information, such as geography, government, and economy, of countries around the world.

Currently, the exchange rates among such major currencies as the U.S. dollar, Japanese yen, British pound, and euro fluctuate continuously in an unpredictable manner. This has been the case since the early 1970s, when fixed exchange rates were abandoned. As can be seen from Exhibit 1.1, exchange rate volatility has exploded since 1973. Exchange rate uncertainty will have a pervasive influence on all the major economic functions, including consumption, production, and investment.

Another risk that firms and individuals may encounter in an international setting is political risk. **Political risk** ranges from unexpected changes in tax rules to outright expropriation of assets held by foreigners. Political risk arises from the fact that a sovereign country can change the "rules of the game" and the affected parties may not have effective recourse. In 1992, for example, the Enron Development Corporation, a subsidiary of a Houston-based energy company, signed a contract to build India's largest power plant. After Enron had spent nearly $300 million, the project

EXHIBIT 1.1

Monthly Percentage Change in Japanese Yen-U.S. Dollar Exchange Rate



Source: International Monetary Fund, *International Financial Statistics,* various issues.

was canceled in 1995 by nationalist politicians in the Maharashtra state who argued India didn't need the power plant. For another example, in April 2012 the Argentine governent nationalized a majority stake in YPF, the country's largest oil company, worth approximately $10 billion, held by the Spanish parent company, Repsol, accusing the latter for underproducing oil in Argentina. Broadly, the seizure of YPF is a part of the campaign to bring strategic industries under government control. Both the Enron and Repsol episodes illustrate the difficulty of enforcing contracts in foreign countries.[2]

Multinational firms and investors should be particularly aware of political risk when they invest in those countries without a tradition of the rule of law. The meltdown of Yukos, the largest Russian oil company, provides a compelling example. Following the arrest of Mikhail Khodorkovsky, the majority owner and a critic of the government, on fraud and tax evasion charges, the Russian authorities forced Yukos into bankruptcy. The authorities sued the company for more than $20 billion in back taxes and auctioned off its assets to cover the alleged tax arrears. This government action against Yukos, widely viewed as politically motivated, inflicted serious damage on international shareholders of Yukos, whose investment values were wiped out. It is important to understand that the property rights of shareholders and investors are not universally respected.

Market Imperfections

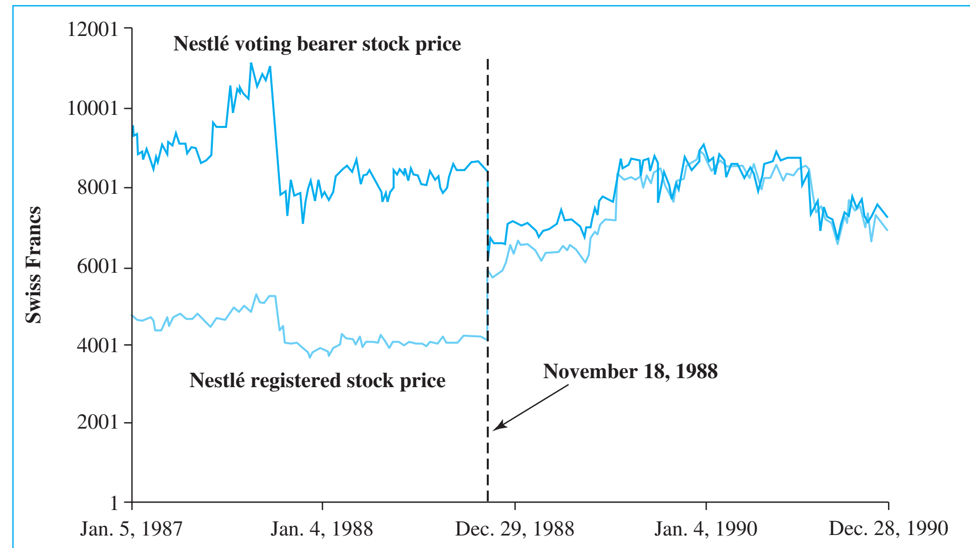
Although the world economy is much more integrated today than was the case 10 or 20 years ago, a variety of barriers still hamper free movements of people, goods, services, and capital across national boundaries. These barriers include legal restrictions, excessive transaction and transportation costs, information asymmetry, and discriminatory taxation. The world markets are thus highly imperfect. As we will discuss later in this book, **market imperfections**, which represent various frictions and impediments preventing markets from functioning perfectly, play an important role in motivating MNCs to locate production overseas. Honda, a Japanese automobile company, for instance, decided to establish production facilities in Ohio, mainly to circumvent trade barriers. One might even say that MNCs are a gift of market imperfections.

Imperfections in the world financial markets tend to restrict the extent to which investors can diversify their portfolios. An interesting example is provided by the Nestlé Corporation, a well-known Swiss MNC. Nestlé used to issue two different classes of common stock, bearer shares and registered shares, and foreigners were allowed to hold

[2]Since then, Enron has renegotiated the deal with the Maharashtra state while the Spanish government retaliated by restricting imports from Argentina.

EXHIBIT 1.2

Daily Prices of Nestlé's Bearer and Registered Shares



Source: Reprinted from *Journal of Financial Economics,* Volume 37, Issue 3, Claudio Loderer and Andreas Jacobs, "The Nestlé Crash," pp. 315–39, 1995, with kind permission from Elsevier Science S.A., P.O. Box 564, 1001 Lausanne, Switzerland.

only bearer shares. As Exhibit 1.2 shows, bearer shares used to trade for about twice the price of registered shares, which were exclusively reserved for Swiss residents.[3] This kind of price disparity is a uniquely international phenomenon that is attributable to market imperfections.

On November 18, 1988, however, Nestlé lifted restrictions imposed on foreigners, allowing them to hold registered as well as bearer shares. After this announcement, the price spread between the two types of Nestlé shares narrowed drastically. As Exhibit 1.2 shows, the price of bearer shares declined sharply, whereas that of registered shares rose sharply. This implies that there was a major transfer of wealth from foreign shareholders to domestic shareholders. Foreigners holding Nestlé bearer shares were exposed to political risk in a country that is widely viewed as a haven from such risk. The Nestlé episode illustrates both the importance of considering market imperfections in international finance and the peril of political risk.

Expanded Opportunity Set

When firms venture into the arena of global markets, they can benefit from an **expanded opportunity set**. As previously mentioned, firms can locate production in any country or region of the world to maximize their performance and raise funds in any capital market where the cost of capital is the lowest. In addition, firms can gain from greater economies of scale when their tangible and intangible assets are deployed on a global basis. A real-world example showing the gains from a global approach to financial management is provided by the following excerpt from *The Wall Street Journal* (April 9, 1996):

> Another factor binding bond markets ever closer is large companies' flexibility to issue bonds around the world at will, thanks to the global swap market. At the vanguard are companies such as General Electric of the U.S. Mark VanderGriend, who runs the financing desk at Banque Paribas, says it took "about 15 minutes" to put together a four billion franc ($791.6 million) deal for GE. By raising the money in francs and swapping into dollars instantly, GE will save five hundredths of a percentage point—or about $400,000 annually on the nine-year deal. "They have such a huge requirement for capital that they are constantly looking for arbitrages," adds Mr. VanderGriend. "And they don't care much how they get there."

[3]It is noted that bearer and registered shares of Nestlé had the same claims on dividends but differential voting rights. Chapter 17 provides a detailed discussion of the Nestlé case.

Individual investors can also benefit greatly if they invest internationally rather than domestically. Suppose you have a given amount of money to invest in stocks. You may invest the entire amount in U.S. (domestic) stocks. Alternatively, you may allocate the funds across domestic and foreign stocks. If you diversify internationally, the resulting international portfolio may have a lower risk or a higher return (or both) than a purely domestic portfolio. This can happen mainly because stock returns tend to covary less across countries than within a given country. Once you are aware of overseas investment opportunities and are willing to diversify internationally, you face a much expanded opportunity set and you can benefit from it. It just doesn't make sense to play in only one corner of the sandbox. Thus, an important "normative" theme we will study throughout this book is: how to maximize the benefits from the global opportunity set, while judiciously controlling currency and political risks and managing various market imperfections.

Goals for International Financial Management

The foregoing discussion implies that understanding and managing foreign exchange and political risks and coping with market imperfections have become important parts of the financial manager's job. *International Financial Management* is designed to provide today's financial managers with an understanding of the fundamental concepts and the tools necessary to be effective global managers. Throughout, the text emphasizes how to deal with exchange risk and market imperfections, using the various instruments and tools that are available, while at the same time maximizing the benefits from an expanded global opportunity set.

Effective financial management, however, is more than the application of the newest business techniques or operating more efficiently. There must be an underlying goal. *International Financial Management* is written from the perspective that the fundamental goal of sound financial management is shareholder wealth maximization. **Shareholder wealth maximization** means that the firm makes all business decisions and investments with an eye toward making the owners of the firm—the shareholders—better off financially, or more wealthy, than they were before.

Whereas shareholder wealth maximization is generally accepted as the ultimate goal of financial management in "Anglo-Saxon" countries, such as Australia, Canada, the United Kingdom, and especially the United States, it is not as widely embraced a goal in other parts of the world. In countries like France and Germany, for example, shareholders are generally viewed as one of the "stakeholders" of the firm, others being employees, customers, suppliers, banks, and so forth. European managers tend to consider the promotion of the firm's stakeholders' overall welfare as the most important corporate goal. In Japan, on the other hand, many companies form a small number of interlocking business groups called *keiretsu*, such as Mitsubishi, Mitsui, and Sumitomo, which arose from consolidation of family-owned business empires. Although *keiretsu* have weakened in recent years, Japanese managers still tend to regard the prosperity and growth of their *keiretsu* as the critical goal; for instance, they tend to strive to maximize market share, rather than shareholder wealth.

It is pointed out, however, that as capital markets are becoming more liberalized and internationally integrated in recent decades, even managers in France, Germany, Japan, and other non-Anglo-Saxon countries are beginning to pay serious attention to shareholder wealth maximization. In Germany, for example, companies are now allowed to repurchase stocks, if necessary, for the benefit of shareholders. In accepting an unprecedented $203 billion takeover offer by Vodafone AirTouch, a leading British wireless phone company, Klaus Esser, CEO of Mannesmann of Germany, cited shareholder interests: "The shareholders clearly think that this company, Mannesmann, a great company, would be better together with Vodafone AirTouch. . . . The final decision belongs to shareholders."[4]

[4]The source for this information is *The New York Times*, February 4, 2000, p. C9.

Obviously, the firm could pursue other goals. This does not mean, however, that the goal of shareholder wealth maximization is merely an alternative, or that the firm should enter into a debate as to its appropriate fundamental goal. Quite the contrary. If the firm seeks to maximize shareholder wealth, it will most likely simultaneously be accomplishing other legitimate goals that are perceived as worthwhile. Shareholder wealth maximization is a long-run goal. A firm cannot stay in business to maximize shareholder wealth if it treats employees poorly, produces shoddy merchandise, wastes raw materials and natural resources, operates inefficiently, or fails to satisfy customers. Only a well-managed business firm that profitably produces what is demanded in an efficient manner can expect to stay in business in the long run and thereby provide employment opportunities.

While managers are hired to run the company for the interests of shareholders, there is no guarantee that they will actually do so. As shown by a series of corporate scandals at companies like Enron, WorldCom, and Global Crossing, managers may pursue their own private interests at the expense of shareholders when they are not closely monitored. This so-called agency problem is a major weakness of the public corporation. Extensive corporate malfeasance and accounting manipulations at these companies eventually drove them into financial distress and bankruptcy, devastating shareholders and employees alike. Lamentably, some senior managers and corporate insiders enriched themselves enormously in the process. Clearly, the boards of directors, the ultimate guardians of the interests of shareholders, failed to perform their duties at these companies. In the wake of these corporate calamities that have undermined the credibility of the free market system, the society has painfully learned the importance of **corporate governance**, that is, the financial and legal framework for regulating the relationship between a company's management and its shareholders. Needless to say, the corporate governance problem is not confined to the United States. In fact, it can be a much more serious problem in many other parts of the world, especially emerging and transition economies, such as Indonesia, Korea, China, Italy, and Russia, where legal protection of shareholders is weak or virtually nonexistent.

As we will discuss in Chapter 4 in detail, corporate governance structure varies greatly across countries, reflecting different cultural, legal, economic, and political environments in different countries. In many countries where shareholders do not have strong legal rights, corporate ownership tends to be concentrated. The concentrated ownership of the firm, in turn, may give rise to the conflicts of interest between dominant shareholders (often the founding family) and small outside shareholders. The collapse of Parmalat, a family-controlled Italian company, after decades of accounting frauds, provides an example of corporate governance risk. The company allegedly hid debts, "invented" assets, and diverted funds to bail out failing ventures of the family members. Because only the Tanzi (founding) family and close associates knew how the company was run, it was possible to hide the questionable practices for decades. Outside shareholders who collectively control a 49 percent stake did not know how Parmalat was operating. Franco Ferrarotti, professor of sociology at the University of Rome, was quoted as saying, "The government is weak, there is no sense of state, public services are bad and social services are weak. The family is so strong because it is the only institution that doesn't let you down."[5]

Shareholders are the owners of the business; it is their capital that is at risk. It is only equitable that they receive a fair return on their investment. Private capital may not have been forthcoming for the business firm if it had intended to accomplish any other objective. As we will discuss shortly, the massive privatization that has been taking place in developing and formerly socialist countries, which will eventually enhance the standard of living of these countries' citizens, depends on private investment. It is thus vitally important to strengthen corporate governance so that shareholders receive fair returns on their investments. In what follows, we are going to discuss in detail: (i) the globalization of the world economy, and (ii) the growing role of MNCs in the world economy.

[5]*USA Today*, February 4, 2004, p. 2B.