

Wiley Finance Series



# International Corporate Finance

+ website

*Value Creation with Currency Derivatives  
in Global Capital Markets*

LAURENT L. JACQUE



WILEY



# **International Corporate Finance**

Founded in 1807, John Wiley & Sons is the oldest independent publishing company in the United States. With offices in North America, Europe, Australia, and Asia, Wiley is globally committed to developing and marketing print and electronic products and services for our customers' professional and personal knowledge and understanding.

The Wiley Finance series contains books written specifically for finance and investment professionals as well as sophisticated individual investors and their financial advisors. Book topics range from portfolio management to e-commerce, risk management, financial engineering, valuation, and financial instrument analysis, as well as much more.

For a list of available titles, visit our Web site at [www.WileyFinance.com](http://www.WileyFinance.com).

# **International Corporate Finance**

*Value Creation  
with Currency Derivatives  
in Global Capital Markets*

LAURENT L. JACQUE

**WILEY**

Cover image: Wiley

Cover design: (top): © Elio Ciol/Corbis; (middle): © tomograf/iStockphoto;  
(bottom): © OJO\_Images/iStockphoto

Copyright © 2014 by Laurent Jacque. All rights reserved.

Published by John Wiley & Sons, Inc., Hoboken, New Jersey.

Published simultaneously in Canada.

No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, scanning, or otherwise, except as permitted under Section 107 or 108 of the 1976 United States Copyright Act, without either the prior written permission of the Publisher, or authorization through payment of the appropriate per-copy fee to the Copyright Clearance Center, Inc., 222 Rosewood Drive, Danvers, MA 01923, (978) 750-8400, fax (978) 646-8600, or on the Web at [www.copyright.com](http://www.copyright.com). Requests to the Publisher for permission should be addressed to the Permissions Department, John Wiley & Sons, Inc., 111 River Street, Hoboken, NJ 07030, (201) 748-6011, fax (201) 748-6008, or online at <http://www.wiley.com/go/permissions>.

Limit of Liability/Disclaimer of Warranty: While the publisher and author have used their best efforts in preparing this book, they make no representations or warranties with respect to the accuracy or completeness of the contents of this book and specifically disclaim any implied warranties of merchantability or fitness for a particular purpose. No warranty may be created or extended by sales representatives or written sales materials. The advice and strategies contained herein may not be suitable for your situation. You should consult with a professional where appropriate. Neither the publisher nor author shall be liable for any loss of profit or any other commercial damages, including but not limited to special, incidental, consequential, or other damages.

For general information on our other products and services or for technical support, please contact our Customer Care Department within the United States at (800) 762-2974, outside the United States at (317) 572-3993 or fax (317) 572-4002.

Wiley publishes in a variety of print and electronic formats and by print-on-demand. Some material included with standard print versions of this book may not be included in e-books or in print-on-demand. If this book refers to media such as a CD or DVD that is not included in the version you purchased, you may download this material at <http://booksupport.wiley.com>. For more information about Wiley products, visit [www.wiley.com](http://www.wiley.com).

*Library of Congress Cataloging-in-Publication Data*

Jacque, Laurent L.

International corporate finance + website : foreign exchange, currency derivatives, and risk management in the global capital markets / Laurent L. Jacque.

pages cm.—(Wiley finance series)

Includes index.

ISBN 978-1-118-78186-9 (paperback)—ISBN 978-1-118-78369-6 (ePDF)—

ISBN 978-1-118-78362-7 (ePub) 1. International business enterprises—Finance.

2. Risk management. 3. Foreign exchange. 4. Foreign exchange futures. I. Title.

II. Title: International corporate finance plus website. III. Title: International corporate finance and website.

HG4027.5.J3193 2014

332'.042—dc23

2013042741

Printed in the United States of America.

10 9 8 7 6 5 4 3 2 1

*For Bebe, Nathalie, and Olivier—my pride and my joy*



# Contents

<b>Preface</b>	<b>xvii</b>
<b>Acknowledgments</b>	<b>xxiii</b>
<b>About the Author</b>	<b>xxv</b>
<b>CHAPTER 1</b>	
<b>What Is International Corporate Finance?</b>	<b>1</b>
The Uneven Reach of Globalization	2
The Rise of the Multinational Corporation	3
What Is Different about International Corporate Finance?	6
Risks in the Wonderland of International Finance	8
Internationalization and the Locus of the Finance Function	12
The International Control Conundrum	15
Exploiting the Multinational Enterprise System	16
Summary	18
Questions for Discussion	19
References	19
<b>PART ONE</b>	
<b>The International Monetary Environment</b>	<b>21</b>
<b>CHAPTER 2</b>	
<b>Exchange Rates Regimes</b>	<b>23</b>
Some First Principles about Exchange Rate Determination	24
World Map of Exchange Rate Regimes: The Flexibility × Convertibility Space	29
Floating Exchange Rates	31
Stabilized or Pegged Exchange Rates	38
Controlled Exchange Rates	44
Summary	49
Appendix 2A: The Purchasing Power Parity Hypothesis	49
Questions for Discussion	58

Problems	58
References	61
<b>CHAPTER 3</b>	
<b>Yesterday and Yesteryear: A Brief History of the International Monetary System</b>	<b>63</b>
Chronology of the International Monetary System	64
The Gold Standard (1878–1914, 1925–1931)	67
The Bretton Woods System (1944–1971)	69
Managed Floating Exchange Rates (1973–)	73
European Monetary System and the European Currency Unit (1979–1999)	74
Emerging Markets Currency Regimes and Crises	78
European Monetary Union and the Birth of the Euro (1999–Present)	81
Today and Tomorrow: The Current Map of Exchange Rates	85
Summary	88
Questions for Discussion	89
Problems	90
References	92
<b>CHAPTER 4</b>	
<b>The Balance of Payments</b>	<b>93</b>
Fundamentals of Balance of International Payments Accounting	94
Current Account	99
Capital Account	101
Official Reserve Account	102
Statistical Discrepancies: Errors and Omissions	103
Balance of Payments and the Foreign Exchange Market	103
Debtor versus Creditor Nations	107
Linking the Balance of Payments to National Income	109
Summary	111
Questions for Discussion	112
Problems	113
References	115
<b>PART TWO</b>	
<b>The Foreign Exchange Market and Currency Derivatives</b>	<b>117</b>
<b>CHAPTER 5</b>	
<b>The Foreign Exchange Market</b>	<b>119</b>
How Forex Is Traded: The Institutional Framework	120
Foreign Exchange Products	128
Exchange Rate Quotations	131

Summary	143
Questions for Discussion	144
Problems	144
References	147
<b>CHAPTER 6</b>	
<b>Interest Rate Arbitrage and Parity</b>	<b>149</b>
Interest Rate Arbitrage Theorem	150
Interest Rate Parity	158
Uncovered Interest Rate Arbitrage and the Carry Trade	166
Summary	169
Appendix 6A: Interest Rate Parity and Asymmetric Taxation	170
Appendix 6B: The Linkages between Interest, Inflation, and Exchange Rates	171
Questions for Discussion	177
Problems	177
References	183
<b>CHAPTER 7</b>	
<b>Currency Futures, Options, and Swaps</b>	<b>185</b>
A Brief History of Derivatives	186
Currency Futures	190
Currency Options	195
Risk Profile of Currency Options	198
Option Strategies	200
Put-Call Parity Theorem	206
The Valuation of Currency Options	209
Derivatives and Zero-Premium Options	215
Currency Swaps	218
Interest Rate Swaps	224
Summary	226
Questions for Discussion	227
Problems	228
References	231
<b>PART THREE</b>	
<b>International Financing</b>	<b>233</b>
<b>CHAPTER 8</b>	
<b>The International Financial Sector and the Dynamics of Global Capital Markets</b>	<b>235</b>
Financing as a Global Procurement Decision	236
The Financial System and Financial (Dis)Intermediation	238
Securitization and the (Lower) Cost of Consumer Financing	241
Deregulation	249

Mapping the Financial System/Capital Market	
Emergence Process	252
Summary	259
Questions for Discussion	260
Problems	260
References	263
<b>CHAPTER 9</b>	
<b>Sourcing Equity Globally</b>	<b>265</b>
A Grand Tour of Equity Markets	266
Global Equity Financing as a Procurement Decision	273
Internationalizing the Cost of Capital:	
The Landmark Case of Novo Industri	274
Why Do Firms Cross-List?	279
How to Source Equity Globally	281
Summary	286
Questions for Discussion	288
Problems	288
References	290
<b>CHAPTER 10</b>	
<b>Sourcing Debt from Global Bond Markets</b>	<b>291</b>
The International Debt Procurement Decision	292
Grand Tour of the Global Debt Market	293
Cost of Foreign Currency Debt Financing	299
Debt Refinancing	304
The International Debt Financing Conundrum	307
Summary	309
Questions for Discussion	310
Problems	311
References	315
<b>CHAPTER 11</b>	
<b>International Trade Financing</b>	<b>317</b>
A Brief History of International Trade	317
The Trilogy of Risks in Exporting	318
Managing Credit Risk	321
Managing Currency Risk	322
Managing Country Risk	323
The Mechanics of Trade Financing with a Letter of Credit	324
Financing Exports	327
Pre-Export Financing	330
Government-Sponsored Export Credit Agencies	332
Summary	333
Questions for Discussion	333
Problems	334

<b>CHAPTER 12</b>	
<b>Asian Finance and Banking</b>	<b>337</b>
Asian Finance: Common Historical Roots, Diverse Paths	338
Adaptive Responses: Crises and Institutional Change in Asian Finance	342
Business Organization, Corporate Ownership, and Governance	346
Capital Market Development	356
Capital Structure and the Cost of Capital	364
Performance, Value, and the Practice of Corporate Finance	366
Summary	368
Questions for Discussion	369
References	369
<b>CHAPTER 13</b>	
<b>Islamic Banking and Finance</b>	<b>371</b>
The Underlying Principles of Islamic Finance	372
The Evolution of Islamic Finance	376
Islamic Financing Products	380
Shariah-Compliant Asset Management	386
Islamic Banking	388
Islamic Finance and the Global Financial Meltdown	392
Summary	394
Questions for Discussion	395
References	395
<b>PART FOUR</b>	
<b>Managing Foreign Exchange Risk</b>	<b>397</b>
<b>CHAPTER 14</b>	
<b>The Case for Foreign Exchange Risk Management</b>	<b>399</b>
Defining Foreign Exchange Risk Management and Its Objectives	400
Can Hedging Currency Risk Increase the Value of the Firm?	403
When Is Hedging Currency Risk Irrelevant?	406
From Hedging to Managing Currency Risk	407
The Building Blocks of Foreign Exchange Risk Management	409
Summary	410
Appendix 14A: Foreign Exchange Risk Management: What Do Firms Do?	411
Questions for Discussion	412
References	412
<b>CHAPTER 15</b>	
<b>Forecasting Exchange Rates</b>	<b>413</b>
Market-Based Forecasts	414
Model-Based Forecasts: Technical versus Econometric Modeling Approaches	419

Composite Forecasts	426
How to Use Currency Forecasts	427
Summary	427
Appendix 15A: Forecasting Pegged Yet Adjustable Exchange Rates	428
Questions for Discussion	434
Problems	434
References	437
<b>CHAPTER 16</b>	
<b>Managing Transaction Exposure</b>	<b>439</b>
Measuring Transaction Exposure	440
The Mechanics of Hedging Transaction Exposure	444
Hedging and Financing International Trade	456
Eliminating Foreign Exchange Rate Risk in Long-Term Contracts	457
Exchange Rate Risk in International Bidding	463
How Much to Hedge Transaction Exposure	467
Summary	468
Questions for Discussion	468
Problems	469
References	475
<b>CHAPTER 17</b>	
<b>Managing Translation Exposure</b>	<b>477</b>
What Is Translation Exposure?	477
Should Translation Exposure Be Hedged?	478
Alternative Translation Methods	479
The Mechanics of Contractual Hedging	485
The Mechanics of Financial Hedging	492
Summary	496
Appendix 17A: Accounting Valuation and the Concept of Translation Exposure	497
Questions for Discussion	501
Problems	502
References	506
<b>CHAPTER 18</b>	
<b>Managing Economic Exposure</b>	<b>507</b>
A Taxonomy of Economic Exposures	508
Toward an Operational Measure of Economic Exposure	514
Managing Operating Exposure	518
Summary	523
Questions for Discussion	524
Problems	524
References	527

**PART FIVE**

<b>Cross-Border Valuation and Foreign Investment Analysis</b>	<b>529</b>
<b>CHAPTER 19</b>	
<b>Foreign Market Entry Strategies and Country Risk Management</b>	<b>531</b>
Contractual Modes of Foreign Market Entry	532
Foreign Market Entry through Foreign Direct Investments	537
Country Risk	539
Costs/Benefits of Foreign Direct Investment to Host Countries	544
Summary	548
Questions for Discussion	549
References	549
<b>CHAPTER 20</b>	
<b>International Capital Budgeting</b>	<b>551</b>
The Foreign Direct Investment Decision-Making Process	551
A Primer on Evaluating Investment Opportunities	554
What Is Different about Evaluating Foreign Investment Proposals?	556
Case Study: Renault Invests in India	560
Global Cost of Equity Capital	571
Summary	575
Appendix 20A: Adjusted Present Value	576
Appendix 20B: Real Options	579
Questions for Discussion	587
Problems	587
References	591
<b>CHAPTER 21</b>	
<b>Cross-Border Mergers and Acquisitions</b>	<b>593</b>
A Brief History of Mergers and Acquisitions	594
The Industrial Logic of Mergers and Acquisitions	594
Are Cross-Border Acquisitions Different?	596
Valuation of Foreign Acquisitions	600
Ciments Lafarge Enters Vietnam	602
Summary	610
Questions for Discussion	610
Problems	610
<b>CHAPTER 22</b>	
<b>Project Finance</b>	<b>613</b>
What Is Project Finance?	614
On Allocating Risks	617

Anatomy of Project Finance: The Case of the Ras Laffan Liquefied Natural Gas Company	619
Valuing Project Finance: The Esty Model	621
Summary	628
Questions for Discussion	629
References	630
<b>CHAPTER 23</b>	
<b>Global Investing</b>	<b>631</b>
The Basics of International Portfolio Management	632
The Gains from International Diversification	640
Trials and Tribulations in Foreign Equity Investing	647
Currency Risk in Global Investing	649
Alternative Modes of Investing in Foreign Equity	651
The New Landscape of Global Investing	652
Summary	657
Appendix 23A: In Search of Alpha at Global Thematic Partners (GTP)	657
Questions for Discussion	662
Problems	662
References	664
<b>PART SIX</b>	
<b>Managing the Multinational Financial System</b>	<b>665</b>
<b>CHAPTER 24</b>	
<b>International Control Conundrum</b>	<b>667</b>
A Primer on Managerial Control	668
The International Control Conundrum	672
Currency Space Mapping	674
EVA-Based Contingent Budgeting and Performance Assessment	677
Summary	683
Appendix 24A: Applying the EVA-Based Control System	684
Questions for Discussion	689
References	689
<b>CHAPTER 25</b>	
<b>Managing the Multinational Financial System</b>	<b>691</b>
A Primer on International Taxation	691
The Multinational Financial System	695
Exploiting the System's Potential to Minimize Global Tax Liabilities	697
Designing a Global Dividends Remittance Strategy	702
Centralizing Cash Management	705

Summary	714
Questions for Discussion	715
Problems	716
References	717
<b>Appendix: Answers to Selected Problems</b>	<b>719</b>
<b>About the Companion Website</b>	<b>727</b>
<b>Index</b>	<b>729</b>



# Preface

**A**s globalization is redefining the field of corporate finance, international finance is increasingly permeating most financial transactions, which in yesteryears were deemed to be strictly domestic transactions. In fact, it is very difficult to understand what is happening in capital markets without a firm grasp of currency markets, the investment strategies of sovereign wealth funds, carry trades, foreign exchange derivative products, and so forth. Similarly, project finance cannot be understood without a firm grasp of valuation concepts in a cross-border context. Indeed, international finance is now part and parcel of the basic literacy of any financial executive whether she or he is an investment banker, a treasurer, a CFO, a portfolio manager, or a loan officer. There is no hiding from international finance.

And yet the field of international finance textbooks is not terribly crowded, with the three or four leading titles showing signs of multiple editions fatigue. What is needed is a book offering a fresh perspective on international finance that transcends the boundaries of *ethnocentric* thinking and an overly U.S.-centric approach—a book that brings the fascinating and rapidly unfolding story of emerging capital markets and their daring multinationals in the mainstream of international finance. *International Corporate Finance* is purporting to be such a book.

## WHAT MAKES THIS BOOK UNIQUE

---

There are several features that will set *International Corporate Finance* apart from rival books:

1. Most chapters are developed around a real-life but simplified mini-case to anchor theoretical concepts to managerial situations. This allows the reader to grasp the practical relevance of the topic addressed before being introduced to the necessary theoretical frameworks.
2. Each chapter provides real-life illustrations. The purpose is to make international finance as alive as possible. Typically this is done as boxed inserts called “International Corporate Finance in Practice,” written in a lighter style meant to wake up the reader by being reasonably provocative.
3. Most chapters provide simple decision rules and pragmatic “how-to” answers to key managerial issues—at least one in each chapter. Many texts often provide a narrative solution to managerial questions raised but fail to provide simple yet rigorous closure to the reader.
4. Several chapters, such as Islamic Banking and Finance, Asian Finance and Banking, Cross-Border Mergers and Acquisitions, and Project Finance, are completely new material that no other textbook currently covers. This book systematically incorporates the story of the BRIC countries (Brazil, Russia, India, and China)

and their daring multinationals, thereby balancing out an overly U.S.-centric and Wall Street–anchored approach to international corporate finance.

5. Most chapters include separate case studies (found on the website) that are real-life decision-making situations. Although much shorter than typical Harvard Business School case studies (the industry standard), they capture multifaceted financial management in an engaging manner and typically result in 30 to 45 minutes of lively class discussion.
6. When appropriate, historical perspective and landmark transactions are presented to put concepts in context. In-depth coverage of the subprime crisis (2008) and the euro crisis (2010–) is developed in the context of ill-functioning financial markets.
7. While primarily focused on international corporate finance, the book is structured in such a way that it could also be used for a course on global capital markets, as Parts One, Two, and Three provide comprehensive coverage of capital markets.
8. A companion quarterly newsletter provides instructors with up-to-date corporate and market developments drawn from the financial press, investment banks' research departments, and relevant websites. It will facilitate instructors' task of making each lecture topical and current.

## **AUDIENCE FOR THIS BOOK**

---

*International Corporate Finance* targets not only the business school market—primarily MBAs, undergraduate seniors, and executive MBAs—but also schools of international affairs and public administration. In draft form it has also been widely used in executive training programs at banks, multinationals, and increasingly government and regulatory agencies.

The book is intended for students taking an elective in international corporate finance that may be part of a finance major (but not necessarily). Although prior exposure to economics and corporate finance would be helpful, the book is self-contained and has no prerequisites.

*International Corporate Finance* should also appeal to a growing international/export market beyond the domestic university/college market. More generally, there is an explosion in the number of MBA programs offered in emerging market countries such as China, India, Brazil, Russia, and Mexico, where international finance is at the center in the curriculum simply because of the global orientation of these economies. For this rapidly growing market, it is imperative to approach international financial management from an emerging market perspective as well as a U.S. or European perspective. Specific chapters on Asian and Islamic finance and banking as well as BRIC countries, along with illustrations and problems/exercises, should be strong elements of differentiation vis-à-vis existing texts.

## **MEETING THE CHALLENGE OF INTERNATIONAL CORPORATE FINANCE**

---

International finance is one of the most topical and lively business topics making the front page of any business daily, but, perhaps because of the unique role played by financial derivatives, it is also a highly complex, arcane, technical, and mystifying subject for the average business student. Herein lies the challenge for the instructor and

the student: how to capitalize on the star power and captivating nature of international finance without sacrificing the rigor of the explanation. Textbooks all too often err on the side of academic correctness and read like treatises written for other knowledgeable academics rather than fresh-faced students. My approach is to start (most) chapters with real-life decisions—situations to hook the reader who presumably wants to know what possible answers struggling managers could implement—and then derive theory, rather than starting from a theoretical construct at the risk of losing the reader before turning to applications. For example, the chapter on trade financing starts with:

*Tata Motors of India's export manager, Raju Aneja, has just signed an export order for 1,000 Nanos—its new revolutionary minicar—with Atlas Distributors, a Vespa scooter dealership based in Casablanca (Morocco). The export sale is denominated in euros (€) and calls for payment of €20 million on delivery—scheduled for approximately three months from time of shipment. Tata Motors has never had any commercial dealings with Atlas but was envisioning a long-term relationship with the Moroccan firm. However, it was concerned about the importer's solvency. The Moroccan dirham was pegged to the euro and partially convertible. How should Tata Motors finance its export trade? Raju knew that this would be the first of many similar deals that Tata Motors was hoping to forge with other emerging market countries where the Nano was expected to meet with much commercial success.*

Similarly, the chapter on debt financing starts with:

*JetBlue Airlines was seeking to raise \$250 million in a seven-year note to upgrade its aging fleet. Ms. Rousse—JetBlue's newly appointed CFO—was reviewing the different funding options offered by its investment bankers, which included a domestic dollar-denominated zero-coupon bond priced at 61 percent, a dollar-denominated Eurobond with a 7.25 percent annual coupon, and a samurai bond denominated in yen with a semiannual coupon of 4.00 percent. Last, a floating-rate note denominated in euros paying euro-LIBOR + 165 basis points was also being considered. Ms. Rousse was perplexed by the array of currency denominations and the significant differences in nominal interest rates, both of which complicated direct comparisons among the different funding options.*

Both chapters progressively build a more rigorous framework as they progress. In the same vein, a rich array of exercises and problems accompany each chapter; they are more than mechanical numerical applications of what is discussed in the chapter itself. Last but not least, most chapters offer a separate short case study (found on the book's website) for fruitful discussion.

## **WHAT IS IN THE BOOK?**

---

This book is divided into six parts:

Part One: The International Monetary Environment

Part Two: The Foreign Exchange Market and Currency Derivatives

Part Three: International Financing

Part Four: Managing Foreign Exchange Risk

Part Five: Cross-Border Valuation and Foreign Investment Analysis

Part Six: Managing the Multinational Financial System

*Part One: The International Monetary Environment.* Part One examines the monetary environment within which international financing decisions are made. How exchange rates are determined and the unique role played by central banks' intervention in setting currency values is the focus of Chapter 2, whereas Chapter 3 presents a brief history of the international monetary system. The architecture of the world economy is outlined in Chapter 4 through the lens of national balance of payments accounting, which records the key flows linking national economies.

*Part Two: The Foreign Exchange Market and Currency Derivatives.* After introducing the foreign exchange market and its inner workings (Chapter 5), Part Two discusses the valuation of the mother of all currency derivatives—the forward contract—in the context of the theory of interest rate parity (Chapter 6). Currency futures, options, and swaps are detailed in Chapter 7, which shows how they can be harnessed for the purpose of risk management.

*Part Three: International Financing.* If globalization of financial markets has gone a long way toward eradicating differences in national cost of capital, they have not been entirely erased. This is why global financial markets are often characterized as mildly segmented rather than fully integrated (Chapter 8). Part Three outlines funding as a global procurement decision from both equity markets (Chapter 9) and debt markets (Chapter 10). The uniqueness of financing strategies and capital markets in two regions of the world that loom especially large on the global economy—namely East Asia and the Middle East—is addressed in separate chapters. Chapter 12 profiles the idiosyncrasies of Asian finance and banking in the context of Japan, South Korea, and China, whereas Chapter 13 explores the mysteries of Islamic finance.

*Part Four: Managing Foreign Exchange Risk.* The exchange rate variable permeates all key financial management decisions and injects a considerable degree of variability in a firm's overall risk profile. Part Four starts by asking whether hedging part or all of a firm's exposure to currency risk is indeed value creating for the firm's owners and therefore warranted (Chapter 14). To the extent that exchange rate forecasting (Chapter 15) is a treacherous activity in the context of clean floating exchange rates, we take a "total risk" view of risk management. Exporters and importers as well as multinational corporations and globally reaching financial institutions generally hedge both transaction and translation exposures by using forwards, futures, options, or swaps. Measuring and managing transaction, translation, and economic exposures are discussed in Chapters 16, 17, and 18, respectively.

*Part Five: Cross-Border Valuation and Foreign Investment Analysis.* Part Five develops a valuation framework for cross-border investments that uniquely incorporates the different variables such as foreign exchange risk, country risk, asymmetric tax treatment, and different inflation rates. Chapter 20 contrasts different metrics such as net present value of asset-based cash flows or equity-based cash flows versus adjusted present value metrics, and reviews the necessary adjustments to be made to the cost of capital used as the discount rate in international valuation.

The framework is applied to cross-border mergers and acquisitions in Chapter 21 and large-scale infrastructural project finance in Chapter 22. Taking the perspective of asset managers manning the desks of mutual funds, pension funds, hedge funds, or sovereign wealth funds, global investing in stocks and bonds is addressed in Chapter 23, which gauges the limit of geographical diversification in the context of ever-increasingly integrated capital markets.

*Part Six: Managing the Multinational Financial System.* Central to the successful implementation of a global strategy, multinational corporations need financial planning, budgeting, and control systems that incorporate the unique operating circumstances of each and every foreign subsidiary while ensuring that strategic goals are duly achieved (Chapter 24). Finally, Chapter 25 shows how financial decisions should be optimized to exploit fully the multinational enterprise system.

## WEBSITE AND ONLINE RESOURCES

---

This book comes with a companion website, [www.wiley.com/intlcorpfinance](http://www.wiley.com/intlcorpfinance) (see back of book for details).

**Readers** have access to all case studies, briefly introduced at the end of each corresponding chapter. These case studies help the reader apply the lessons from this book to real life situations. Each case comes with questions for discussion. Readers also have access to a detailed glossary of key terms used in this book.

**Professors** can readily download the following materials:

- **Instructor's manual.** The online instructor's manual offers detailed solutions for end-of-chapter discussion questions and problems. Elaborate solutions are also presented for each case with guidelines for facilitating a successful class discussion.
- **PowerPoint presentation.** Professionally prepared slides provide detailed lecture outlines, including selected graphs from each of the chapters.

In addition, there are resources specifically for professors' use, and those are available at John Wiley & Sons' Higher Education website.

I would be grateful for readers' and instructors' constructive comments and suggestions for improvements and revisions. Please write directly to me at [laurent.jacque@tufts.edu](mailto:laurent.jacque@tufts.edu).



# Acknowledgments

Over the years, research projects, consulting assignments, and discussions with many savvy executives and academics have helped me challenge received wisdom in the area of corporate finance, financial engineering, risk management, and derivatives; for their insight this book is a better one. Most notably I wish to thank Daniel Ades (Kawa Fund), Y. D. Ahn (Daewoo), Bruce Benson (Barings), Joel Bessis (HEC), Amar Bhide (Tufts University), Alex Bongrain (Bongrain S.A.), Charles N. Bralver (Oliver Wyman), James Breech (Cougar Investments), Eric Briys (Cyberlibris), Gaylen Byker (InterOil), Brian Casabianca (International Finance Corporation), Asavin Chintakananda (Stock Exchange of Thailand), Georg Ehrensperger (Garantia), Myron Glucksman (Citicorp), Anthony Gribbe (J.P. Hottinguer & Cie), Gabriel Hawawini (INSEAD), Charamporn Jotishkatira (Stock Exchange of Thailand), Robert E. Kiernan (Advanced Portfolio Management), Oliver Kratz (Global Thematic Partners), Margaret Loeb (ADM), Rodney McLauchlan (Bankers Trust), Jacques Olivier (HEC), Craig Owens (Campbell Soup), Avinash Persaud (State Street), Guadalupe Philips (Televisa), Roland Portait (ESSEC), Jorge Ramirez (Aon Risk Solutions), Patrick J. Schena (Tufts University), Christoph Schmid (Bio-Oil), John Schwarz (Citicorp), Manoj Shahi (Shinsei Bank, Japan), Sung Cheng Chih (GIC, Singapore), Charles Tapiero (Polytechnic Institute at NYU), Adrian Tschoegl (Wharton), Seck Wai Kwong (State Street), and Lawrence Weiss (Tufts University).

I am indebted to several individuals who selflessly read and edited different versions of the manuscript, and I wish to express my appreciation to:

- Blaise Allaz (HEC–Paris)
- Patricia Bailin (Tufts University)
- Rajesh Chakravarti (Indian School of Business)
- Gunter Dufey (University of Michigan)
- Shuvam Dutta (International Finance Corporation)
- Gabriel Hawawini (INSEAD)
- Lawrence Krohn (Tufts University)
- Rishad Sadikot (Cambridge Associates)
- Rajeev Sawant (Baruch College)
- Patrick Schena (Tufts University)
- Charles S. Tapiero (Polytechnic Institute-NYU)
- Philip Ullmann (Bentley College)
- Lawrence Weiss (Tufts University)

I owe a debt of gratitude to Patrick Schena and Ibrahim Warde, who contributed original chapters on Asian finance and Islamic finance, and to Martin Rietzel for writing the appendix on real options. Special thanks are owed to Olivier Jacque for building financial models used throughout the book and to Shuvan Dutta for

developing several original case studies. Research assistance from Ravi Chaturvedi, Jaya Movva, and Christina Valverde, as well as timely help from Lupita Ervin for graphics and word processing is gratefully acknowledged. Last but not least, I wish to thank my “editor in chief”—Rishad Sadikot—who painstakingly reviewed the entire manuscript and asked all the hard questions.

Special thanks are owed to the John Wiley & Sons editorial team—most notably Tula Batanchiev (editorial program coordinator), Evan Burton (editor), Meg Freeborn (senior development editor), and Stacey Fischkelta (senior production editor)—for their professional guidance and enthusiasm for the project, which made the final stage of writing this book feel almost easy.

Yet with so much help from so many, I am still searching for the ultimate derivative that would hedge me from all remaining errors: But there is no escape—they are all mine.

LLJ  
Winchester and Paris  
September 1, 2013

## About the Author

**L**aurent L. Jacque is the Walter B. Wriston Professor of International Finance and Banking at the Fletcher School of Law and Diplomacy (Tufts University) and Academic Director of its International Business Studies Program. He previously served as Fletcher's Academic Dean and as such was responsible for the design and the establishment of the new Master of International Business degree and the Center for Emerging Market Enterprises. Since 1990 he has also held a secondary appointment at the HEC School of Management (France). Earlier, he served on the faculty of the Wharton School for 11 years with a joint appointment in the finance and management departments, and taught at the Carlson School of Management (University of Minnesota). He also held visiting appointments at Instituto de Empresa (Spain), Kiel Institute of World Economics (Germany), Pacific Asian Management Institute (University of Hawaii), Institut Supérieur de Gestion (Tunisia), and Chulalongkorn University (Thailand) as the Sophonpanich Research Professor.

He is the author of three books, *Global Derivative Debacles: From Theory to Malpractice* (World Scientific, 2010), translated into French, Russian, Chinese, and Korean; *Management and Control of Foreign Exchange Risk* (Kluwer Academic Publishers, 1996); *Management of Foreign Exchange Risk: Theory and Praxis* (Lexington Books, 1978); as well as more than 25 articles on risk management and international corporate finance that have appeared in leading academic and professional journals such as *Management Science*, *Journal of Risk and Insurance*, *Journal of Applied Corporate Finance*, *Journal of International Business Studies*, *Insurance: Mathematics and Economics*, *Journal of Operations Research Society*, *Columbia Journal of World Business*, and other publications. He served as an advisor and consultant to Wharton Econometrics Forecasting Associates, and as a member of Water Technologies Inc.'s board of directors.

A recipient of several teaching awards, Laurent Jacque also recently won the James L. Paddock award for teaching excellence at the Fletcher School and the Europe-wide HEC-CEMS award in 2008. He is a consultant to a number of firms and active in executive education around the world. Laurent Jacque is a graduate of HEC (Paris) and received his MA, MBA, and PhD from the Wharton School (University of Pennsylvania).



# What Is International Corporate Finance?

*The only trouble with going abroad is that you have to leave home to do it.*

An English aristocrat when Britannia ruled the waves!

**A**s we enter the third millennium, information technology—by crushing the cost of communications—is accelerating the globalization of manufacturing, commerce, and especially finance. News traveling at the speed of light through the Internet reaches an estimated 250,000 computer terminals in trading rooms around the world, morphing national financial markets into one huge, efficient global marketplace for capital. Indeed, the relentless rise of the digital cyber-economy is weakening the grip of the nation-state as government policies are subjected to a continuing referendum by financial markets. And yet die-hard sovereigns are holding firmly to their prerogatives of having a national *currency*, a national *regulatory framework*, and a national *tax code* of their own and much more. International business’s vastly expanded global reach is redefining the risks and opportunities faced by financial executives, whether they are at the helms of international trading firms; old-fashioned brick-and-mortar multinational corporations (MNCs) such as IBM, Nestlé, or Toyota; or “virtual” multinational enterprises such as Google or eBay.

In this first chapter, we explain what is unique about international corporate finance. To do so, it is helpful to sketch how the process of globalization fueled by the relentless rise of the multinational enterprise is reshaping the global economy, thereby providing a backdrop against which to better identify the unique dimensions of international corporate finance. At the end of this chapter, the reader should have become convinced that the study of international corporate finance is a *sine qua non* condition of success in tomorrow’s business world. The old divide between domestic and international finance is blurring, so much so that our English aristocrat would no longer need to leave home to go abroad, because abroad has become home—at least in the world of finance.

In this introductory chapter the reader will gain an understanding of:

- What globalization is and how the multinational corporation is its handmaiden.
- What makes international corporate finance uniquely different from domestic corporate finance.

- How the exchange rate variable uniquely complicates financial decision making.
- How the locus of decision making in the finance function migrates as firms morph from strictly domestic entities to fully developed multinational corporations.
- What the international control conundrum is about.
- How multinational corporations can uniquely leverage their financial systems to minimize taxes and lower their cost of capital.

## THE UNEVEN REACH OF GLOBALIZATION

---

Globalization is about the increasing integration of national economies as cross-border movements of labor, goods, and services, as well as money, continue at an unabated pace. In the words of Narayana Murthy, president and CEO of Infosys—an up-and-coming Indian multinational—“I define globalization as producing where it is most cost-effective, selling where it is most profitable, and sourcing capital where it is cheapest, without worrying about national boundaries.” In his best-selling book *The World Is Flat*, Thomas L. Friedman argues that the world economy has become a level playing field.

The reality is, however, somewhat more nuanced. Globalization is a multifaceted process that has evolved unevenly, with certain markets becoming dramatically more integrated than others. If one breaks down the world economy into three principal markets for (1) *labor*, (2) *goods and services*, and (3) *capital*, we immediately sense that globalization is an uneven three-speed process upholding major price differences across national markets. If the world were indeed a level playing field, there would be no price differences in the cost of labor, goods, services, or capital, and what is known as the Law of One Price would hold true. Yet, globalization is at best sluggish in the labor markets where most international migration is still being curbed by severe national immigration quotas: Wages are lower in Vietnam than in China, China’s wages are lower than Poland’s, and Poland’s wages are lower than wages in Switzerland. Globalization is healthy, but the movements of goods and services are still regulated, with most countries maintaining tariff and nontariff barriers. Meanwhile, it is unbridled and nearly all-encompassing in the market for capital. This process has been fueled by four forces:

1. *Technology aided by the marriage of computers and telecommunications.* As the cost of transportation, communications, and computing continues to decline exponentially, overcoming the natural barriers of spatial distance has become cheaper. The “death of distance” has enabled a nimbler division of labor among trading nations, allowing domestic and multinational corporations to leverage economies of scale better through outsourcing and offshoring.
2. *Economic liberalization and deregulation.* The falling of regulatory barriers that traditionally hampered the cross-national flow of goods and services as well as foreign direct and portfolio investment is proving to be a powerful catalyst for increasing integration in markets of goods, services, and capital. Multiple rounds of multilateral negotiations within the framework of the