

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 website at www.WileyFinance.com.

International Corporate Finance

Value Creation with Currency Derivatives in Global Capital Markets

Second Edition

LAURENT L. JACQUE

WILEY

Copyright © 2020 by Laurent L. 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. 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 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.

Library of Congress Cataloging-in-Publication Data:

Names: Jacque, Laurent L., author.

Title: International corporate finance: value creation with currency derivatives in global capital markets / Laurent L. Jacque.

Description: Second edition. | Hoboken, New Jersey: Wiley, [2020] |

Series: Wiley finance | Includes bibliographical references and index.

Identifiers: LCCN 2019026508 (print) | LCCN 2019026509 (ebook) | ISBN

9781119550464 (Hardback) | ISBN 9781119550488 (ePDF) | ISBN

9781119550433 (ePub)

Subjects: LCSH: International business enterprises—Finance. | Risk

management. | Foreign exchange futures.

Classification: LCC HG4027.5 .J3193 2020 (print) | LCC HG4027.5 (ebook) |

DDC 658.15/99-dc23

LC record available at https://lccn.loc.gov/2019026508

LC ebook record available at https://lccn.loc.gov/2019026509

Cover Design: Wiley

Cover Images: © Vintage Tone/Shutterstock, © kentoh/Shutterstock

Printed in the United States of America.

10 9 8 7 6 5 4 3 2 1

For my grand children Philippe, Adeline and Maya my pride and my joy

Contents

Preface	xvii
Acknowledgments	XXV
About the Author	xxvii
CHAPTER 1	
What Is International Corporate Finance?	1
The Uneven Reach of Globalization	2 3
The Rise of the Multinational Corporation	
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	19
Questions for Discussion	19
References	20
PART ONE	
The International Monetary Environment	21
CHAPTER 2	
Exchange Rates Regimes	23
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	39
Controlled Exchange Rates	46
To Float or to Fix: The Trilemma of International Finance	49
Summary	50
Questions for Discussion	51
Problems	52
Internet Exercises	54
References	54

viii Contents

CHAPTER 3	
Yesterday and Yesteryear	57
Chronology of the International Monetary System	58
The Gold Standard (1878–1914, 1925–1931)	61
The Bretton Woods System (1944–1971)	63
Managed Floating Exchange Rates (1973–Present)	67
European Monetary System and the European Currency Unit	
(1979–1999)	68
Emerging Markets Currency Regimes and Crises	72
European Monetary Union and the Birth of the Euro (1999–Present)	76
Today and Tomorrow: The Current Map of Exchange Rates	84
Summary	86
Questions for Discussion	87
Problems	88
Internet Exercises	90
References	90
Case Study 3.1: Will the Eurozone Shutter? Plant Location	
and Exchange Rates for Hyundai	91
CHAPTER 4	
The Balance of Payments	99
Fundamentals of Balance of International Payments Accounting	100
Current Account	105
Financial Account	107
Official Reserve Account	109
Statistical Discrepancies: Errors and Omissions	111
Balance of Payments and the Foreign Exchange Market	111
Debtor Versus Creditor Nations	115
Linking the Balance of Payments to National Income	118
Summary	119
Questions for Discussion	120
Problems	121
Internet Exercises	122
References	124
Case Study 4.1: When One of the BRIC(k)s Falls: Trials	
and Tribulations of the Indian Rupee	124
PART TWO	
The Foreign Exchange Market and Currency Derivatives	129
CHAPTER 5	
The Foreign Exchange Market	131
How Forex is Traded: The Institutional Framework	132
Foreign Exchange Products	140
Exchange Rate Quotations	142
Summary	155
Questions for Discussion	156

Contents

Problems	157
Internet Exercises	160
References	160
Case Study 5.1: Banco Mercantil Internacional's Forex Losses	160
CHAPTER 6	
Interest Rate Arbitrage and Parity	165
Interest Rate Arbitrage Theorem	166
Interest Rate Parity	174
Uncovered Interest Rate Arbitrage and the Carry Trade	181
Summary	184
Appendix 6A: Transaction Costs: Interest Rate Arbitarge with Bid-Ask Spreads (Advanced)	185
Appendix 6B: Interest Rate Parity and Asymmetric Taxation	187
Questions for Discussion	188
Problems	188
Internet Exercises	195
References	195
Case Study 6.1: Brazil Rede Globo's Short-Term Funding	195
CHAPTER 7 Purchasing Power Parity and the International Parities Framework	199
Purchasing Power Parity	200
The Linkages Between Interest, Inflation, and Exchange Rates	213
Questions for Discussion	220
Problems	220
Internet Exercises	221
References	222
CHAPTER 8	
Currency Futures and Options	223
A Brief History of Derivatives	223
Currency Futures	228
Currency Options	234
Risk Profile of Currency Options	236
Option Strategies	239
Put-Call Parity Theorem	245
The Valuation of Currency Options	248
Derivatives and Zero-Premium Options	254
Summary	258
Appendix 8A: Pricing Currency Options	259
Questions for Discussion	261
Problems	261
Internet Exercises	264
References Case Study 8.1: Daewoo's Unorthodox Funding Strategy	264 264

X Contents

PART THREE	
International Financing	269
CHAPTER 9	
The International Financial Sector and the Dynamics of Global	
Capital Markets	271
Financing as a Global Procurement Decision	272
The Financial System and Financial (Dis)Intermediation	273
Securitization and the (Lower) Cost of Consumer Financing	281
Deregulation	287
Mapping the Financial System/Capital Market Emergence Process	290
Summary	297
Questions for Discussion	298
Problems	298
Internet Exercises	300
References	300
Case Study 9.1: How Thai Airways FOILs Jet Fuel Price Risk	301
CHAPTER 10	
Sourcing Equity Globally	307
A Grand Tour of Equity Markets	308
Global Equity Financing as a Procurement Decision	317
Internationalizing the Cost of Capital: The Landmark Case of Novo Industri	318
Why do Firms Cross-List?	323
•	323 325
How to Source Equity Globally Summary	331
Questions for Discussion	331
Problems	333
Internet Exercises	334
References	335
Case Study 10.1: Jazztel's Foreign IPO	335
CHAPTER 11	
Sourcing Debt from Global Bond Markets	345
The International Debt Procurement Decision	346
Grand Tour of the Global Debt Market	347
Cost of Foreign Currency Debt Financing	356
Debt Refinancing	361
The International Debt Financing Conundrum	364
Summary	366
Questions for Discussion	366
Problems	367
Internet Exercises	372
References	372
Case Study 11.1: McDonald's Dim Sum Bonds: "Lovin' It"	372

Contents Xi

CHAPTER 12	
Currency, Interest Rate, and Credit Default Swaps	377
Currency Swaps	378
Interest Rate Swaps	383
Credit Default Swaps	391
Summary	397
Questions for Discussion	397
Problems	398
Internet Exercises	400
References	400
Case Study 12.1: The Demise of AIG	400
CHAPTER 13	
International Trade Financing	405
A Brief History of International Trade	406
The Trilogy of Risks in Exporting	407
Managing Credit Risk	409
Managing Currency Risk	410
Managing Country Risk	411
The Mechanics of Trade Financing with a Letter of Credit	412
Financing Exports	415
Pre-Export Financing	418
Government-Sponsored Export Credit Agencies	422
Summary	423
Questions for Discussion	424
Problems	424
Internet Exercises	426
Case Study 13.1: Warrick Pharmaceuticals Inc.	426
PART FOUR	
Managing Foreign Exchange Risk	431
CHAPTER 14	400
The Case for Foreign Exchange Risk Management	433
Defining Foreign Exchange Risk Management and its Objectives	435
Can Hedging Currency Risk Increase the Value of the Firm?	437
When is Hedging Currency Risk Irrelevant?	440
From Hedging to Managing Currency Risk	441
The Building Blocks of Foreign Exchange Risk Management	443
Summary	445
Appendix 14A: Foreign Exchange Risk Management: What do	111
Firms do?	446 446
Questions for Discussion References	446 447
Case Study 14.1: Bio-Oils Energy S.L.	447
Ouse sinuy 17.1. Dio-Ous Ellergy S.L.	TT /

Xİİ Contents

CHAPTER 15	
Forecasting Exchange Rates	455
Market-Based Forecasts	456
Model-Based Forecasts: Technical Versus Econometric Modeling	
Approaches	461
Composite Forecasts	468
How to Use Currency Forecasts	469
Summary	470
Appendix 15A: Forecasting Pegged Yet Adjustable	
Exchange Rates	470
Questions for Discussion	476
Problems	477
Internet Exercises	479
References	479
Case Study 15.1: Euclides Engineering, Ltd.	480
CHAPTER 16	
Managing Transaction Exposure	483
Measuring Transaction Exposure	484
The Mechanics of Hedging Transaction Exposure	488
Hedging and Financing International Trade	500
Eliminating Foreign Exchange Rate Risk in Long-Term Contracts	501
Exchange Rate Risk in International Bidding	508
How Much to Hedge Transaction Exposure	512
Summary	513
Questions for Discussion	514
Problems	514
References	520
Case Study 16.1: Hedging Currency Risk at TT Textiles	521
CHAPTER 17	
Managing Translation Exposure	531
What is Translation Exposure?	531
Should Translation Exposure be Hedged?	532
Alternative Translation Methods	533
The Mechanics of Contractual Hedging	539
The Mechanics of Financial Hedging	546
Summary	550
Appendix 17A: Accounting Valuation and the Concept	
of Translation Exposure	551
Questions for Discussion	555
Problems	555
Internet Exercises	560
References	560
Case Study 17.1: Wilkinson Sword's Trials and Tribulations in	
Turkey	560

Contents

CHAPTER 18	
Managing Economic Exposure	567
A Taxonomy of Economic Exposures	568
Toward an Operational Measure of Economic Exposure	575
Managing Operating Exposure	578
Summary	583
Questions for Discussion	584
Problems	584
References	587
Case Study 18.1: Peugeot Citroën SA's Economic Exposure to the South Korean Won	588
PART FIVE	
Cross-Border Valuation and Foreign Investment Analysis	59 1
CHAPTER 19	
Foreign Market Entry Strategies and Country Risk Management	593
Contractual Modes of Foreign Market Entry	594
Foreign Market Entry Through Foreign Direct Investments	599
Country Risk	600
Costs/Benefits of Foreign Direct Investment to Host Countries	608
Summary	612
Questions for Discussion	613
Internet Exercises	613
References	614
Case Study 19.1: Carrefour's Indian Entry Strategy	614
CHAPTER 20	
International Capital Budgeting	619
The Foreign Direct Investment Decision-Making Process	619
A Primer on Evaluating Investment Opportunities	622
What is Different About Evaluating Foreign Investment Proposals?	624
Case Study: Renault Invests in India	629
Global Cost of Equity Capital	639
Optimal Worldwide Capital Structure	643
Summary	644
Appendix 20A: Adjusted Present Value	645
Appendix 20B: Real Options	648
Questions for Discussion	656
Problems	656
Internet Exercises	660
References	660
CHAPTER 21	
Cross-Border Mergers and Acquisitions	661
A Brief History of Mergers and Acquisitions	662
The Industrial Logic of Mergers and Acquisitions	662

ĸĬV	Contents

Are Cross-Border Acquisitions Different?	664
Valuation of Foreign Acquisitions	671
Ciments Lafarge Enters Vietnam	673
Summary	680
Questions for Discussion	681
Problems	681
Internet Exercises	683
	663
Case Study 21.1: Etihad's Proposed Acquisition	CO 4
of Malaysia Airlines	684
CHAPTER 22	
Project Finance	689
What is Project Finance?	690
Anatomy of Project Finance: The Case of the Ras Laffan Liquefied	
Natural Gas Company	696
Valuing Project Finance: The Esty Model	696
Summary	704
Questions for Discussion	705
References	705
Case Study 22.1: Clean Infra Ltd Project Finance	706
CHAPTER 23 Global Investing	713
The Basics of International Portfolio Management	714
The Gains from International Diversification	722
Trials and Tribulations in Foreign Equity Investing	729
Currency Risk in Global Investing	730
Alternative Modes of Investing in Foreign Equity	733
The New Landscape of Global Investing	734
Summary	741
Appendix 23A: In Search of Alpha at Global Thematic Partner is	
found on the Book Website at www.wiley.com/go/intlcorpfinance2e	741
Questions for Discussion	742
Problems	742
Internet Exercises	744
References	744
DERT ON	
PART SIX Managing the Multinational Financial System	747
CHAPTER 24 Managing the Multinational Financial System	749
A Primer on International Taxation	749
The Multinational Financial System	753
Exploiting the System's Potential to Minimize Global Tax Liabilities	755
Designing a Global Dividends Remittance Strategy	761

Centralizing Cash Management	765
Summary	774
Questions for Discussion	775
Problems	775
Internet Exercises	777
References	777
Appendix: Answers to Selected Problems	779
About the Companion Website	787
Index	789
Continued on the Website	
CHAPTER 25	
International Control Conundrum (extension of Part 6)	805
A Primer on Managerial Control The International Control Conundrum	806 809
EVA-Based Contingent Budgeting and Performance Assessment	815
Summary	821
Appendix 25A: Applying The EVA-Based Control System	822
Questions for Discussion	826
References	826
CHAPTER 26	827
Asian Finance and Banking (extension of Part 3) Asian Finance: Common Historical Roots, Diverse Paths	828
Adaptive Responses: Crises and Institutional Change in Asian	020
Finance	832
Business Organization, Corporate Ownership, and Governance	836
Corporate Governance	841
Capital Market Development	846
Capital Structure and the Cost of Capital Performance, Value, and the Practice of Corporate Finance	855 857
Summary	860
Questions for Discussion	860
References	861
CHAPTER 27	200
Islamic Banking and Finance (extension of Part 3)	863
The Underlying Principles of Islamic Finance	864
The Evolution of Islamic Finance	868

kvi	Contents

Glossary		899
Partners (GTP)		894
Appendix 23A to Chapter 23: In Search of Alpha	at Global Thematics	
Case sinay 27.11. When Emiliaces 1111	me 1ups 1summe 1 munee	000
Case Study 27.1: When Emirates Airl	ine Taps Islamic Finance	888
References		888
Questions for Discussion		888
Summary		886
Islamic Finance and the Global Financia	l Meltdown	885
Islamic Banking		880
Shariah-Compliant Asset Management		879
Islamic Financing Products		872

Preface

As 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 feature 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.

XVIII PREFACE

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 (also 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.

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. The first edition 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.

Preface xix

THE CHALLENGE THIS TOPIC PRESENTS

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 decision—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 for fruitful discussion.

XX PREFACE

WHAT IS IN THE BOOK?

This book is divided into six parts:

Part 1: The International Monetary Environment

Part 2: The Foreign Exchange Market and Currency Derivatives

Part 3: International Financing

Part 4: Managing Foreign Exchange Risk

Part 5: Cross-Border Valuation and Foreign Investment Analysis

Part 6: Managing the Multinational Financial System

Part 1: The International Monetary Environment. Part 1 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 2: The Foreign Exchange Market and Currency Derivatives. After introducing the foreign exchange market and its inner workings (Chapter 5), Part 2 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). The international parity framework with *Purchasing Power Parity* and the Fisher Parity is completed in Chapter 7. Currency futures and options are detailed in Chapter 8, which shows how they can be harnessed for the purpose of risk management.

Part 3: 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 9). Part 3 outlines funding as a global procurement decision from both equity markets (Chapter 10) and debt markets (Chapter 11). Risk(s) arising from investing in or financing via fixed-income securities can be managed with currency, interest rate, and credit default swaps (Chapter 12). The idiosyncrasies of International Trade Financing are presented in Chapter 13.

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 found on the book website. Chapter 25 profiles the idiosyncrasies of Asian finance and banking in the context of Japan, South Korea, and China, whereas Chapter 26 explores the mysteries of Islamic finance.

Part 4: 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 4 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

Preface XXI

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 5: Cross-Border Valuation and Foreign Investment Analysis. After contrasting alternative modes of foreign market entry and associated political risks (Chapter 19). Part 5 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 6: Managing the Multinational Financial System. Chapter 24 shows how financial decisions should leverage the multinational enterprise system by deftly exploiting arbitrage opportunities arising from capital markets segmentation and heterogenous national tax systems. Finally, 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 (see Chapter 25 on the book website).

What Is New in the Second Edition of International Corporate Finance

The second edition will continue to emphasize even more prominently the importance of emerging markets as the so-called BRICs are looming increasingly larger on the world economy, global trade, and financial markets. More chapters (as compared to the first edition) are developed around a real-life but simplified mini-case to anchor theoretical concepts to managerial situations. This allows students to grasp the practical relevance of the topic addressed.

- All data provided in table and graphs were updated to reflect most recent information.
- Catchy, short case studies are now included in most chapters.

Revisions of Specific Chapters

- Chapter 2 includes a new discussion of the International Finance trilemma and how it shapes the choice of currency regimes; it features a case illustration of how Switzerland resisted its currency appreciation by defending an official peg against the euro and accumulating mammoth reserves.
- Chapter 3 gives a thorough update of the Euro crisis and how "internal" devaluation is allowing the euro-zone to limp along. IMF's largest ever bail out to Argentina (2018).

XXII PREFACE

Chapter 4 explains how Brexit impacts the UK balance of payments and its financial services industry.

- Chapter 7 (formerly the appendix to Chapter 2) is a new chapter on International Parity conditions. Purchasing Power Parity, the Fisher Parity, and forwards as unbiased predictors of future spot exchange rates are integrated with interest rate parity. How inflation and interest rates drive the relationships between spot, forward, and future spot exchange rates.
- Chapter 8 was split between futures and options versus swaps which are now expanded in a new Chapter 12. New material is introduced on exotic KIKO options and how they torpedoed Korean exporters. A new appendix on currency option pricing includes numerical illustrations of how to price put and call currency options with the Garman-Kohlhagen model.
- Chapter 9 revises the discussion of disintermediation with the introduction of capital adequacy ratios as mandated by the Basel Accord 2.5 to explain the cost of financial intermediation. It explains the role played by credit rating agencies in facilitating disintermediation and the emerging role played by the commercial paper market. Finally, it illustrates how the emergence of money market funds fuels disintermediation in China.
- Chapter 10 explores how governments mostly of East Asian countries and more recently Saudi Arabia intervenes in their domestic stock market to prop up market indices, thereby undermining market efficiency.
- Chapter 11 has two additional sections: 1) on sovereign debt with a case illustration of Argentine Century bond to mature in 2117 (yes in 100 years!) and 2) on structured notes.
- Chapter 12 is a new chapter on swaps including currency, interest rate, and credit default swaps, with a case illustration of the Proctor & Gamble interest rate swap debacle and the JP Morgan London Whale mammoth gambit on credit default swaps going sour.
- Chapter 16 introduces exotic options and their use in hedging currency risk in international trade and financing.
- Chapter 19 illustrates political risk in the form of expropriation with the recent example of Venezuela. It introduces economic sanctions and their extra-territorial reach on firms as a form of punishing political risk; it uses the example of Peugeot Citroën exiting Iran for a second time because of reenacted U.S. sanctions.
- Chapter 20 includes a new section on how to develop an optimal worldwide capital structure to minimize the firm cost of equity capital.
- Chapter 21 gives an update on the global reach of anti-trust and M&A review process and how it impacts M&A cross-border valuation. It includes a case illustration of how China was able to acquire Las Bambas copper mine by blocking a proposed merger between Glencore and Xstrata.
- Chapter 23 expands discussion of hedge funds and private equity firms as global investors. It features a case study of how holdouts "vulture" hedge funds were able to force Argentina to repay full value of distressed debt through litigation.
- Chapter 24 provides an update on cross-border, intra-corporate transfer pricing and the current feud between the European Union, Ireland, and MNCs about tax avoidance.

Preface XXIII

WEBSITE AND ONLINE RESOURCES

For readers this book comes with a companion website where Chapters 25, 26 and 27 as well as appendix 23.A1 can be found at: www.wiley.com/go/intlcorpfinance2e (see back of book for details).

Professors can readily download at www.wiley.com/go/intlcorpfinance2e 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.
- Multiple Choice Questions to help students/readers to gauge their understanding of each chapter materials
- PowerPoint Presentation. Professionally prepared slides provide detailed lecture outlines including selected graphs from the text of each 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.

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 Gribe (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 Loebl (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)

Rajesh Chakravarti (Indian School of Business)

Gunter Dufey (University of Michigan)

Shuvam Dutta (International Finance Corporation)

Gabriel Hawawini (INSEAD)

Olivier Jacque (Morgan Stanley)

Lawrence Krohn (Tufts University)

Kenichi Nozaki (GreenLight Fund)

Rishad Sadikot (Cambridge Associates)

Rajeev Sawant (Baruch College)

Patrick Schena (Tufts University)

Charles S. Tapiero (Polytechnic Institute-NYU)

Philip Ullmann (Bentley College and Tufts University)

Lawrence Weiss (Tufts University)

XXVI ACKNOWLEDGMENTS

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 (Morgan Stanley) for building financial models used throughout the book and to Shuvan Dutta (International Finance Corporation) for developing several original case studies. Research assistance from Jaya Movva and Christina Valverde as well as timely help from Lupita Ervin and Tina Cottle for graphics and word processing is gratefully acknowledged. Last but not least, I wish to thank my "editors in chief," Rishad Sadikot (first edition) and Kenichi Nozaki (second edition), 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), Stacey Fischkelta (senior production editor), and Missy Garnett (project manager) – for their professional guidance and enthusiasm for the project, which made the final stage of writing this book feel almost easy.

A very special debt of gratitude is owed to Bill Falloon (executive editor), who championed the second edition. Mike Henton, Benjamin Elisha, Nishantini Amir, and Amy Handy provided me with their support and guidance in bringing the project to closure, for which I am most thankful.

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.

LLI

Winchester, Abaco, and Paris January 21, 2019

About the Author

Laurent 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), Indian School of Business (Hyderabad, India), Kiel Institute of World Economics (Germany), Pacific Asian Management Institute (University of Hawai), Institut Supérieur de Gestion (Tunisia), and Chulalongkorn University (Thailand) as the Sophonpanich Research Professor.

He is the author of an additional three books, Global Derivative Debacles: From Theory to Malpractice (World Scientific, 2015, 2nd edition), translated into French, Spanish, Russian, Chinese, and Korean; Management and Control of Foreign Exchange Risk (Kluwer Academic Publishers, 1996); and Management of Foreign Exchange Risk: Theory and Praxis (Lexington Books, 1978), as well as more than twenty-five articles on risk management and international corporate finance, which have appeared in leading academic and professional journals, including 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. Since 2010 he has been a senior advisor to the director of the Bharti Institute of Public Policy at the Indian School of Business (Mohali, India) and a member of its advisory board.

A recipient of several teaching awards, Laurent Jacque also 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).