EXPERIMENTS IN FINANCIAL DEMOCRACY

This book is a detailed historical description of the evolution of corporate governance and stock markets in Brazil in the late nineteenth and twentieth centuries. The analysis details the practices of corporate governance, in particular the rights that shareholders have had to restrict the actions of managers, and how that shaped different approaches to corporate finance over time. The book argues that companies are not necessarily constrained by the institutional framework in which they operate. In the case of Brazil, even if the protections for investors included in national laws were relatively weak before 1940, corporate charters contained a series of provisions that protected minority shareholders against the abuses of large shareholders, managers, or other corporate insiders. These provisions ranged from limits on the number of votes a single shareholder could have to restrictions on the number of family members who could act as directors simultaneously. The investigation uses the Brazilian case to challenge some of the key findings of a recent literature that argues that legal systems (e.g., common vs. civil law) shape the extent of development of stock and bond markets in different nations. The book argues that legal systems alone cannot determine the course of stock and bond markets over time, because corporate governance practices and the size of these markets vary significantly over time, while the basic principles of legal systems are stable.

Aldo Musacchio is an assistant professor in the Business, Government, and International Economy Unit of Harvard Business School and a Research Fellow of the National Bureau of Economic Research, Cambridge, Massachusetts. Before joining Harvard in 2004, Professor Musacchio was a Fellow of the Center for Democracy, Development, and the Rule of Law at Stanford University and a Fellow of the Institute for Humane Studies at George Mason University. His primary fields of expertise are the business and economic history of Latin America, corporate governance, the political economy of development, and new institutional economics. Professor Musacchio's current research explores the role of property rights and the legal environment for long-run economic development, including the ways in which firms adapt to adverse economic conditions. His paper "Can Civil Law Countries Get Good Institutions? Lessons from the History of Creditor Rights and Bond Markets in Brazil" won the Arthur H. Cole Prize for best paper in the *Journal of Economic History*, 2007–2008. Professor Musacchio received his Ph.D. in economic history of Latin America from Stanford University.

STUDIES IN MACROECONOMIC HISTORY

SERIES EDITOR: Michael D. Bordo, Rutgers University

EDITORS: Marc Flandreau, Institut d'Etudes Politiques de Paris Chris Meissner, University of California, Davis François Velde, Federal Reserve Bank of Chicago David C. Wheelock, Federal Reserve Bank of St. Louis

The titles in this series investigate themes of interest to economists and economic historians in the rapidly developing field of macroeconomic history. The four areas covered include the application of monetary and finance theory, international economics, and quantitative methods to historical problems; the historical application of growth and development theory and theories of business fluctuations; the history of domestic and international monetary, financial, and other macroeconomic institutions; and the history of international monetary and financial systems. The series amalgamates the former Cambridge University Press series *Studies in Monetary and Financial History*.

Other books in the series:

Howard Bodenhorn, A History of Banking in Antebellum America

Michael D. Bordo, The Gold Standard and Related Regimes

Michael D. Bordo and Forrest Capie (eds.), Monetary Regimes in Transition

Michael D. Bordo and Roberto Cortés-Conde (eds.), *Transferring Wealth and Power* from the Old to the New World

Claudio Borio, Gianni Toniolo, and Piet Clement (eds.), *Past and Future of Central Bank Cooperation*

Richard Burdekin and Pierre Siklos (eds.), Deflation: Current and Historical Perspectives

Trevor J. O. Dick and John E. Floyd, Canada and the Gold Standard

Barry Eichengreen, Elusive Stability

Barry Eichengreen (ed.), Europe's Postwar Recovery

Caroline Fohlin, Finance Capitalism and Germany's Rise to Industrial Power

Michele Fratianni and Franco Spinelli, A Monetary History of Italy

Mark Harrison (ed.), The Economics of World War II

Continued after the index

Experiments in Financial Democracy

Corporate Governance and Financial Development in Brazil, 1882–1950

ALDO MUSACCHIO

Harvard Business School



> CAMBRIDGE UNIVERSITY PRESS Cambridge, New York, Melbourne, Madrid, Cape Town, Singapore, São Paulo, Delhi, Dubai, Tokyo

Cambridge University Press 32 Avenue of the Americas, New York, NY 10013-2473, USA

www.cambridge.org Information on this title: www.cambridge.org/9780521518895

© Aldo Musacchio 2009

This publication is in copyright. Subject to statutory exception and to the provisions of relevant collective licensing agreements, no reproduction of any part may take place without the written permission of Cambridge University Press.

First published 2009

Printed in the United States of America

A catalog record for this publication is available from the British Library.

Library of Congress Cataloging in Publication data Musacchio, Aldo. Experiments in financial democracy : corporate governance and financial development in Brazil, 1882–1950 / Aldo Musacchio. p. cm. – (Studies in macroeconomic history) Includes bibliographical references and index. ISBN 978-0-521-51889-5 1. Stockholders–Brazil–History. 2. Corporate governance–Brazil–History. 3. Finance–Brazil–History. I. Title. II. Series. HG5338.M87 2009 338.60981–dc22 2009025734

ISBN 978-0-521-51889-5 Hardback

Cambridge University Press has no responsibility for the persistence or accuracy of URLs for external or third-party Internet Web sites referred to in this publication and does not guarantee that any content on such Web sites is, or will remain, accurate or appropriate.

Para Haydeé y Humberto

... most of the fundamental errors currently committed in economic analysis are due to lack of historical experience more often than to any other shortcoming of the economist's equipment.

- Joseph Schumpeter, History of Economic Analysis, p. 13

C'est une immense démocratie financière qu'on ne rencontre nulle part ailleurs et qui est la force et la sauvegarde de notre pays (It's an immense financial democracy that cannot be found elsewhere and is the force and safeguard of our country)...

 Alfred Neymarck, "Les chemineaux de l'épargne," p. 125, referring to France

Contents

List	of Figures and Tables	page xi
Prej	face	xv
Ack	nowledgments	xxi
1	Introduction	1
2	Financial Development in Brazil in the Nineteenth Century	28
3	The Stock Exchange and the Early Industrialization of Brazil, 1882–1930	58
4	The Foundations of Financial Democracy: Disclosure Laws and Shareholder Protections in Corporate Bylaws	84
5	Voting Rights, Government Guarantees, and Ownership Concentration, 1890–1950	105
6	Directors, Corporate Governance, and Executive Compensation in Brazil, c. 1909	135
7	Bond Markets and Creditor Rights in Brazil, 1850–1945	155
8	Were Bankers Acting as Market Makers?	186
9	What Went Wrong after World War I?	215
10	The Rise of Concentrated Ownership in the Twentieth Century	236
11	Conclusion	253
Bibliography		267
Index		289

Figures and Tables

FIGURES

2.1.	Number of new domestic joint stock	
	companies and banks registered in Brazil, 1848-1909	page 35
2.2.	Equity market capitalization over GDP in Brazil	
	(five-year intervals), 1878–2002	41
2.3.	Stock turnover at the Rio de Janeiro Stock Exchange	
	(as a % of GDP), 1894–1980	44
2.4.	Turnover of securities in the Rio de Janeiro Stock Exchange,	
	1894–1930 (contos de mil reis [millions] of 1900)	45
2.5.	Stock of bonds (debentures) relative to GDP in	
	Brazil, 1886–2002	46
2.6.	Volume of debentures traded (as a % of GDP)	47
2.7.	Corporate bond issues per year, Rio de Janeiro Stock	
	Exchange, 1890–1930	49
3.1.	Net flows of bank credit and net changes in private	
	securities outstanding, 1906-1930	65
4.1.	Shareholder rights and average stock market	
	capitalization to GDP, 1890–2003	89
7.1.	Total corporate bankruptcies and cases used	174
9.1.	British capital exports to the private sector	
	in Brazil, 1870–1939 (as a % of Brazil's GDP,	
	three-year moving average, net values after 1924)	219
9.2.	British capital exports to the private sector	
	in Brazil, 1870–1939 (by sector, as a % of Brazil's	
	GDP, net values after 1924)	220
9.3.	Stock and bond market capitalization to GDP, Brazil,	
	1881–2003	220

Cambridge University Press
978-0-521-51889-5 - Experiments in Financial Democracy: Corporate Governance and
Financial Development in Brazil, 1882-1950
Aldo Musacchio
Frontmatter
More information

xii	List of Figures and Tables	
9.4. 9.5.	Volume of stocks and corporate bonds traded relative to GDP, 1894–1969 Capital flows to Brazil (from England) and stock and	223
	corporate bonds turnover (all relative to GDP, indices with 1913=100), 1894–1939	224
9.6.	Nominal and real average yields of stocks and corporate bonds, Brazil, 1905–1942	226
9.7.	Nominal and real stock price indices, Rio de Janeiro Stock Exchange, 1926–1942 (1926=100)	227
	TABLES	
1.1.	Main features of the four legal families according	
1.2	to the law and finance literature Comparison of the sources of shareholder protections	10
1.2.	in law and finance vs. practice and finance	19
1.3.	Main differences between the law and finance and corporate and finance approaches	23
2.1.	Trading and chartering requirements for corporations	25
2.2.	in Brazil, 1850–1891 Number of companies registered at the exchange	33
2.2.	(per million population, averages by decade)	37
3.1.	Total loans, equity, and bonds outstanding per year, 1906–1930 (as a % of GDP)	64
3.2.	Total loans to GDP in selected countries, 1895–1929	66
3.3.	6 / 1	
3.4.	and real GDP levels, 1906–1930 and 1896–1930 Capitalization of the Rio de Janeiro Stock Exchange	69
	by type of security (at face value, in thousand	
35	contos of mil reis of 1900) Number of companies traded on the Rio de Janeiro	71
5.5.	Stock Exchange, 1896–1930	73
3.6.	Stock market capitalization by industry, Rio de Janeiro Stock Exchange, 1896–1930 (thousand	
	contos of 1900)	75
3.7.	1 / / /	
3.8.	Stock Exchange, 1896–1930 Average turnover rates per year for traded companies,	77
	Rio de Janeiro Stock Exchange, 1896–1930	78

Cambridge University Press
978-0-521-51889-5 - Experiments in Financial Democracy: Corporate Governance and
Financial Development in Brazil, 1882-1950
Aldo Musacchio
Frontmatter
More information

	List of Figures and Tables	xiii
3.9.	Number of companies traded on the São Paulo Stock Exchange,	
	1902–1917	80
3.10.	Stock market capitalization by industry, São Paulo	
	Stock Exchange, 1902–1917	81
4.1.	Shareholder rights in Brazil and England, 1882–2001	87
	Voting rights in Brazilian corporations, c. 1909	100
	Summary statistics: ownership data, Brazil, 1890–1950	109
5.2.	Correlates of governance and ownership concentration	
	using a Tobit estimate, Brazil, 1890–1950	112
5.3.	Correlates of governance and ownership concentration	
	using OLS, Brazil, 1890–1950	114
	Voting groups at the E. F. Paulista shareholder meeting, 1935	119
5.5.	Evolution of ownership concentration and	
	control in Brazil, 1890–2004	125
5.6.	Ownership concentration in some of Brazil's largest	
	corporations	127
6.1.	Management composition and incentive structure	
	in Brazilian corporations (by industry), c. 1909	138
6.2.	Median profit rates (to capital) by industry,	
	Brazil, c. 1909	141
6.3.	Estimated CEO total compensation by industry	
	and region, Brazil, c. 1909 (current US\$)	142
6.4.	Total executive compensation in manufacturing	
	companies in Brazil, c. 1909, and the United States,	
	1904–1914 (annual salary in current US\$)	143
6.5.	Summary statistics and difference of means for CEO	
	compensation variables, Brazil, c. 1909	149
6.6.	Regressions CEO compensation estimates	
	(normalized by size), Brazil, c. 1909	151
7.1.	Debentures relative to capitalization	158
7.2.	Total debenture stock by industry, Brazil, 1881–1925	159
7.3.	Percentage of firms that issued debentures by sector,	
	1881–1931	160
7.4.	Bond-equity ratios for debenture-issuing companies	161
7.5.	Creditor rights in Brazil since 1850	163
8.1.	Number of interlocking boards of directors	
	by industry in Brazil, c. 1909	198
8.2.	Number of interlocking boards of directors	
	by industry in Mexico, c. 1909	199
	. ,	

Cambridge University Press
978-0-521-51889-5 - Experiments in Financial Democracy: Corporate Governance and
Financial Development in Brazil, 1882-1950
Aldo Musacchio
Frontmatter
More information

xiv	List of Figures and Tables	
8.3.	Bankers in the networks of corporate interlocks in Brazil, Mexico, the United States, and	
	Germany, c. 1910	201
8.4.	1 8	204
8.5.	and Bonacich centrality, 1904 and 1928 Most central corporations in Mexico, Bonacich	204
0.5.	centrality, 1909	205
8.6.	Most central corporations in Mexico,	200
	betweenness centrality, 1909	206
8.7.	Most central corporations in Brazil, Bonacich	
	centrality, 1909	207
8.8.	1	
0.0	centrality, 1909	208
8.9.	Summary statistics, corporate network and bank interlocks data, Brazil and Mexico, c. 1909	210
8 10	. Correlates of company-bank interlocks in Brazil	210
0.10	and Mexico (OLS and Probit estimates), c. 1909	211
10.1	. Total bank loans for the private sector	
	(as a % of GDP), 1951–1972	239
10.2	. New stock and bond issues (as a % of GDP),	
	Brazil, 1951–1972	241
10.3	. Ownership of the largest business groups	
	in Brazil, 1980	244

Preface

When I started to do research for this book, debate about the policies and legal institutions necessary for the development of financial markets around the world was intensifying both in academic circles and in international financial agencies. As academics reached near consensus on the importance of financial development to foster economic growth, the development of financial markets became a goal of international development agencies and governments in most countries. Discussion moved from how important it was to have stock markets versus banks to how countries could develop financial markets in general. To devise policies that could help countries develop financial markets, however, academics and policy makers first had to understand why financial markets are more developed in some countries than in others.

A natural candidate for explaining these differences was variation in legal institutions across countries. But although social scientists agree that institutions are important in explaining economic and financial development, there is no agreement as to which institutions generate, and which are incidental to, financial prosperity. It could be the case, for example, that important changes in institutions and regulations in the already highly developed U.S. financial system were demanded by actors to further improve the functioning of that market. If so, institutions that favor the development of financial markets might be a consequence rather than a cause of financial development.

Researchers therefore sought to explain the variance in financial markets by looking for institutional differences across countries that would not be a consequence of financial market development. The logical way to do this was to go back in history before the emergence of modern financial markets to look for factors that might account for the variation in institutions across countries.

xvi

Preface

A number of papers that follow this methodological approach argue that contemporary institutional and financial outcomes are a consequence of the persistent effects of the legal traditions countries adopted decades or centuries ago. This literature, termed the "law and finance" literature, advances the idea that a country's legal tradition determines the degree to which the legal system protects investors from the abuses of managers and corporate insiders, and this influences how willing savers are to participate in financial markets and, ultimately, how deep these markets will be. In fact, their statistical work suggests that common law countries (Australia, Canada, England, the United States, and others) have, on average, stronger protections for creditors and shareholders, and larger financial markets, than countries that followed the civil law tradition (Brazil, countries in continental Europe, most of Latin America, and others).

Because most countries adopted or inherited their legal traditions before legislators enacted investor protections, even, in fact, before modern financial markets developed, legal systems are thought to be exogenous to finance. Also implicit in the law and finance literature's statistical results is the notion that there exists a relationship between legal origin and financial market development. If being a civil law country is highly correlated with having smaller financial markets and poor investor protections today, this relationship between legal origin and financial outcomes should be observable at any time in the country's past. Yet, most of the work in this literature has focused on finding relationships between a time-invariant variable such as legal origin and investor protections and financial development, which seem to vary a great deal over time. As I did the research for this book, I found that only a few researchers were looking into the historical trajectories of institutions and financial development over a long time span. I realized that we needed detailed case studies that tracked institutions and markets over time in order to inform our understanding of how, if at all, legal traditions determined the economic development paths countries followed in subsequent years.

As I tried to understand the origins, institutional and otherwise, of the large stock and bond markets that developed in Brazil since the nineteenth century, I realized that the logic employed by the law and finance literature to explain differences in financial market development did not square with my evidence. If the effects of legal traditions persist over time, Brazil should have had weak investor protections in the past as well as today. But my evidence showed that the first period of financial development, roughly between 1882 and 1915, was accompanied by strong investor protections. This suggested a lack of support for the idea of persistent effects

Preface

of legal traditions. It remained to identify the specific investor protections that aided the development of stock and bond markets after 1882, and to determine how the Brazilian government and Brazilian corporations were able to provide these protections. I found strong creditor rights not only in Brazil, but also in other countries during the nineteenth century, likely due to the influence of Napoleon's commerce code, which led most countries to impose harsh punishments on debtors in default and judges in many countries, especially Brazil, to strongly protect creditors. Because bondholders also benefited from these practices, when corporations were allowed by law to issue bonds, the Brazilian bond market gained momentum. The takeoff in bond markets in Brazil was thus related to legal institutions that protected creditors and court practices that protected bondholders during corporate bankruptcies.

Curiously, I did not find strong protections for shareholders in either the Commerce Code or Brazil's national company laws. Yet Brazil's stock markets enjoyed a bonanza period between 1882 and 1915, and minutes of large corporations' shareholder meetings revealed that in many cases corporate ownership was relatively dispersed and distribution of votes among shareholders relatively egalitarian in many corporations. How was it that these savers, who were not protected directly by national regulations, were willing to invest in Brazilian corporations and showing up in significant numbers at shareholder meetings?

The answer, I found, was that the investor protections absent from national laws were incorporated in the bylaws or provided through the actions of corporations and the information made available to investors before equity was sold in financial markets. I found this also to be the case in other countries in which national protections for investors were weak or absent. For instance, while I was writing this book researchers studying the evolution of stock markets and ownership concentration in Chile, Germany, Italy, Japan, and the United Kingdom showed that in those countries, too, financial markets had grown rapidly at the end of the nineteenth century and beginning of the twentieth century despite the lack of legal protections for shareholders in national laws. Some of these researchers surmised that financial intermediaries such as universal banks and stock exchanges were the source of the trust needed to induce investors to buy the equity and participate in the ownership of publicly traded corporations. The evidence for Chile, England, and Japan was to a large extent similar to that for Brazil: corporations included in their bylaws voting provisions that explicitly protected small investors by limiting, for example, the maximum number of votes per shareholder.

xvii

xviii

Preface

The idea that the kind of investor protections we observe today is a consequence of the legal tradition countries follow stems directly from the way the law and finance literature conceptualizes history. If there are clear and systematic differences in legal protections for investors across countries, and those are strongly correlated with legal origin, then in order to justify the causality from those protections to financial development it must be the case that the systematic differences were determined by legal origin years and years ago. Yet, the evidence presented in this book shows that this is not the case: before 1913 investor protections were very different in Brazil, and perhaps in many countries, from what they are today. History did not occur the way the literature assumes and the only way to know the evolution of investor protections over time is actually to do historical work. Therefore, the first main objective of this book is to defend the use of explicit historical research rather than relying on the merely implicit historical work done by most studies in the law and finance literature. As Joseph Schumpeter argued in his History of Economic Analysis, perhaps this is one of those instances in which the use of detailed historical work could aid the development of an economic theory of the relationship between legal institutions and financial development.

The second important contribution of this book is to bring the corporation back into the forefront of the debate about investor protections and access to capital. Most of the literature that studies investor protections and other regulations that promote financial development emphasizes the importance of regulations and government monitoring, relegating companies, shareholders, and mangers to a secondary role. The recipes for developing financial markets promulgated by the law and finance literature are for governments and regulatory agencies (and largely dependent on information disclosure by corporations issuing equity and bonds). According to this literature, which is followed closely by the World Bank and other international organizations, the best way to improve investor protections is through the reform of national company and bankruptcy laws (not to mention influencing judiciary behavior and improving the monitoring capacity of regulatory agencies). Once legal systems (and with them investor protections) are improved, this story goes, masses of new investors will participate in stock and bond markets, which will deepen, causing the cost of capital for corporations to fall.

My historical evidence shows that in the absence of investor protections in national laws, Brazilian companies and their founding shareholders induced smaller investors to buy equity on a massive scale before 1915 through the dissemination of information (e.g., the names and interests of

Preface

all corporate insiders) and inclusion of friendly provisions in their bylaws. I document, for example, some important provisions in corporate bylaws that limited the power of large shareholders and show how they operated in practice. In fact, corporations with provisions that limited the power of large shareholders exhibited less concentration of ownership and voting power. I found many instances of shareholders who held large portions of equity that afforded them less than proportional voting rights, reflecting, I believe, democratic attitudes on the part of investors and a rooted tradition of "financial democracy" in some of Brazil's largest corporations.

Of course, democratic practices at the company level did not exist in a void of government regulation and oversight. In fact, Brazil had a system of fairly advanced company laws that provided limited liability to shareholders, mandated a two-tier board system, permitted shareholders to sue managers for fraud and mismanagement, and required corporations to make public everything from financial statements and shareholder meeting minutes to executive compensation.

That many of Brazil's largest corporations financed growth through bond issues was a consequence, I maintain, of improvements in creditor rights in 1890 that led to increased investor participation in the bond markets. After that year, the republican government that replaced the Brazilian monarchy started a series of regulatory and constitutional changes. As a consequence of one such reform, bondholders were strongly protected on paper and in practice.

However, the institutional settings that promoted financial development in Brazil were not long lasting. The disruption in trade and capital markets generated by World War I and the subsequent inflation in Brazil and other countries increased the cost of capital for corporations and reduced real returns for investors. The economic shock of World War I and the changes in international markets that followed (especially after the Great Depression) altered the equilibrium that existed until 1914, radically changing corporate governance practices and promoting the rise of bank-based financing for corporations. The book ends with this "great reversal" of conditions and draws some lessons for the future.

xix

Acknowledgments

This book is the product of a long effort that benefited from the support and help of many colleagues around the world. To my advisor and friend, Steve Haber, who contributed to the design of this project from its very early stages, I am particularly grateful. Many of the ideas advanced in these pages had their genesis in conversations we had in his office or at the academic seminars and conferences he organized. I am also grateful to Gavin Wright, Zephyr Frank, and Avner Greif at Stanford University, who essentially taught me economic history and kindly gave of their time to discuss many of the ideas that have ended up in this book.

However much the process of writing a book is an individual experience, it also has been for me a collaborative experience involving a succession of fruitful debates and interactions with colleagues and friends the world over. The encouragement I needed to embark on the project was provided by Gary Libecap and the late Ken Sokoloff, who provided extremely positive feedback after my first presentation at the Economic History Association meetings. With the initial boost from Ken, Gary, and Steve, and the further encouragement of Naomi Lamoreaux and Jean-Laurent Rosenthal at UCLA and Phil Hoffman at Caltech, I decided to press ahead with the project and write a dissertation and a book about the history of corporate governance and financial market development in Brazil. As my work progressed, many colleagues provided valuable feedback on early versions of some of the chapters of this book. I wish to thank especially Rawi Abdelal, Dan Bogart, John Coatsworth, Paul David, Gustavo del Ángel, Rafael DiTella, Alan Dye, Stan Engerman, Jeff Fear, Niall Ferguson, Marc Flandreau, Zephyr Frank, Carola Frydman, Claudia Goldin, Aurora Gómez-Galvarriato, Peter Gourevitch, Avner Greif, Tim Guinnane, Anne Hanley, Pierre-Cyrille Hautcoeur, Eric Hilt, Lakshmi Iyer, Stephen Krasner, Ross Levine, Juliette Levy, David Moss, Doug North, Mary O'Sullivan, Enrico Perotti, Jim Robinson, Armin

xxii

Acknowledgments

Schwienbacher, Jérôme Sgard, Mary Shirley, Andrei Shleifer, Rich Sicotte, Jordan Siegel, Alberto Simpser, Bill Summerhill, Dick Sylla, Gail Triner, Richard Vietor, John Wallis, Barry Weingast, Eric Werker, Jeff Williamson, and Gavin Wright. I am also grateful for feedback I received from participants in seminars and conferences at Stanford, Harvard, UCLA, Yale, Stern-NYU, the Observatoire Francais des Conjonctures Économiques, the University of Antwerp, the École des Hautes Études en Sciences Sociales, and the All-UC Economic History Group. Carol H. Shiu provided useful criticisms of the first draft of the project when it was selected as one of the Gerschenkron dissertation prize finalists by the Economic History Association.

From the comfort of my home in Cambridge, Massachusetts, I was the beneficiary of abundant help via e-mail from colleagues scattered, and even moving, around the globe. Les Hannah, whether in Tokyo or in transit to sundry destinations, answered a thousand questions and kindly shared his data and research with me. Lyndon Moore, in Australia, whom I have yet to meet in person, promptly answered frequent and numerous queries from me and shared his data. Dan Bogart not only provided insightful feedback on some of the chapters, but also initiated intriguing debate about the effects of legal origins on the railway sector. Zephyr Frank also made himself readily available, sharing his unpublished data with me and answering my questions promptly. Ranald Michie was ever helpful, and shared his work as well before it was published. Steve Haber, Eric Hilt, Tom Nicholas, Noel Maurer, and Jean-Laurent Rosenthal also kindly placed themselves on what amounted to almost permanent standby in order to provide timely answers to the near continual stream of questions with which I bombarded them. My friend Ian Read also read the whole manuscript and provided helpful comments. Finally, the exchange of communications with Phil Hoffman and the detailed comments he made to my findings on creditor rights and bond market development shaped much of the discussion of Chapters 7, 9, and 10.

My colleagues in the Business, Government, and the International Economy (BGIE) Unit at Harvard Business School were extremely supportive of this project and provided valuable feedback on many of the book's chapters. The book is better for significant contributions from every one of them, for which I am most grateful. I am particularly grateful to Niall Ferguson, who took the time to help me structure the book and reorganize the argument, and Noel Maurer, who helped me to design the book from the very beginning and provided crucial feedback in the last stages of writing. The main lessons of the book were partly a product of helpful discussions with Rawi Abdelal. Conversations with David Moss shaped and enriched most of the discussion

Acknowledgments

xxiii

of creditor rights and bankruptcy law. Jeff Fear provided constant support for the project and because of our intense discussions on corporate governance in Europe I was able to write parts of the book with a comparative perspective. Rafael DiTella, who was and continues to be a great mentor, provided useful criticisms to the project. The encouragement and support of Geoff Jones and Tom Nicholas in the Business History group are also gratefully acknowledged. Geoff, during his tenure as director of research, did everything he could to make my research more successful. Tom Nicholas read the first draft of the book over one weekend and gave me detailed criticisms. Conversations with Tarun Khanna, Jordan Siegel, and Mikołaj Jan Piskorski, in the Strategy Unit, greatly improved my understanding of corporate governance and business networks, and helped frame some of the chapters that treat those topics. Tarun pointed out a large literature in accounting that I had missed and pushed me to refine my argument. Jordan read the entire manuscript and gave me detailed comments and helpful criticisms. Mark Roe, from Harvard Law School, was also a great source of inspiration and feedback. He provided meticulous comments on the entire manuscript and encouraged me to make a stronger case against the law and finance literature.

In Brazil, when I was a visiting scholar at Ibmec São Paulo in 2002, I received immensely helpful comments on an early version of Chapter 7 from Flávio Saes, Renato Marcondes, Renato Colistete, and Teresa C. de Novaes Marques. The support of Claudio Haddad and Carlos da Costa at Ibmec were fundamental to my research there. I am grateful as well to the librarians of Ibmec São Paulo, especially Josi Amato, who helped me locate materials from the stock exchange archives housed at Ibmec Rio de Janeiro. Conversations, both formal and informal, with my colleagues at Ibmec contributed greatly to the development of the book. I am especially grateful to Pedro C. de Mello, Eduardo Andrade, Sergio Lazzarini, Carlos Melo, Regina Madalozzo, Antonio Zoratto Sanvicente, Pedro Valls, and Rinaldo Artes. My archival work while in Brazil was greatly facilitated by conversations with Lise Sedrez, Joe Ryan, and Alison Adams. At the Comissão de Valores Mobiliários (CVM) I cannot thank enough the unconditional help of my friend Aline Menezes. While at the São Paulo Stock Exchange (Bovespa) Wang Jiang Horng was always willing to help.

The book is in part dedicated to the economic historians who studied the financial history of Brazil before me. In particular, it would not have been possible if it were not for the careful research left by the late Mária Bárbara Levy and the late Raymond Goldsmith. Levy's history of the Rio de Janeiro Stock Exchange inspired me in the initial stages of research. She also compiled the Rio de Janeiro Stock Exchange Archive, from which I

xxiv

Acknowledgments

generated most of the data used herein. Raymond Goldsmith was the father of the field of economics that studies financial development and his book on Brazil was extremely influential for my work.

Behind every book there is always an army of librarians and archivists that usually does not get much credit. I would like to acknowledge the help of Sátiro Nunez of the Arquivo Nacional in Rio de Janeiro, who guided me through the Stock Exchange Archive and the court cases used for this book. The personnel at the Arquivo do Estado de São Paulo and the Museu Banespa, which houses documents I needed to examine and copy, were also extremely helpful. Invaluable support was also provided by Sonia Moss, Mary Louise Munhill, and all the personnel of Stanford University's Green and SAL libraries. Laura Linard and Deb Wallace of Baker Library made sure I had all the materials I needed from the Harvard libraries (and others around the world) to finish the book.

In Brazil, I was most fortunate to have met families that helped me immerse myself in the culture, politics, and society of the country. Carolina Mota and Janice Theodoro da Silva opened the door to their country and got me interested in Brazilian history. Suzana, Lucas, and Clara Martins became my adoptive family in Rio de Janeiro, and Alejandra Meraz and Marcos Natali my adoptive Mexican family in São Paulo. Maira Evo Magro helped me greatly during my stay in São Paulo to understand the local culture and improve my Portuguese.

I am also fortunate to have worked with a team of superb research assistants and editors over the past few years. I am grateful, in particular, for the meticulous work of Carlos L. de Góes Góes and Elsa Campos in Brazil, and the outstanding research of Claire Gilbert at Harvard University. Research assistance in different stages of the book was also ably provided by Silvana Jeha, Ricardo Tancredi, Veronica A. Santarosa, Alexandre Rostoworoski, Danilo Caccaos, and Lucía Madrigal. I am grateful to the late Jack McNamara, who edited the early versions of some of the chapters, and to John Simon, who worked on the final versions, for their copyediting and suggestions to improve the manuscript.

Funding for this project was provided by the Social Science History Institute at Stanford University, the Institute of Humane Studies in Washington, D.C., the Center for Democracy, Development and the Rule of Law at Stanford University, and the Division of Research and Faculty Development at Harvard Business School.

I do not have enough words to acknowledge the generosity of Carmen Peralta in providing support during the initial stages of the project. I will always be in her debt for her support and affection.

Acknowledgments

xxv

Finally, this book would not have been possible without the love and support of my family, Haydeé, El Doc, Marusia, Natalia, Humberto, and Duska, my exwife Paola, and my friends Aurora Gómez-Galvarriato, Ian Read, Zephyr Frank, Gustavo del Ángel, Alberto Simpser, Esteban Rossi-Hansberg, Maria José Sordo, and Lucas Martins.