



Corporate Governance and Regulatory Impact on Mergers and Acquisitions

Research and Analysis on Activity
Worldwide Since 1990

Edited by

Greg N. Gregoriou & Luc Renneboog



Corporate Governance and Regulatory Impact on Mergers and Acquisitions



Quantitative Finance Series

Aims and Objectives

- Books based on the work of financial market practitioners and academics
- Presenting cutting-edge research to the professional/practitioner market
- Combining intellectual rigor and practical application
- Covering the interaction between mathematical theory and financial practice
- To improve portfolio performance, risk management and trading book performance
- Covering quantitative techniques

Market

Brokers/Traders; Actuaries; Consultants; Asset Managers; Fund Managers; Regulators; Central Bankers; Treasury Officials; Technical Analysis; and Academics for Masters in Finance and MBA market.

Series Titles

Return Distributions in Finance
Derivative Instruments: theory, valuation, analysis
Managing Downside Risk in Financial Markets.
Economics for Financial Markets
Performance Measurement in Finance.
Real R&D Options
Advanced Trading Rules, Second Edition
Advances in Portfolio Construction and Implementation
Computational Finance
Linear Factor Models in Finance
Initial Public Offerings
Funds of Hedge Funds
Venture Capital in Europe
Forecasting Volatility in the Financial Markets, Third Edition
International Mergers and Acquisitions Activity Since 1990
Corporate Governance and Regulatory Impact on Mergers and Acquisitions

Series Editor

Dr Stephen Satchell

Dr Satchell is the Reader in Financial Econometrics at Trinity College, Cambridge; Visiting Professor at Birkbeck College, City University Business School and University of Technology, Sydney. He also works in a consultative capacity to many firms, and edits the journal *Derivatives: use, trading and regulations* and the *Journal of Asset Management*.

Corporate Governance and Regulatory Impact on Mergers and Acquisitions

Research and Analysis on Activity Worldwide Since 1990

Edited by

Greg N. Gregoriou and Luc Renneboog



ELSEVIER

AMSTERDAM • BOSTON • HEIDELBERG • LONDON
NEW YORK • OXFORD • PARIS • SAN DIEGO
SAN FRANCISCO • SINGAPORE • SYDNEY • TOKYO

Academic Press is an imprint of Elsevier



Academic Press is an imprint of Elsevier
30 Corporate Drive, Suite 400, Burlington, MA 01803, USA
525 B Street, Suite 1900, San Diego, California 92101-4495, USA
84 Theobald's Road, London WC1X 8RR, UK

∞ This book is printed on acid-free paper.

Copyright © 2007, Elsevier Inc. All rights reserved.

No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopy, recording, or any information storage and retrieval system, without permission in writing from the publisher.

Permissions may be sought directly from Elsevier's Science & Technology Rights Department in Oxford, UK: phone: (+44) 1865 843830, fax: (+44) 1865 853333, E-mail: permissions@elsevier.com. You may also complete your request on-line via the Elsevier homepage (<http://elsevier.com>), by selecting "Support & Contact" then "Copyright and Permission" and then "Obtaining Permissions."

Library of Congress Cataloging-in-Publication Data

Corporate governance and regulatory impact on mergers and acquisitions : research and analysis on activity worldwide since 1990 / edited by Greg N. Gregoriou, and Luc Renneboog.

p. cm.—(Quantitative finance series)
Includes bibliographical references and index.

ISBN 978-0-12-374142-4

1. Consolidation and merger of corporations. 2. Corporate governance.
3. Consolidation and merger of corporations—Law and legislation. 4. Corporate governance—Law and legislation. I. Gregoriou, Greg N., 1956- II. Renneboog, Luc.
HD2746.5.C6693 2007

338.8'3—dc22

2007017992

British Library Cataloguing-in-Publication Data

A catalogue record for this book is available from the British Library.

ISBN: 978-0-12-374142-4

For information on all Academic Press publications visit our
Web site at www.books.elsevier.com

Printed in the United States of America

07 08 09 10 11 9 8 7 6 5 4 3 2 1

Working together to grow
libraries in developing countries

www.elsevier.com | www.bookaid.org | www.sabre.org

ELSEVIER BOOK AID Sabre Foundation
International

Contents

Acknowledgments	vii
About the editors	ix
List of contributors	xi
1 Understanding mergers and acquisitions: corporate governance and regulatory issues	1
<i>Greg N. Gregoriou and Luc Renneboog</i>	
2 The effect of merger laws on merger activity: international evidence	15
<i>Arturo Bris, Christos Cabolis, and Vanessa Janowski</i>	
3 The governance motive in cross-border mergers and acquisitions	43
<i>Stefano Rossi and Paolo Volpin</i>	
4 Corporate governance convergence through cross-border mergers: the case of Aventis	71
<i>Arturo Bris and Christos Cabolis</i>	
5 Whither hostility?	103
<i>William W. Bratton</i>	
6 Corporate governance and acquisitions: acquirer wealth effects in the Netherlands	131
<i>Abe de Jong, Marieke van der Poel, and Michiel Wolfswinkel</i>	
7 European Union takeover regulation and the one-share one-vote controversy	163
<i>Arman Khachaturyan and Joseph A. McCahery</i>	
8 Opportunities in the merger and acquisition aftermarket: squeezing out and selling out	191
<i>Christoph Van der Elst and Lientje Van den Steen</i>	
9 Valuation methods and German merger practice	243
<i>Wolfgang Breuer, Martin Jonas, and Klaus Mark</i>	

10	Share buybacks, institutional investors, and corporate control	259
	<i>Paul U. Ali</i>	
Index		275

Acknowledgments

We would like to thank Karen Maloney, Dennis McGonagle, and Anne McGee at Elsevier for guidance throughout the publishing process; Jamey Stegmaier at SPi for the project management; and Joe Bathke for the copyediting. We also wish to thank all the anonymous referees for carefully reviewing and selecting the final papers during this process.

This page intentionally left blank

About the editors

Greg N. Gregoriou is Professor of Finance in the School of Business and Economics at State University of New York at Plattsburgh. He obtained his Ph.D. (finance) from the University of Quebec at Montreal and is hedge fund editor for the peer-reviewed scientific journal *Derivatives Use, Trading and Regulation* and editorial board member for the *Journal of Wealth Management* and the *Journal of Risk and Financial Institutions*. He has authored over 50 articles on hedge funds and managed futures in various U.S. and U.K. peer-reviewed publications, including (among others) the *Journal of Portfolio Management*, *Journal of Derivatives Accounting*, *Journal of Futures Markets*, *European Journal of Operational Research*, *Annals of Operations Research*, *European Journal of Finance*, and *Journal of Asset Management*. He has edited 18 books for Elsevier, Wiley, Palgrave-MacMillan, and Risk and has co-authored one book for Wiley.

Luc Renneboog is Professor of Corporate Finance at Tilburg University and a research fellow at the CentER for Economic Research and the European Corporate Governance Institute (ECGI, Brussels). He graduated from the Catholic University of Leuven with degrees in management engineering (M.Sc.) and in philosophy (B.A.), from the University of Chicago with an MBA, and from the London Business School with a Ph. D. in financial economics. He held appointments at the University of Leuven and Oxford University, as well as visiting appointments at London Business School, European University Institute (Florence), HEC (Paris), Venice University, and CUNEF (Madrid). He has published in the *Journal of Finance*, *Journal of Financial Intermediation*, *Journal of Law and Economics*, *Journal of Corporate Finance*, *Journal of Banking and Finance*, *Journal of Law, Economics & Organization*, *Cambridge Journal of Economics*, *European Financial Management*, and others. He has co-authored and edited several books on corporate governance, dividend policy, and venture capital with Oxford University Press. His research interests are corporate finance, corporate governance, dividend policy, insider trading, law and economics, and the economics of art.

This page intentionally left blank

List of contributors

Paul U. Ali is an Associate Professor in the Faculty of Law, University of Melbourne. Paul was previously a finance lawyer in Sydney. He has published several books and journal articles on finance and investment law, including, most recently, *Innovations in Securitisation* (The Hague, 2006) and articles in *Derivatives Use, Trading and Regulation*, *Journal of Alternative Investments*, *Journal of Banking Regulation*, and *Journal of International Banking Law and Regulation*.

William W. Bratton is a Professor of Law at the Georgetown University Law Center. Before joining the Georgetown law faculty in 2003, he was a Samuel Tyler Research Professor at the George Washington University Law School, where he joined the faculty in 1999. Prior to 1999, Professor Bratton was the Kaiser Professor of Law and Director of the Heyman Center on Corporate Governance at Cardozo Law School, and Professor of Law and Governor Woodrow Wilson Scholar at Rutgers Law School, Newark. He also has been the Unilever Visiting Professor at the Faculty of Law of the University of Leiden and a visiting professor at the Duke and Stanford University law schools. Before joining academia, he served as law clerk to Judge William H. Timbers of the Second Circuit U.S. Court of Appeals and practiced corporate law at Debevoise & Plimpton in New York. William Bratton is the author of *Corporate Finance: Cases and Materials* (Foundation Press), and the co-editor of an Oxford Press collection of essays on regulatory competition. He also has published many law review articles and book chapters on topics in corporate law, law and economics, and legal history.

Wolfgang Breuer is a Professor of Finance at the RWTH Aachen University. From 1995 to 2000, he was a Professor of Finance at the University of Bonn. He earned his Ph.D. in 1993 and his habilitation degree in 1995, both at the University of Cologne. Wolfgang Breuer has written about a dozen books, 40 articles in books, and more than 30 journal articles (e.g., in the *Journal of Futures Markets*, *Journal of Institutional and Theoretical Economics*, *European Journal of Finance*, and *Journal of Banking and Finance*) comprising a great variety of topics in the field of finance. His current research interests focus on portfolio management issues as well as behavioral corporate finance and international financial management.

Arturo Bris has been a Professor of Finance at IMD Business School since July 2005. Prior to joining IMD, he was the Robert B. & Candice J. Haas Associate

Professor of Corporate Finance at the Yale School of Management, where he was also a Research Associate of the European Corporate Governance Institute and a member of the Yale International Institute for Corporate Governance. Arturo Bris graduated with degrees in Law and Economics from Universidad Autónoma de Madrid and received an M.Sc. from CEMFI (Foundation of the Bank of Spain). He holds a Ph.D. in Management from Insead (France). His main research focus is on issues of corporate governance, financial regulation, and international valuation. His research and consulting activities focus on the international aspects of financial regulation, and in particular, on the effects of bankruptcy, short sales, insider trading, and merger laws. He has also worked extensively on the effects of the Euro on the corporate sector, as well as on the valuation impact of corporate governance changes. His work has been published in the *Journal of Finance*, *Journal of Financial Economics*, *Journal of Legal Studies*, and *Journal of Business*, among others. Since 1998, he has been teaching corporate finance and investment banking at Yale, where he has received the Best Teacher Award twice. His consulting experience includes companies in both the United States and Europe. He ranks among the top 100 most-read social scientists in the world.

Christos Cabolis is an Assistant Professor at the ALBA Graduate Business School in Athens, Greece and a Fellow of the International Center (ICF) for Finance at the Yale School of Management. His research concerns issues related to mergers, the valuation of changes in corporate governance, and measuring market power and price discrimination. Christos Cabolis has been teaching courses on corporate finance as well as business economics. Prior to joining ALBA, he was the Executive Director of the International Center for Finance (ICF) at the Yale School of Management. He directed the administrative and operational activities for the Center, which range from the Center's initiatives in international corporate governance, financial history, and global capital markets to research-oriented conferences and special events. Christos joined the Yale School of Management from Yale College, where he served as Dean of Jonathan Edwards College for 6 years. During that time he was also a lecturer in the Yale Department of Economics, where he taught courses on finance and industrial organization.

Abe de Jong is a Professor of Corporate Finance and Corporate Governance at RSM Erasmus University in the Netherlands. He obtained his Ph.D. in the Department of Finance at Tilburg University. His research interests are in the area of empirical corporate finance and include mergers and acquisitions, capital structure choice, risk management, and corporate governance. He has published in *Financial Management*, *Journal of Banking & Finance*, *Journal of Corporate Finance*, and other journals.

Vanessa Janowski received a bachelor's degree in Economics from Yale University and an M.Sc. in Applied Mathematics from the London School of Economics. While at Yale, she worked as a research assistant on corporate

finance. She also gained professional experience in the finance sector (Merrill Lynch in New York, Banco Bilbao Vizcaya Argentaria in Madrid, and FIMA in Zagreb). She was a recipient of the European Union Studies Grant; Mellon Grant for Senior Thesis Research in Brussels, Stavros S. Niarchos Fellowship for Modern Greek Language Study in Greece, Pulaski Education Foundation Scholarship for Excellence in Academics, ROME Prize for Research Opportunities in Mathematics and Economics, and Auerbach Grayson Leitner Fellowship for Summer Brokerage Internship. She is currently a consultant at the strategic advisory firm Monitor Group in London. Her research interests are in game theory and behavioral economics, as well as applications of neuroimaging methodologies in economic decision making.

Martin Jonas is wirtschafsprüfer (Certified Public Accountant), steuerberater (tax advisor), and partner at Warth & Klein, a leading private German audit firm. He studied economics and law at the University of Bonn, where he obtained his Ph.D. (1993). After 1993, he established the corporate finance division of Warth & Klein. He is a member of the Expert Committee for Valuation at the Institute of Certified Public Accountants, the German standard setter for valuation practices, and an advisor or auditor in many mergers and takeovers. Martin Jonas has published several articles about the valuation practice in Germany, especially about valuation and taxes. He is a visiting lecturer at the University of Bonn, and his research focus is the translation of capital market theories into practical and applicable valuation methods.

Arman Khachaturyan is the Restructuring Director of the Armenia Telephone Company and a Research Fellow at the Centre for European Policy Studies. His areas of expertise include company law, corporate governance, takeovers, disclosure, comparative corporate law, and finance.

Klaus Mark works as a consultant in the corporate finance division at Warth & Klein. He earned his Ph.D. in Finance at RWTH Aachen University. After receiving his diploma in economics at the University of Bonn, he worked for 5 years as a research analyst at RWTH Aachen University in the Department of Finance. His research interests include topics in risk management, the evaluation of firms, and venture capital.

Joseph A. McCahery is a Professor of Corporate Governance and Business Innovation at the University of Amsterdam Faculty of Economics and Econometrics. He is also a Goldschmidt Visiting Professor of Corporate Governance at the Solvay Business School of the University of Brussels and a Professor of International Business Law at Tilburg University Faculty of Law. He obtained his Ph.D. from Warwick University. He has contributed to the literature on banking and securities law, corporate law, corporate governance, the political economy of federalism, and taxation, and he has published in a wide range of top academic journals. He is an editor of the *European Business*

Organization Law Review and an associate editor of *Economics Bulletin*. He has served as an expert on corporate governance for the Organisation for Economic Co-Operation and Development (OECD) and the Center for European Policy Studies (CEPS).

Stefano Rossi is an Assistant Professor of Finance at the Stockholm School of Economics. He holds a Ph.D. in Finance from London Business School and was a visiting fellow of the Department of Economics at Harvard University. He graduated from Bocconi University of Milan with degrees in economics and finance. His main publications include “Cross-Country Determinants of Mergers and Acquisitions” with Paolo Volpin, *Journal of Financial Economics* (2004), and “Spending Less Time with the Family: The Decline of Family Ownership in the UK” with Julian Franks and Colin Mayer, in Morck, Randall K., (ed.) *A History of Corporate Governance Around the World*, National Bureau of Economic Research (NBER) and University of Chicago Press (2005). His paper “Ownership: Evolution and Regulation,” with Julian Franks and Colin Mayer, won the first prize of the European Corporate Governance Institute Clinical Paper Competition (2004) and the Standard Life Investments Prize for the Best ECGI Working Paper (2005). His research interests are law and finance, corporate governance, bankruptcy, corporate finance, financial contracting, international finance, and the financing of innovations.

Lientje Van den Steen is a researcher at the Financial Law Institute, Ghent University, Belgium. She holds a master’s degree in Law from Ghent University. Her research interests concern primarily financial law, in particular securities and financial markets law, company law, and Islamic financial law. She is currently preparing a Ph.D. on the legal status of securities held by an intermediary.

Christoph Van der Elst is a Professor of Law and Management at the Law School of the University of Tilburg, Netherlands. He combines this position with an assistant professorship of commercial law and corporate governance at the Financial Law Institute of the Law School of the Ghent University, Belgium. He holds a master’s degree in Law, a master’s degree in economics and a Ph.D. in Economics from Ghent University. Previously he was a lecturer at the University of Utrecht, scientific advisor of the Belgian High Council for the Economic Professions, and registered at the bar. His research interests primarily concern different issues of corporate governance and company law, and in particular, the position of shareholders in the law and finance theory.

Marieke van der Poel is a Ph.D. candidate at the Department of Financial Management at RSM Erasmus University in the Netherlands. She graduated with a degree in Business Administration (Financial Management) from RSM Erasmus University. Her research interests are in the fields of financial accounting and behavioral corporate finance. She has worked on management earnings forecasts and nonrational motives for divestiture decisions.

Paulo Volpin is an Assistant Professor of Finance at the London Business School, a research affiliate of the Centre for Economic Policy Research (CEPR), and a research associate of the European Corporate Governance Institute (ECGI). He holds a Ph.D. in Economics from Harvard University. His research is in corporate finance, especially in the fields of international corporate finance and corporate governance. His main publications include “The Political Economy of Corporate Governance” with Marco Pagano, *American Economic Review* (2005), “Cross-Country Determinants of Mergers and Acquisitions” with Stefano Rossi, *Journal of Financial Economics* (2004), “Managers, Workers, and Corporate Control” with Marco Pagano, *Journal of Finance* (2005). The latter paper won the “Egon Zehnder International Prize” for Best Paper in the 2004 ECGI Working Paper series.

Michiel Wolfswinkel is a finance manager with ENECO Energie NV. He graduated with a degree in Business Administration (Finance) from Erasmus University in Rotterdam, and he has more than 15 years of experience in international assignments in corporate finance and mergers and acquisitions. Michiel is a Ph.D. candidate at RSM Erasmus University with current research interests in corporate finance and behavioral finance, particularly in the areas of investments and divestments and the reaction of financial markets.

1 Understanding mergers and acquisitions: corporate governance and regulatory issues

Greg N. Gregoriou and Luc Renneboog

Abstract

This chapter gives an overview of the main aspects of takeover regulation; specifically (i) the mandatory bid rule, (ii) the principle of equal treatment of shareholders, (iii) ownership and control transparency, (iv) squeeze-out and sellout rules, (v) the one-share-one-vote principle, (vi) the breakthrough rule, and (vii) board neutrality with respect to antitakeover measures. The impact of each of these rules is explicated on takeover activity, on the main agency problems, and on ownership and control structures. In addition, the chapter introduces the research exposed in this volume.

1.1 Corporate governance and takeovers

Takeover regulation is a mechanism to facilitate efficient corporate restructuring; it is also important in terms of mitigating conflicts of interest between diverse company constituencies such as management, shareholders, and stakeholders. Takeover regulation not only curbs conflicts of interest related to transfers of control, it also has a more general impact on the agency problems between management and shareholders, minority and majority investors, and other stakeholders. As such, it constitutes an important element of a corporate governance system. Its corporate governance role, however, depends on other characteristics of the governance system such as ownership and control (Goergen and Renneboog, 2001; 2003).

In a system with dispersed ownership, the primary corporate governance role of takeover regulation is to restrain opportunistic managerial behavior. Small shareholders cannot effectively monitor the management due to coordination problems and have to rely on external monitoring via the market for corporate control. Hostile takeovers target poorly performing firms and replace poorly performing management. The threat of losing their jobs and perquisites provides managers with an incentive to focus on shareholder objectives. The role of takeover regulation is then to design rules and provide instruments that minimize the costs and inefficiencies associated with the (hostile) takeover

mechanism and thereby facilitate a transfer of control toward more productive owners and management. Examples of measures stimulating takeover activity are the squeeze-out rule, the breakthrough rule, and limitations on the use of takeover defense measures (see below).

Goergen, Martynova, and Renneboog (2005) argue that in a system with concentrated ownership, takeover regulation functions as a corporate governance device aiming at protecting minority shareholders' interests. The concentration of ownership and control is an alternative mechanism that can mitigate the conflicts of interest between management and shareholders. Major investors have strong incentives to monitor management and replace it in poorly performing companies (Franks, Mayer, and Renneboog, 2001). Bolton and von Thadden (1998) argue that the advantage of monitoring by blockholders is that it takes place on an ongoing basis. In contrast, external disciplining only occurs in crisis situations. However, the presence of a controlling shareholder is also associated with potential opportunistic behavior toward minority shareholders. Although there are a number of standard company law techniques to resolve conflicts between the large shareholder and minority shareholders, takeover regulation plays an important role, as it can provide minority shareholders with an "exit on fair terms" opportunity. Provisions such as the sellout right, the mandatory bid rule, or the equal treatment principle ensure such exit opportunities for minority shareholders.

Specific provisions of takeover regulation apply to control transactions to regulate conflicts of interest between the management and shareholders of the target and bidder. Two major agency problems may emerge. First, control transfers may turn the target's incumbent shareholders into minority shareholders. Second, the management of the target company may be tempted to implement unduly defensive measures to obstruct the takeover, even if this clashes with shareholder interests. Takeover regulation should aim at minimizing both potential conflicts. In particular, a limit on the use of antitakeover devices is seen as the best way to constrain opportunistic managerial behavior. In addition, the mandatory bid rule and the sellout right provide target shareholders with the right to exit the company at a fair price.

Renneboog and Szilagyi (2007) discuss the importance of another agency issue: that between shareholders and creditors. The authors argue this issue is of paramount importance. Renneboog and Szilagyi (2006) show that mergers and acquisitions (M&As) involving Continental European firms are systematically more bondholder-friendly than U.S. deals. They also reveal that important questions are: (i) whether the types and conditions of restructuring transactions are different in stakeholder-oriented regimes, and (ii) to what extent these differences are due to powerful creditors blocking transactions that may be economically desirable but would otherwise hurt creditor interests. Furthermore, the internationalized corporate environment has been shown to feed a gradual convergence of governance systems. In stakeholder-oriented regimes, this process implies a shift of priority from stakeholder consensus to shareholder value and involves the promotion of debt securitization and the deterioration of creditor

influence. Banks' incentives to invest in monitoring are reduced by these factors, which implies a qualitative change in their economic role. This comes at a time when market-based disciplinary devices are being increasingly questioned in their ability to control agency problems, not least due to the recent massive overinvestment in the U.S. technology sector and some of the biggest corporate scandals in history. A key research question is whether these events change the way bondholder wealth is altered by corporate restructuring actions.

Overall, the above discussion suggests that takeover regulation can have a number of provisions that perform corporate governance functions, both in the case of a transfer of control and in terms of governance of ordinary corporate activity. There are, however, three important trade-offs.

First, in countries with dispersed ownership, provisions aiming to provide an exit opportunity for target shareholders are likely to discourage the monitoring of managers via the market for corporate control and vice versa. A second trade-off arises with respect to the two main functions of takeover regulation: the promotion of efficient corporate restructuring and the reduction of agency conflicts and the protection of minority shareholders (Goergen *et al.*, 2005). The trade-off is similar to the previous one but relates to the broader definition of corporate restructuring, which apart from the hostile takeover mechanism includes the reallocation of capital to better managers. As such, the second trade-off is equally important in countries with dispersed ownership and those with concentrated ownership. Takeover regulation also indirectly affects the incentives for a company to seek a listing on the stock exchange. If the incumbent owners value control, they will often be reluctant to take their firm public if this exposes them to an active market for corporate control. Their reluctance to take their firm public depends on the distribution of gains from a future takeover bid, which is determined by takeover regulation. Furthermore, regulation that is likely to reduce the power of the blockholders discourages a listing. This constitutes a third trade-off of the regulation: promoting the expansion of financial markets and supplying corporate governance devices aimed at protecting the rights of corporate constituencies. No clear guidelines are available as to how the above trade-offs should be made. The way the trade-offs are made critically depends on the broader (national) corporate governance framework and the economic and political objectives of national regulators.

1.2 Key aspects of takeover regulation

The regulatory devices available to achieve these two aims comprise (Martynova and Renneboog, 2006): (i) the mandatory bid rule, (ii) the principle of equal treatment of shareholders, (iii) ownership and control transparency, (iv) squeeze-out and sellout rules, (v) the one-share-one-vote principle, (vi) the breakthrough rule, and (vii) board neutrality with respect to antitakeover measures.

The mandatory bid rule provides the minority shareholders with an opportunity to exit the company on fair terms. The rule requires the acquirer to make a tender offer to all the shareholders once she has accumulated a certain percentage of the shares. Nowadays mandatory bid thresholds have decreased substantially. For instance, there has been a decrease in the thresholds in Denmark and Italy to 33%. The mandatory bid rule usually also dictates the price of the tender offer. Depending on the national regulation, the price must not be lower than the highest price paid for the shares already acquired by the bidder or must not be lower than a certain percentage of the average share price of the previous 12 months (e.g., 75%). The mandatory bid requirement is justified on the grounds that an investor who obtains control may be tempted to exploit private benefits of control at the expense of the minority shareholders. As such, the role of the mandatory bid rule in takeover regulation is to protect the minority shareholders by providing them with the opportunity to exit at a fair price. Although the mandatory bid requirement may mitigate the problem of expropriation of minority shareholders, it also decreases the likelihood of value-creating restructuring (Burkart and Panunzi, 2004). The main reason for this is that the rule makes control transactions more expensive and thereby discourages bidders from making a bid in the first place.

While the principle of equal treatment is particularly important in takeover regulation, the possibility exists of violating the rights of minority shareholders. The principle requires controlling shareholders, the management, and other constituencies to treat all shareholders within each individual class of shares equally. The equal treatment requirement became a fundamental principle in almost all Western European countries prior to the 1990s. The equal treatment principle requires that an acquirer offer minority shareholders an opportunity to exit on terms that are no less favorable than those offered to the shareholders who sold a controlling block. Overall, the role of the equal treatment principle in takeover regulation is similar to the mandatory bid rule as both aim at protecting minority shareholders.

An important element of corporate governance is the disclosure of voting and cash flow rights. In all Western countries, the disclosure regulation relates to voting rights rather than cash flow rights (see the country studies in Barca and Becht, 2001). Virtually all of these countries have recently lowered the thresholds above which the ownership of control rights needs to be disclosed. In some countries, the “strategic intent” or the purpose for which the share stake was acquired also has to be disclosed. Thus, in the early 1990s, the average threshold for disclosure in Western Europe and Scandinavia was about 9%, with the United Kingdom having the lowest threshold (3%), and Germany the highest threshold (25%). In countries such as Italy and Sweden, a mandatory disclosure of voting rights was introduced for the first time as late as 1992. By 2004, the average threshold was reduced to 5% with the lowest threshold of 2% in Italy and the highest one of 10% in Luxembourg and Sweden. Information about major share blocks allows the regulator, minority shareholders, and the market to monitor large blockholders and avoid the possibility that the latter will

extract private benefits of control at the expense of other stakeholders. In other words, transparency minimizes potential agency problems *ex ante*. Moreover, transparency allows the regulator to investigate, for instance, insider trading or self-dealing by large blockholders.

The squeeze-out rule gives the controlling shareholder the right to force minority shareholders who hold out in a tender offer to sell their shares to the bidder at or below the tender offer price (Boehmer, 2002; Becht, Bolton, and Röell, 2003). The squeeze-out rule only kicks in if the bidder has acquired a specific percentage of the equity, usually 90%. The rule allows the bidder to obtain 100% of the equity and frees him from having to deal with minority shareholders. The squeeze-out rule affects the behavior of the target shareholders during a tender offer as it reduces the holdout problem and may lead to a decrease in the tender price.

The one-share-one-vote principle speaks against any arrangements restricting voting rights. Dual-class shares with multiple voting rights, nonvoting shares and voting caps are forbidden if this legal principle is upheld. The issue of dual-class shares or nonvoting shares allows some shareholders to accumulate control while limiting their cash investment. Another way to deviate from the one-share-one-vote principle is via pyramids of control. The use of intermediate holding companies allows the investor at the top of the pyramid—the ultimate shareholder—to have control with reduced cash flow rights. Renneboog (2000) and Köke (2004) show that for Belgium and Germany, respectively, it is the ultimate shareholder, rather than direct shareholders, who monitors the firm and exercises control.

The effects of violating the one-share-one-vote principle via dual-class shares, nonvoting shares or voting caps can be undone if corporate law allows for a breakthrough rule. This rule enables a bidder who has accumulated a given fraction of the equity to break through the company's existing voting arrangements and exercise control as if the one-share-one-vote principle were upheld. For example, a recently acquired block consisting of a majority of nonvoting rights may be converted into a voting majority by means of the breakthrough rule. The rule facilitates corporate restructuring as it allows the bidder to bypass antitakeover devices and redistributes the takeover gains from the incumbent shareholders to the bidder. Thus, the breakthrough rule makes transfers of control feasible that would otherwise have been made impossible due to the opposition by a target shareholder holding a majority of voting shares. The disadvantages of the breakthrough rule are detailed in Goergen *et al.* (2005).

In the wake of a takeover threat, the management of the target company potentially faces a conflict of interest: the transaction may create shareholder value, but it also endangers their jobs and perquisites. If the management of the target firm has unrestricted power, the line of actions chosen may focus on their own interests and hence on the prevention of a takeover. This calls for a set of rules that governs the behavior of management and shareholders when a takeover offer is imminent. The rules deal with the issues of who decides whether to reject or accept the offer, the adoption of takeover defenses, and the bargaining strategy with the bidder. There are two solutions for mitigating the

managerial agency problem in a takeover context (Davies and Hopt, 2004). The first is to transfer the decision of the acceptance of the bid to the shareholders of the target company and to remove it from the management. Unless the regulator forbids this, the management can only influence the decision by taking actions that discourage potential bidders from making an offer in the first place or by prolonging the offer process. Examples of such actions are the attempt to make the company less attractive to a potential bidder, the advice to the target shareholders to reject the bid, and the search for a white knight. Currently, several jurisdictions impose board neutrality with respect to takeover offers, preventing the board of directors from taking actions that may frustrate a potential bid. For example, the use of poison pills is forbidden in most European countries. The main argument in favor of board neutrality is that it limits the potential coercive effect of a bid (Arlen and Talley, 2003; Bebchuk, 2002). In most jurisdictions, the board should indeed remain neutral and limit the use of antitakeover devices unless an antitakeover strategy was approved by the shareholders at a general meeting and only once a bid has been made. The second solution is to provide the board with substantial decision power but to give the shareholders the possibility to veto its decisions. The board then has the right to negotiate with a bidder on behalf of the shareholders. This arrangement mitigates the coordination problem between small shareholders in case of dispersed ownership and the agency problems of other stakeholders such as the employees. In a second stage, the shareholders are asked to approve or reject the managerial advice. Although this arrangement gives more flexibility to the target management to act against potentially undesired bids by setting up an anticipatory antitakeover strategy, there is also more opportunity for the managers to pursue their own interests. A summary of the impact of these takeover rules is given in Table 1.1.

1.3 Overview of the research presented in this volume

This volume focuses on the impact of corporate governance and takeover regulation on mergers and acquisitions. In the wide-ranging Chapter 2, Bris, Cabolis, and Janowski quantify the various takeover legislations of 41 Western and developing economies. They find that over the past decade, there has been strong evidence toward convergence in financial markets. Especially after 1995, cross-border merger flows have increased dramatically. The authors expect that merger laws have an important impact on merger activity. They distinguish between merger laws that positively and negatively affect the frequency of acquisitions in a given country. Merger laws stimulating mergers may have beneficial effects when the industry concentration is not at its optimal level. They can then create efficiency gains from integration. However, stricter laws can have negative implications as well by preventing some profitable acquisitions from succeeding. The authors conclude that national laws do not have a significant effect on domestic or cross-border merger flows, after controlling for time effects and market conditions.

Table 1.1 Takeover regulation: impact on M&A activity and minority shareholder protection

		Concentrated ownership structure		Dispersed ownership structure	
		Impact on M&A activity	Impact on minority shareholder protection	Impact on M&A activity	Impact on target shareholder protection
1	The Mandatory Bid Rule:	Less trade in controlling blocks	Better protection	Fewer M&As	Better protection
1.1	Lower mandatory bid threshold	Fewer M&As	Better protection	Fewer M&As	Better protection
1.2	Higher price at which the bid should be made	Fewer M&As	Better protection	Fewer M&As	Better protection
1.3	No equal treatment requirement	More M&As in form of two-tier offers	Expropriation of minorities	More M&As in form of two-tier offers	Expropriation of incumbent shareholders
1.4	Equal treatment requirement (in the presence of high private benefits of control)	Fewer M&As	Better protection	No impact	Better protection
1.5	Equal treatment requirement (in case of low private benefits of control)	More M&As	No impact	No impact	No impact
2	The Equal Treatment Principle	Fewer M&As	Better protection	No impact	No impact
3	Ownership and control transparency (Lower disclosure threshold)	Fewer M&As	Better ex ante protection	Fewer M&As	Better ex ante protection
4	The Squeeze-Out Rule	More M&As	Better protection	More M&As	Better protection
5	The Sellout Rule	Fewer M&As	Better protection	Fewer M&As	Better protection

(Continued)

Table 1 (Continued)

		Concentrated ownership structure		Dispersed ownership structure	
		Impact on M&A activity	Impact on minority shareholder protection	Impact on M&A activity	Impact on target shareholder protection
6	Ban on the deviation from the one-share-one-vote principle	More M&As	Ambiguous (Less protection)	More M&As	Ambiguous (Less protection)
7	Breakthrough rule	More M&As	Less protection	More M&As	Less protection
8	Management neutrality and limitations on antitakeover measures	More M&As	Ambiguous (Better protection)	More M&As	Ambiguous (Less protection)
8.1	Management is decision-maker, antitakeover devices can be installed only when a bid occurs	More M&As	Ambiguous	More M&As	Less protection
8.2	Management is decision-maker, antitakeover devices can be installed prior to a bid	Fewer M&As	Ambiguous	Fewer M&As	Better protection

Source: Goergen, Martynova, and Renneboog (2005).

Rossi and Volpin take an even broader perspective in Chapter 3. They attempt to explain the aggregate pattern of cross-border activity by showing that they serve a governance purpose, both across countries and across industries. The key question is whether cross-border mergers and acquisitions are a channel through which companies can opt out of a poor governance regime. Rossi and Volpin develop a model in which the cost of external capital decreases when the control of the firm shifts from a country with poor corporate governance to one with better corporate governance, which is likely to result from the

fact that the management is subject to the governance regime of the acquiring company and therefore the risk of expropriation is reduced. The model predicts that in cross-border M&As, companies from countries with good corporate governance should be acquirers, and companies from countries with poor corporate governance should be targets. When testing this prediction over a sample of cross-border M&As of 49 countries in the 1990s, the authors find that targets tend to come from countries with lower judicial efficiency and less-developed banking sectors than their acquirers. In addition, the average corporate governance of companies acquiring in one country is higher than the governance standards of that country. Rossi and Volpin also predict that cross-border M&A activity should be concentrated in industries that need more external capital and face greater agency problems. The intuition for this result is that the benefit of better governance standards is relatively larger in industries that need more external capital and face greater agency problems. Hence, companies from countries with worse governance should be more likely to be acquired in cross-border deals in industries that need more external financing and in industries that face greater agency costs. This prediction is tested and confirmed.

In Chapter 4, Bris and Cabolis detail the role of cross-border mergers in the process of corporate governance convergence with a case study involving Rhône-Poulenc (from France) and Hoechst (from Germany). The company resulting from the merger in 1999 was Aventis (incorporated in France). Despite the firm's nationality, the corporate governance structure of Aventis is a combination of the corporate governance systems of Hoechst and Rhône-Poulenc. Aventis is shown to have adopted the most protective provisions of the two merging firms.

William Bratton questions in Chapter 5 why hostility in takeovers has been reduced so dramatically over the past decade. The hostile takeover and the regulatory barriers impeding it have for decades held a central place in policy discussions respecting U.S. corporate law. The hostile takeover's proponents assume that it belongs to an identifiable class of disciplinary mergers that create value by separating poor managers from valuable assets. The opponents question the productivity assertion even as they simultaneously assert that hostile takeovers amount to a threat necessitating regulatory barriers. The sketchy empirical results on the value enhancement brought about by hostile takeovers can be best understood in historical context. Disciplinary mergers, to the extent they exist at all, appeared in cognizable numbers only in the mid- and late-1980s, motivated by governance and market conditions specific to the time. Bratton states that hostility lost its salient role in the U.S. merger market due to the recovery of stock market prices and constraints on the availability of debt capital. In the changed environment, cooperation made better cost sense. Antitakeover regulation cannot be dismissed as irrelevant, for it raises the cost of hostility. Meanwhile, the author shows that hostility recently has returned in the form of hedge fund shareholder activism. Now governance and the boardroom are the venues, rather than the market for corporate control. The activists

interfere with the friendly market's operation, intervening on both sides of announced transactions. On the sell side, they augment standing pressure for higher premiums, joining an established cast of Wall Street players. Bratton, however, argues that they are not bringing back the hostile tender offer.

In Chapter 6, de Jong, van der Poel, and Wolfswinkel concentrate on a special type of corporate governance regime: in the Netherlands, the management board is in a strong position vis-à-vis the shareholders. Several takeover defenses commonly used in the Netherlands limit shareholder influence during takeover battles and in the absence of such fights. The authors investigate 865 acquisitions by Dutch industrial firms over the period 1993–2004. Corporate governance structures normally serve to constrain managers in their acquisition activity, but it is *ex ante* questionable whether this is the case in the Netherlands. De Jong *et al.* measure the shareholder wealth effects of acquisitions and the factors that determine these wealth effects, including the governance characteristics of corporations. The average abnormal stock return following acquisition announcements is 1.1%, which is a significant positive effect. These wealth effects are also positively influenced by the relative size of the target company and when firms pay the acquisition (partially) with equity. The so called structured regime to which Dutch firms are subject delegates many shareholder rights to the supervisory board. This structural regime has a negative impact on the abnormal returns. This result suggests that good governance regulation improves acquisition decisions.

The European Commission (EC) is presently considering a rule mandating that all publicly listed companies adopt a one-share-one-vote capital structure. Khachaturyan and McCahery wonder in Chapter 7 what explains the fact that the European Union (EU) wishes to introduce a system of shareholder democracy, which all member states have, in effect, systematically rejected? The adoption of one-share-one-vote is a suboptimal arrangement compromising economic efficiency and distorting incentives of corporate constituencies. Second, the authors show that recent evidence has documented that any attempt to mandate the one-share-one-vote rule in the EU may induce companies to move either to pyramidal structures, or worse yet, to use complex derivative instruments to decompose one-share-one-vote. Even though pyramidal holdings may further facilitate expropriation of private benefits of control, as compared to the status quo, the decomposition of the one-share-one-vote rule can: (1) further advance heterogeneity of preferences of shareholders; (2) create incentives for voting arbitrage in different contexts, which; (3) encourages the approval of value-reducing transactions. Much of the justification for one-share-one-vote is based on the assumption that its adoption will induce the transformation of corporate Europe from a system of controlled ownership structures toward a dispersed ownership regime. The inference is unwarranted, however, because the evidence clearly shows that the move to a one-share-one-vote regime is worse than the status quo, and, paradoxically, instead of advancing rights of “disadvantaged shareholders,” the one-share-one-vote rule could serve to decrease minority shareholders’ rights in the EU. Moreover, Khachaturyan and

McCahery state that the absence of conclusive evidence regarding the benefits to be achieved by the elimination of dual-class shares and nonvoting shares suggests that it is preferable to allow firms to choose their own capital structure without legal interference. The lessons of the analysis developed above leads to a number of policy conclusions. First, the economic evidence provides no compelling basis for the introduction of a mandatory rule on one-share-one-vote. Second, even if the EC considers it desirable at some point in time to adopt a mandatory rule prohibiting the creation of dual-class and other structures, it may be efficient to allow firms the choice to opt out of the one-share-one-vote regime. Finally, it should be possible under a flexible model of legal options for shareholders and firms, both at the IPO and midstream, to have the option to opt into a one-share-one-vote regime if they wish.

Van der Elst and Van den Steen report in Chapter 8 that the European Takeover Directive has shifted the interest of European politicians and academics to some particular features in takeover procedures like the breakthrough rule, reciprocity and squeeze-out, and sellout rights. The squeeze-out right is the (conditional) right of a majority shareholder to force the minority to surrender financial instruments to the majority shareholder, who as a result acquires 100% ownership of the corporation. The sellout right is the right of a minority (shareholder) to compel the majority shareholder to purchase the shares from the minority. Both rights are necessary instruments to mitigate the expropriation risk and the free-rider problem. When a bidder makes an offer, the target shareholders will not tender as they expect that the bidder will realize a higher value for the target company. Hence, the offer will fail. The squeeze-out right influences the dynamics of a tender offer, encourages the minority shareholders to tender and provides the bidder a tool to drive the free-riding minority shareholders out of the company. Conversely a bidder that acquires the control of a corporation can allocate to himself a disproportionate part of the gains of the company. Recent empirical evidence emphasized the significance of these private benefits. The sellout right offers the minority shareholders an instrument to consider the pretakeover value, the bid price and the posttakeover value and accordingly to decide. The economic analysis illustrates that the triggering thresholds for a squeeze-out right and a sellout right should be flexible enough in light of the different ownership structures of companies. In the second part of their chapter, the authors examine the legal framework of the squeeze-out right and the sellout right. They show that an economically efficient flexible framework can be in conflict with the constitutional protection of private property. It seems difficult to assess the price impact of the above regulation as the parties involved have conflicting interests. Courts, parties, independent experts, supervisory authorities all play a role in a different degree in the different countries. Next, there are national policy considerations. Finally, the European Takeover Directive is considered another layer of legislation on top of the national rules. The harmonization efforts of the EU are, if any, not successful. Van der Elst and Van den Steen argue that that corporate mobility will compel legislators to offer an effective and efficient squeeze-out and sellout system.

Breuer, Jonas, and Mark explain in Chapter 9 how the German Tax CAPM works. They illustrate this concept using the example of the merger of Deutsche Telekom and T-Online. They detail the valuation of the equity of Deutsche Telekom as part of the determination of the adequate exchange ratio between Deutsche Telekom shares and T-Online shares. The reason why the German Tax CAPM is important is that it is a key element to find a fair compensation or share exchange ratio and is laid down as a principle by the German Institute of Certified Public Accountants (Institut der Wirtschaftsprüfer (IDW)).

In the final chapter, Ali shows that corporations routinely use buybacks to return excess capital to their shareholders, manage their capital structures and convey signals to the market about the corporation's financial performance. These are the publicly disclosed motivations for the vast majority of buybacks that occur in the Australian market. The author also examines how buybacks can be used by Australian corporations to achieve those aims as well as undisclosed objectives such as consolidating management's control of the corporation and creating deterrence to takeover bids. The buybacks that have been implemented by Australian corporations typically take the form of on-market buybacks or Dutch auctions. Although these buybacks are notionally open to all shareholders to participate in, the review of on-market buybacks discloses how they can readily be employed to consolidate control in the hands of the non-participating shareholders, such as a controlling shareholder. The examination of Dutch auctions also shows that, due to the way in which the buyback price has been structured for tax purposes, Australian corporations have used Dutch auctions to effectively stream dividends to their most influential shareholders, namely institutional investors. Equally, these Dutch auctions are capable of being used to entice those shareholders to reduce their shareholdings in the corporation, and by so doing consolidate control of the corporation in the hands of its management.

References

- Arlen, J. H. and Talley, E. L. (2003). "Unregulable Defenses and the Perils of Shareholder Choice." New York University Law School, mimeo.
- Barca, F. and Becht, M. (2001). "The Control of Corporate Europe." Oxford University Press, Oxford.
- Bebchuk, L. (2002). The case against board veto in corporate takeovers. *University of Chicago Law Review* 69, 973–1035.
- Becht, M., Bolton, P., and Röell, A. (2003). Corporate governance and control. In "The Handbook of the Economics of Finance" (G. Constantinides, M. Harris, and R. Stulz, eds.). North-Holland.
- Boehmer, E. (2002). Who controls German corporations? In "Corporate Governance Regimes: Convergence and Diversity" (J. McCahery, P. Moerland, T. Raaijmakers, and L. Renneboog, eds.). pp. 268–296. Oxford University Press, Oxford.

- Bolton, P. and von Thadden, E.-L. (1998). Blocks, liquidity and corporate control. *Journal of Finance* 53, 1–25.
- Burkart, M. and Panunzi, F. (2004). Mandatory bids, squeeze-out, sellout and the dynamics of the tender offer process. In “Modern Company and Takeover Law in Europe” (Ferrarini, Hopt, Winter, and Wymeersch, eds.). Oxford University Press, Oxford.
- Davies, P. and Hopt, K. (2004). Control transactions. In “The Anatomy of Corporate Law” (R. Kraakman, P. Davies, H. Hansmann, G. Hertig, K. Hopt, H. Kanda, and E. Rock, eds.). pp. 157–191. Oxford University Press, Oxford.
- Franks, J., Mayer, C., and Renneboog, L. (2001). Who disciplines management of poorly performing companies? *Journal of Financial Intermediation* 10, 209–248.
- Goergen, M. and Renneboog, L. (2001). Strong managers and passive institutional investors in the UK. In “The Control of Corporate Europe” (F. Barca and M. Becht, eds.). pp. 259–284. Oxford University Press, Oxford.
- Goergen, M. and Renneboog, L. (2003). Why are the levels of control (so) different in German and UK companies? Evidence from initial public offerings. *Journal of Law, Economics and Organization* 19, 141–175.
- Goergen, M., Martynova, M., and Renneboog, L. (2005). Corporate governance convergence: Evidence from takeover regulation reforms in Europe. *Oxford Review of Economic Policy* 21, 1–27.
- Köke, J. (2004). The market for corporate control in a bank-based economy: A governance device? *Journal of Corporate Finance* 10, 53–80.
- Martynova, M. and Renneboog, L. (2006). “A Corporate Governance Index: Convergence and Diversity of National Corporate Governance Regulations.” Tilburg University, mimeo.
- Renneboog, L. (2000). Ownership, managerial control and the governance of poorly performing companies listed on the Brussels stock exchange. *Journal of Banking and Finance* 24(12), 1959–1995.
- Renneboog, L. and Szilagyi, P. (2006). “Bondholder Wealth in M&As? Evidence on the Impact and Spillover of Governance and Legal Standards.” CentER, Tilburg University, discussion paper.
- Renneboog, L. and Szilagyi, P. (2007). Corporate restructuring and bondholder wealth. *European Financial Management* 33, forthcoming.

This page intentionally left blank

2 The effect of merger laws on merger activity: international evidence

Arturo Bris, Christos Cabolis, and Vanessa Janowski

Abstract

This chapter is the first attempt to isolate the direct effect of competition laws on a country's merger activity and indirectly on corporate value. We find that, although the direct relationship between merger laws and Tobin's Q is positive and significant, the relationship vanishes once we control for the net cross-border merger flows in a particular country. We conclude that the positive effect of merger laws on corporate value is driven by their deterring effect on horizontal, cross-border, anticompetitive mergers. To the extent that the trend toward globalization in the world has dramatically increased merger flows from some countries to others, we argue that there is a need for competition laws that make up for the pervasive effects of the global market on some countries.

2.1 Introduction

The 1990s showed an unprecedented increase in the number of mergers and acquisitions. The distinguishing characteristic of this late twentieth-century wave is its global dimension. In 2000, almost 2300 mergers were successfully completed across countries for a total value of \$740 billion. This compares to only 650 cross-border acquisitions in 1990, worth \$74 billion.¹ Since it has been demonstrated that mergers have implications on the market power of the firms and on social welfare, it comes as no surprise that a number of new merger and competition laws have been introduced worldwide during the same decade. Today, there are over 80 countries in the world with antitrust laws, of which about 45 specifically provide for some kind of merger review.² Most of these laws have been enacted in very recent years, many in countries with no history of competition law and with vastly different economic systems.

¹ Source: Securities Data Corporation.

² The United Nations Conference on Trade and Development (UNCTAD) lists 82 countries that have competition authorities. See www.unctad.org/en/docs/c2clp99d16.en.pdf.

The objective of this chapter is to isolate the direct effect of competition, antitrust, and merger laws (MLs) on a country's merger activity. Sound merger enforcement must prevent anticompetitive mergers but avoid deterring the larger universe of efficiency-enhancing mergers. Therefore, we try to determine the impact of competition laws on the frequency and size of acquisitions and on the characteristics of the merging firms. In this chapter, we distinguish between domestic and cross-border mergers. Cross-border mergers can allow companies to create monopolistic positions that are not under the jurisdiction of any one competition authority. For instance, in the proposed merger between Wilkinson Sword (U.K.) and Gillette (U.S.) in 1990, 14 different agencies, including some outside the United States and European Union, were involved in oversight proceedings. In many markets, the proposed merger would have given the resulting single company 90% of the market. The prevention of anticompetitive, cross-border mergers is of prime interest to regulators, since they imply a transfer of resources and control from domestic to foreign firms. National competition laws may put controls on domestic acquisitions as well as certain cross-border deals with domestic effects.

We construct country-level measures of merger intensity using a base sample of about 62,000 acquisitions from 41 countries that have enacted MLs as of December 2001. Such measures quantify the fraction of a country's publicly listed firms that changes ownership every year. We also classify merger flows into domestic and cross-border, and into and from a given country measures within countries, as well as across borders.

Our main finding is that MLs do have a significant effect on the merger activity in a country. In particular, we find that the existence of MLs reduces uncertainties and spurs merger activity, by both domestic and foreign acquirers. Specifically, we show that the existence of antitrust and competition laws (ACLs) in a country increases by 20% the number of domestic firms that become targets of an acquisition. Among those, ACLs increase the frequency of cross-border acquisitions by 8%. Antitrust laws, however, do not affect the characteristics of the acquisitions; that is, domestic firms are acquired in horizontal as well as nonhorizontal mergers as frequently after the first enactment of the law as prior to it. However, ACLs do determine the acquisition propensity by firms in a given country: We find that, when ACLs are enacted, domestic firms are 4% more likely to become acquirers in a nonhorizontal, conglomerate merger. Our evidence supports the idea that regulation levels the playing field and reduces information asymmetries.

We do not find that MLs *per se* have an effect on the merger activity within a country. However, we do find that the severity of the law affects the frequency of mergers. We construct an index of merger quality that takes into account the notification requirements in a country, as well as the penalties imposed by merger authorities if notification does not occur. Our results show that a one standard deviation increase in the quality index increases cross-border merger activity by 2%. That is, two out of one hundred firms in a country that would not be acquired otherwise become acquisition targets in a cross-border deal

when the quality of the regulation in the country increases by one standard deviation (which is equivalent to one point of the quality index). This suggests that MLs facilitate the internationalization of the corporate sector in a country by making the domestic firms available for foreign acquirers. We do not find any effect of MLs on the frequency of domestic acquisitions.

In the next section we describe the related literature. In Section 2.3, we describe the data on MLs that we use throughout the chapter. In Section 2.4, we outline the measures of merger frequency and volume on which we focus our analysis. In Section 2.5, we present the econometric analysis of our study. We analyze the impact of MLs on domestic and cross-border merger flows and describe the relationship between MLs, merger flows, and corporate value. In Section 2.6, we conclude.

2.2 Related literature

Generally, the literature related to mergers employs static modeling structures that study the performance and welfare implications of a merger. By doing so, the literature identifies the incentives that firms have to merge as well as the need—or absence thereof—for public policy. Any introductory industrial organization textbook outlines two incentives for mergers: the first relates to the efficiency gain that stems from reduced costs due to elimination of duplication and enhancement of information; the second associates with the increased monopoly power enjoyed by the fewer postmerger firms in the market. While mergers and acquisitions that result in the former category are presumably welfare enhancing and, therefore, beneficial from a social point of view, the latter result in an increased monopoly power and therefore are not beneficial in terms of welfare.

In general, the literature on mergers predicts that an industry that is active in mergers will experience an increase in profitability. However, there is not a general agreement as to whether the participating firms in a merger enjoy higher profitability than the nonparticipating firms. Stigler (1950) suggested that the nonparticipating firms may benefit more than the merger participating firms, a point that Salant, Switzer, and Reynolds (1983) showed in a simple Cournot model. The main reason that drives the result in the Salant, Switzer, and Reynolds article is that the new merged entity is indistinguishable from the merger nonparticipating firms. Deneckere and Davidson (1985), Perry and Porter (1985), and Farrell and Shapiro (1990) suggest ways that the merged entity is bigger in one way or another than the nonparticipating firms, resulting in a reversal of the Stigler suggestion.

Several other articles have studied the stock market valuation effects of mergers. Their focus is on the effect of the merger on the joint returns of bidder and targets (Bradley, Desai, and Kim, 1988; Jarrell, Brickley, and Netter, 1988; Jensen and Ruback, 1983; Schwert, 1996). Results are mixed. Eckbo (1982), Mitchell and Mulherin (1996), and Moon and Walkling (2000) find that rivals of acquisition targets earn significant abnormal returns. The relationship

between legal variables and corporate valuation has been analyzed in La Porta *et al.* (2002) and Daines (2001). La Porta *et al.* show that measures of shareholder protection—legal origin of the country, and indexes of specific legal rules—are positively related to the firm's Tobin's Q. Daines (2001) shows that the market assigns a higher value to the assets of firms incorporated in Delaware. Finally, ours has the same flavor as the paper by Andrade *et al.* (2001), which only considers U.S. acquisitions in its analysis of the reasons why companies merge. However, Andrade *et al.* focus on the distribution of wealth that is created in a merger only between the merger participants, and not on the effect of merger activity on corporate valuation at the country level.

Our chapter also relates to the literature on cross-border and international mergers. Gugler *et al.* (2000) analyze the effect of mergers on a sample of 14,000 mergers from more than 100 countries. They find that 27% of all the acquisitions they consider result in both a loss of efficiency and an increase in market power for the merging firms. Harris and Ravenscraft (1991) find that U.S. targets of foreign acquirers have significantly higher wealth gains than do targets of U.S. firms. Finally, Brady and Feinberg (2000) find that the enforcement of the European regulation has substantial price effects on the stocks of companies affected.

2.3 Merger laws

2.3.1 Data sources

We have collected information on ACLs and MLs for a large sample of countries worldwide. We use several sources of information. We first use White & Case's 2003–2004 survey of worldwide notification requirements, which is a widely recognized catalog of MLs and control regimes for 131 countries.³ We complement this information with Cicero (2001), which summarizes the merger control provisions in 46 countries and provides information on filing deadlines and thresholds. We complement the above information by checking domestic regulators' webpages, contacting antitrust local authorities directly, and employing information contained in the International Securities Services Association (ISSA) database.

We have found reliable information on enactment dates and data on merger deals for 41 countries. Only the United States (1914) and Japan (1947) passed MLs prior to 1950. Two countries passed laws in the 1950s, 6 in the 1970s, 8 in the 1980s, and 24 since 1990. These numbers give us an indication of the importance of MLs in the last 2 decades. Most European Union (EU) countries have passed competition laws following the European Merger Regulation of 1989. Table 2.1 describes the enactment date, the date of first amendment, and other changes in the law, for the countries in our sample.

³ For more detail on how this survey is conducted, please see the introduction to White & Case's 2003–2004 Edition of *Worldwide Antitrust Merger Notification Requirements*.

Table 2.1 Merger laws around the world

Dates of first enactment and amendments of merger regulations in countries with available information.

Country	Antitrust laws	Merger laws		Notes
	Date of initial enactment	Date of initial enactment	First amendment	
Argentina	1980	2001		
Australia	1974	1974	1975	
Austria	1988	1988		
Belgium	1991	1991	1999	
Brazil	Before 1990	1994		
Canada	Before 1990	1985		
Chile	1973			
Colombia	1959			
Denmark	1997	1997	2000	
Finland	1992	1992	1998	
France	1986	1986	2000	Another act passed in 2001.
Germany	1957	1958	1999	There have been other amendments prior to 1999.
Greece	1991	1977	2000	
Hong Kong	Before 1990			
India	1969	1956	1997	
Indonesia	Before 1990			
Ireland	1991	1978	1996	
Israel	1988	1988		
Italy	1990	1990		Presidential Decree of April 30, 1998, No. 217 contains some procedural and enforcement rules.
Japan	1947	1947	2001	
Malaysia	Before 1990			
Mexico	1992	1993		
Netherlands	1997	1997		The 1997 act came into force in 1998.
New Zealand	1986	1986		
Norway	1993	1993	2000	
Pakistan	1970			
Peru	1991			
Philippines	Before 1990			

(Continued)

Table 2.1 (Continued)

Country	Antitrust laws	Merger laws		
	Date of initial enactment	Date of initial enactment	First amendment	Notes
Portugal	1983	1993		
Singapore	Before 1990			
South Africa	1998	1998	2000	The 2000 act came into force in 2001.
South Korea	1980	1980		The Monopoly Regulation and Fair Trade Act (MRFTA) of 1980 has undergone nine amendments.
Spain	1989	1989	1999	Other amendments have been made since 1999.
Sweden	1993	1993		
Switzerland	1995	1996		
Taiwan	1991	1991	1999	
Thailand	1999			
Turkey	1994	1994	1997	
United Kingdom	1973	1973		
United States	1976	1914	1950	The Hart-Scott-Rodino Antitrust Improvements Act ('the HSR Act') was enacted in 1976 and amended in 2001.
Venezuela	1992	1992	1996	

Source: White and Case 2003–2004 Edition of the Worldwide Antitrust Merger Notification Requirements, Cicero (2001), National Regulators, and International Securities Services Association Handbook.

In general, national MLs aim to promote competition by establishing controls in the merger process, and put limits to the concentration of economic powers that result in market dominance. For instance, Article 1 of the Swedish Competition Act, passed in 1993, states that “The purpose of this Act is to eliminate and counteract obstacles to effective competition in the field of production of and trade in goods, services and other products.” This is similar to Article 2 of the Mexican Federal Law of Economic Competition, which pronounces that “the purpose of this law is to protect the process of competition and free market participation, through the prevention of monopolies, monopolistic practices

and other restrictions that deter the efficient operation of the market for goods and services.”

In Table 2.2, we show in a timeline the dates at which ACLs and MLs were enacted. The early 1990s was the period when most laws were passed, especially in Western Europe and Latin America. Table 2.2 also illustrates that a few countries do not have merger regulation, even though they have antitrust regulation in place.⁴ A large set of countries, Italy, Switzerland, and South Africa, among others, has enacted simultaneously both pieces of regulation.

2.3.2 *Merger law quality index*

For each of the 41 countries under analysis, we construct an index of ML quality. Our main source for the index comes from the White & Case 2003–2004 report. We characterize the severity of the law depending on four factors. Each factor receives a score of one when it is present, zero otherwise. The four factors we consider are:

- Premerger notification requirements
- Postmerger notification requirements
- The mandatory nature of these requirements⁵
- The type of penalties imposed for lack of notification. Penalties may be proportional to the value of the transaction or they may represent a fixed cost.⁶

An example to illustrate our index can be found in the Czech Republic’s Competition Act. Under this act, the “mergers and acquisitions are subject to approval of the Czech Office for the Protection of Economic Competition where (i) the aggregate net worldwide turnover for the last accounting period exceeded CZK 5 billion or (ii) the aggregate net turnover on the market of the Czech Republic during the last accounting period exceeded CZK 550 million and each of at least two of the undertakings concerned achieved a net turnover of at least CZK 200 million during the last accounting period.”⁷ The Czech Republic’s Competition Act features mandatory premerger notification, with filing fees of CZK 10,000 (approximately USD 327). Penalties for failure to comply with the

⁴ Some of these countries have enacted MLs between 2001 and 2006, but their laws are not considered in the analysis. For instance, this is the case with the Czech Republic, where merger regulation came into force on July 1, 2001.

⁵ In some jurisdictions, pre- and postnotification requirements are voluntary and therefore ineffective.

⁶ In jurisdictions where the penalty is a fixed cost, it becomes negligible for large acquirers and henceforth ineffective. Countries with no penalties receive a score of zero. Countries that gave any penalties proportional to size or revenue (sometimes these countries also gave a penalty value range, depending on the type of infraction) and countries that had penalties but not explicitly dependent on size or revenue receive a score of one. Note that frequently, the countries in this group gave a possible dollar value range for the penalties.

⁷ Note that the Czech Republic’s Competition Act is not in our sample of countries because the law has been enacted in 2001, the last year of our data.

Table 2.2 Antitrust and merger laws around the world

Countries are classified by the year of enactment of antitrust and competition laws, as well as merger laws.

Antitrust and competition laws	
Before 1990	Brazil, Canada, Hong Kong, Indonesia, Malaysia, Philippines, Singapore, Japan, Germany, Colombia, India, Pakistan, Chile, United Kingdom, Australia, United States, Argentina, Korea, Portugal, France, New Zealand, Austria, Israel, Spain
1990	Italy
1991	Belgium, Greece, Ireland, Peru, Taiwan
1992	Finland, Mexico, Venezuela
1993	Norway, Sweden
1994	Turkey
1995	Switzerland
1996	
1997	Denmark, Netherlands
1998	South Africa
1999	Thailand
2000	
2001	
No Law	
Merger laws	
Before 1990	United States, Japan, India, Germany, United Kingdom, Australia, Greece, Ireland, Korea, Canada, France, New Zealand, Austria, Israel, Spain
1990	Italy
1991	Belgium, Taiwan
1992	Finland, Venezuela
1993	Portugal, Mexico, Norway, Sweden
1994	Brazil, Turkey
1995	
1996	Switzerland
1997	Denmark, Netherlands
1998	South Africa
1999	
2000	
2001	Argentina
No Law	Hong Kong, Indonesia, Malaysia, Philippines, Singapore, Colombia, Pakistan, Chile, Peru, Thailand

Source: White and Case 2003–2004 Edition of the Worldwide Antitrust Merger Notification Requirements, Cicero (2001), National Regulators, and International Securities Services Association Handbook.

notification provisions of the Act may result in fines of up to CZK 300,000 (approximately USD 9810); penalties of up to CZK 10 million (USD 327,011), or up to 10% of the net turnover for the last accounting period may be imposed if the undertakings concerned fail to notify of the merger or complete it before receiving clearance.

Out of the 131 countries covered by the White & Case report, 76 have either no kind of merger control notification or no penalty to enforce it. Thirty-three countries have penalties, but they are not explicitly dependent on size or revenue, and 22 countries have some form of penalty proportional to size or revenue. Table 2.3 summarizes the characteristics of the MLs for our sample countries.

Table 2.3 Merger law quality index

We assign a value of 1 to a country with: premerger notification requirements, postmerger notification requirements, mandatory notification premerger.

Country	Quality index	Prenotification mandatory (Y/N)	Postnotification mandatory (Y/N)	Notification is not voluntary (Y/N)	Penalties are proportional to size of transaction
Argentina	4	Yes	Yes	Yes	Yes
Australia	1	No	No	No	Yes
Austria	3	Yes	No	Yes	Yes
Belgium	3	Yes	No	Yes	Yes
Brazil	4	Yes	Yes	Yes	Yes
Canada	2	Yes	No	Yes	No
Chile	0	No	No	No	No
Colombia	2	Yes	No	Yes	No
Denmark	2	Yes	No	Yes	No
Finland	2	Yes	No	Yes	No
France	1	No	No	No	Yes
Germany	3	Yes	No	Yes	Yes
Greece	2	Yes	No	Yes	No
Hong Kong	1	No	No	Yes	No
India	2	Yes	No	Yes	No
Indonesia	3	No	Yes	Yes	Yes
Ireland	3	Yes	No	Yes	Yes
Israel	3	Yes	No	Yes	Yes
Italy	2	Yes	No	Yes	No
Japan	3	Yes	Yes	Yes	No
Malaysia	1	No	No	Yes	No
Mexico	2	Yes	No	Yes	No
Netherlands	3	Yes	No	Yes	Yes

(Continued)

Table 2.3 (Continued)

Country	Quality index	Prenotification mandatory (Y/N)	Postnotification mandatory (Y/N)	Notification is not voluntary (Y/N)	Penalties are proportional to size of transaction
New Zealand	1	No	No	No	Yes
Norway	0	No	No	No	No
Pakistan	1	No	No	Yes	No
Peru	1	No	No	Yes	No
Philippines	1	No	No	Yes	No
Portugal	3	Yes	No	Yes	Yes
Singapore	1	No	No	Yes	No
South Africa	2	Yes	No	Yes	No
Korea	2	No	Yes	Yes	No
Spain	2	Yes	No	Yes	No
Sweden	2	Yes	No	Yes	No
Switzerland	3	Yes	No	Yes	Yes
Taiwan	3	Yes	No	Yes	Yes
Thailand	3	Yes	No	Yes	Yes
Turkey	2	Yes	No	Yes	No
United Kingdom	3	Yes	Yes	Yes	No
United States	3	Yes	Yes	Yes	No
Venezuela	0	No	No	No	No

Source: White and Case 2003–2004 Edition of the Worldwide Antitrust Merger Notification Requirements, Cicero (2001), National Regulators, and International Securities Services Association Handbook.

Another example can be drawn from the penalties imposed under the Austrian jurisdiction. Austria has a mandatory premerger notification law, with a penalty of between EUR 10,000 and EUR 1 million or 10% of the worldwide turnover of the parties in the last financial year imposed on the companies involved for unlawful completion of a merger. Canada has a mandatory premerger notification law, with a penalty of CAD 50,000 for unlawful completion of a merger. In addition, there are countries such as Sweden that do have a premerger notification law; however, there are no penalties to enforce the law. In this case, Sweden is assigned a zero. Thus, this coding is meant to capture the disparities in severity of law across different countries. The implicit assumption here is that countries that introduce proportionality in penalties rather than a fixed amount are more severe, while the ones that have no penalties are least severe of all.

The main idea driving the coding decisions is that a proportional penalty is more costly for larger firms, while a constant penalty is more costly for very small firms. We thus expect to observe that in countries with fixed penalties the likelihood of small mergers decreases.

2.4 Merger data

Our sample includes all the acquisitions of public companies available in Securities Data Corporation (SDC), from January 1, 1990, through December 31, 2001. Only completed transactions are considered, and we exclude from the initial sample “leveraged buyout” deals, as well as spin-offs, recapitalizations, self-tender and exchange offers, repurchases, minority stake purchases, acquisitions of remaining interest, and privatizations. Table 2.4 describes our sample, which contains 62,119 acquisitions in 41 countries. Horizontal mergers account for 50% of the sample. They are defined as acquisitions where the two-digit Standard Industrial Classification (SIC) codes of the bidder and the acquirer coincide.⁸ We call the complementary group “Nonhorizontal mergers,” which includes both vertical and conglomerate mergers.

Of all observations, cross-border mergers represent 19%. The number of cross-border mergers decreases in the early 1990s and rises again to attain its original level by 2001. In 2001, one out of four mergers in our sample countries is cross-border.

The SDC provides details on each acquisition. Unfortunately, for a vast majority of the countries, information on bid prices, accounting data, and other bid characteristics are either unavailable or unreliable. This, however, does not hinder our research since our interest centers on the date and industry characteristics of acquirer and target firms. Some concerns have been raised in the literature regarding the concept of announcement date in some developing economies (see Bhattacharya *et al.*, 1999). We do not think this problem affects our results, since we aggregate acquisitions by year of announcement. Therefore, to the extent that the announcement date reported by SDC is not very different from the actual announcement date, our results are accurate.

We also compile information on the number of listed companies, and the market capitalization in dollars, in each country and year, from the International Finance Corporation (IFC) manuals. This allows us to construct measures of merger intensity by country and year, by dividing the number of acquisitions by the number of publicly listed companies. We compute these measures for each of the 32 different industries in a country (using the industry classification in Datastream), and depending on whether national firms are either targets or acquirers, whether the merger is domestic or cross-border, and whether the merger is horizontal or nonhorizontal.

Figure 2.1 illustrates how the number of acquisitions has increased in the 1990s. If about 16% of all firms in the world were subject to a merger attempt, that number increases to 35% by 1998, and then drops to 20% in 2001. For the cross-border mergers, the frequency increased from 4% in 1990 to 7% in 2000.

⁸ Six SIC codes are considered per firm.

Table 2.4 Description of the sample

Number of acquisitions in the original sample, by year. The sample includes all the acquisitions of public companies available in Securities Data Corporation, from January 1, 1990, through December 31, 2000. Only completed transactions are considered, and we exclude from the initial sample leveraged buyout deals, as well as spinoffs, recapitalizations, self-tender and exchange offers, repurchases, minority stake purchases, acquisitions of remaining interest, and privatizations. Horizontal mergers are those where the two-digit Standard Industrial Classification code of the target and the acquirer are equal. Otherwise the merger is considered vertical.

Year	All mergers	Domestic mergers				Cross-border mergers			
		Number	% over total	Horizontal	Vertical	Number	% over total	Horizontal	Vertical
-11	2,470	1,885	76.32%	900	985	585	23.68%	278	307
-10	2,453	2,002	81.61%	1,009	993	451	18.39%	196	255
-9	2,784	2,314	83.12%	1,224	1,090	470	16.88%	218	252
-8	3,530	2,999	84.96%	1,558	1,441	531	15.04%	256	275
-7	4,599	3,851	83.74%	1,998	1,853	748	16.26%	331	417
-6	4,906	4,049	82.53%	2,059	1,990	857	17.47%	382	475
-5	5,647	4,707	83.35%	2,399	2,308	940	16.65%	441	499
-4	7,565	6,261	82.76%	3,114	3,147	1,304	17.24%	647	657
-3	8,427	6,896	81.83%	3,523	3,373	1,531	18.17%	818	713
-2	7,577	6,032	79.61%	3,201	2,831	1,545	20.39%	863	682
-1	8,533	6,605	77.41%	3,301	3,304	1,928	22.59%	962	966
	3,628	2,756	75.96%	1,299	1,457	872	24.04%	463	409
All Years	62,119	50,357	81.07%	25,585	24,772	11,762	18.93%	5,855	5,907

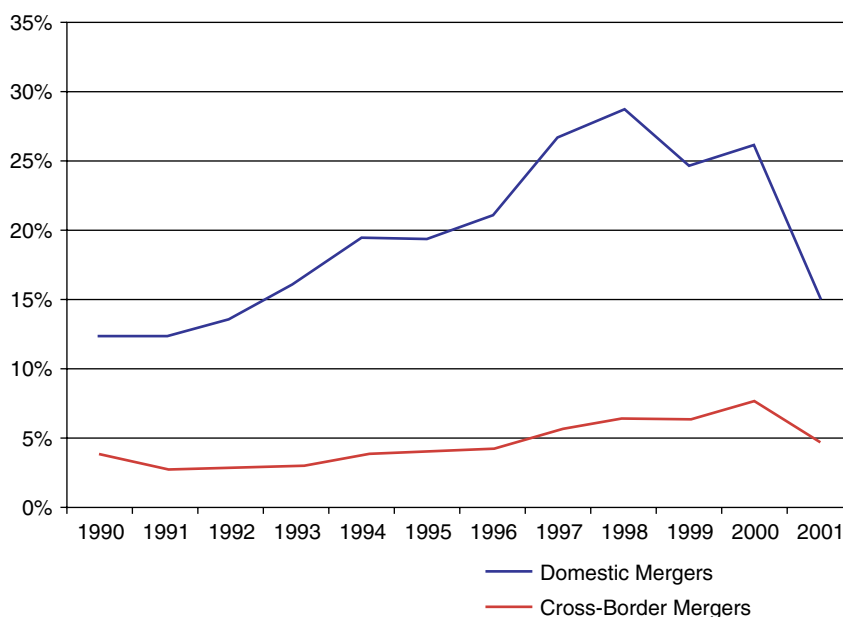


Figure 2.1 Frequency of Domestic and Cross-Border Mergers. The figure shows the number of consummated acquisitions of domestic firms, relative to the number of listed firms, by year. Number of listed firms in each country is from the IFC Yearbooks.

Table 2.5 reports the number of firms in a country that are merger targets, relative to the number of publicly listed firms. We have aggregated the industry numbers into a single country indicator of how likely it is for a domestic firm to be acquired, either by another domestic firm or by a foreign company. There are a few countries (Australia, Canada, New Zealand, Spain, and Sweden) where in some years, more than 50% of the firms in the country are targets of a merger attempt.

One concern in our analysis is the lack of observations in the early years of the sample. SDC officially started reporting acquisition information in 1980. However, for some countries there is no evidence of actual acquisitions until as late as 1994. We cannot discern whether this is due to an actual absence of mergers or to a lack of reporting by SDC. Therefore, in the analysis we are extremely cautious and control for time effects. As a robustness check, we investigate whether there is any news in the business press regarding an impending merger for the 389 country-year observations where SDC does not report any merger. We are not able to identify any additional event.

Table 2.6 reports the frequency of mergers by region and year. The Americas, Oceania, and Africa are the regions with the largest volume of acquisitions relative to market capitalization. In general, there is a significant increase in the merger volume during the second half of the 1990s, with a peak in 1998.

Table 2.5 Number of acquisitions by country

The table shows the number of consummated acquisitions of domestic firms, relative to the number of listed firms, by country and year. Number of listed firms in each country is from the International Finance Centres' Yearbooks.

Country	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Argentina	0.00%	8.33%	10.53%	8.70%	27.27%	33.87%	51.56%	81.54%	44.93%	57.75%	40.54%	22.67%
Australia	35.29%	25.60%	18.48%	42.18%	37.73%	50.28%	39.24%	57.98%	80.79%	74.62%	64.27%	50.62%
Austria	3.17%	0.00%	7.32%	10.64%	10.10%	9.26%	9.65%	10.43%	4.96%	15.87%	8.27%	7.19%
Belgium	20.16%	11.72%	16.41%	11.54%	11.94%	21.90%	17.39%	13.82%	24.24%	23.83%	23.47%	25.12%
Brazil	0.00%	1.47%	3.16%	3.57%	2.66%	7.73%	23.96%	26.62%	24.83%	17.50%	25.23%	14.89%
Canada	25.84%	29.59%	33.27%	41.91%	44.30%	49.77%	50.00%	62.45%	83.36%	64.77%	86.19%	68.98%
Chile	2.91%	3.51%	8.00%	6.16%	12.26%	9.43%	8.75%	18.50%	11.96%	17.65%	13.30%	9.04%
Colombia			8.33%	0.00%	23.08%	16.13%	19.35%	12.90%	31.25%	0.00%	3.13%	0.00%
Denmark	4.55%	10.70%	6.45%	10.81%	10.36%	5.26%	5.04%	13.11%	13.94%	23.75%	25.75%	18.32%
Finland	5.48	14.29	21.31	35.09	24.62	34.25	32.39	21.77	20.16	32.65	37.01	23.28%
France	19.73%	16.80%	19.41%	16.84%	19.53%	17.34%	18.12%	25.74%	24.97%	20.85%	23.13%	13.76%
Germany	7.36%	6.53%	4.50%	5.78%	4.29%	7.90%	8.89%	11.01%	13.47%	13.21%	12.80%	7.41%
Greece	0.00%	3.81%	1.69%	0.00%	0.00%	1.15%	1.03%	0.48%	3.15%	7.53%	5.58%	9.19%
Hong Kong	6.17%	18.92%	16.50%	18.31%	21.08%	13.80%	12.18%	18.22%	15.96%	19.76%	26.44%	14.16%
India	0.00%	0.00%	2.01%	1.82%	4.55%	8.76%	3.49%	10.65%	11.03%	10.99%	24.19%	11.87%
Indonesia	6.38%	6.10%	6.38%	7.21%	13.28%	12.16%	23.72%	10.30%	4.47%	12.22%	16.49%	17.68%
Ireland	21.21%	22.39%	28.57%	9.86%	13.70%	42.86%	25.00%	34.57%	32.58%	53.19%	52.48%	35.58%
Israel	0.00%	15.79%	10.00%	4.76%	6.98%	28.89%	28.57%	31.48%	59.09%	49.30%	84.00%	18.18%
Italy	14.49%	18.75%	21.83%	16.16%	23.31%	16.18%	16.86%	24.07%	26.60%	27.67%	37.65%	24.93%
Japan	0.54%	0.92%	0.58%	0.32%	1.08%	0.79%	0.98%	1.41%	2.16%	5.28%	8.15%	6.17%
Malaysia	8.82%	25.09%	9.46%	18.68%	26.63%	42.89%	35.17%	31.98%	28.04%	24.08%	24.60%	20.27%

Mexico	17.14%	0.00%	19.05%	18.06%	25.53%	33.01%	19.23%	37.29%	31.01%	21.05%	28.47%	19.18%
Netherlands	28.04%	11.28%	17.41%	22.17%	31.37%	18.87%	41.74%	46.19%	54.10%	40.74%	51.70%	24.08%
New Zealand	41.67%	27.08%	10.00%	44.64%	39.13%	34.67%	48.75%	37.35%	67.06%	50.00%	47.73%	29.67%
Norway	8.33%	24.73%	14.00%	18.42%	21.26%	18.88%	16.46%	15.98%	20.68%	32.55%	32.82%	18.75%
Pakistan		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	4.05%	0.00%	2.53%	0.00%	2.53%
Peru		0.00%	0.00%	6.06%	12.77%	3.33%	16.13%	12.50%	18.46%	15.38%	8.57%	4.29%
Philippines	0.00%	2.74%	2.50%	2.22%	7.48%	13.39%	4.05%	8.02%	4.22%	16.57%	7.60%	5.75%
Portugal	7.25%	6.41%	10.71%	6.82%	5.05%	5.71%	10.09%	8.11%	8.55%	15.00%	27.87%	9.52%
Singapore	9.92%	18.67%	10.69%	14.04%	16.75%	15.35%	15.63%	16.46%	22.18%	19.55%	26.60%	19.09%
South Africa	1.82%	4.80%	4.67%	9.33%	12.47%	19.16%	24.32%	29.21%	35.18%	18.37%	18.36%	7.53%
South Korea	0.19%	0.92%	0.55%	0.00%	0.35%	2.53%	1.91%	1.45%	6.89%	9.23%	9.08%	10.16%
Spain	37.50%	37.82%	36.29%	19.85%	28.57%	17.36%	13.01%	44.81%	68.07%	51.12%	75.40%	33.51%
Sweden	23.19%	34.93%	29.22%	24.53%	41.11%	20.87%	20.91%	31.35%	27.42%	40.64%	52.56%	24.00%
Switzerland	3.19%	9.38%	9.64%	12.00%	16.67%	13.74%	18.72%	17.47%	11.52%	16.99%	22.42%	17.35%
Taiwan	1.52%	0.67%	1.15%	0.00%	2.35%	1.27%	2.92%	2.33%	1.23%	4.25%	9.55%	10.15%
Thailand	0.00%	1.92%	1.49%	0.00%	1.64%	2.95%	2.50%	4.96%	17.31%	14.84%	9.89%	8.80%
Turkey	0.00%	3.03%	2.70%	1.23%	1.12%	0.00%	0.00%	3.70%	6.09%	5.22%	6.84%	10.83%
United Kingdom	40.29%	30.62%	30.94%	35.49%	41.75%	40.73%	41.36%	47.11%	48.97%	41.36%	42.32%	23.84%
United States	17.11%	16.40%	20.60%	24.67%	30.20%	30.25%	33.92%	45.66%	48.34%	40.51%	42.37%	
Venezuela	0.00%	0.00%	0.00%	0.00%	20.00%	40.00%	5.88%	11.11%	31.58%	13.64%	34.62%	7.14%

Table 2.6 Number of acquisitions by region

The table shows the \$ value of consummated acquisitions of domestic firms, relative to the total market capitalization, by region and year; and the number of consummated acquisitions, relative to the number of listed companies, by year and region.

Region	Number of domestic acquisitions/total number of firms in country											
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Africa	1.49%	4.16%	4.04%	7.71%	10.03%	14.25%	18.74%	24.07%	31.05%	14.91%	15.12%	6.33%
Asia	1.43%	3.79%	2.22%	2.90%	4.49%	5.82%	5.38%	6.10%	6.90%	8.53%	11.27%	8.81%
Eastem	0.00%	1.37%	2.20%	2.91%	1.86%	5.09%	7.14%	6.55%	10.89%	15.48%	18.21%	13.79%
Europe												
Western	12.67%	12.01%	12.61%	10.38%	11.51%	11.22%	12.38%	16.37%	19.52%	19.05%	22.41%	13.16%
Europe, non-E.U. countries												
Central and South America	2.24%	1.25%	3.73%	3.97%	7.65%	9.26%	11.60%	16.06%	14.77%	11.81%	13.56%	7.72%
Western	26.37%	22.01%	21.57%	25.43%	30.21%	27.32%	27.46%	31.33%	31.94%	29.20%	30.78%	17.92%
Europe, non-E.U. countries												
Oceania	23.43%	18.46%	12.88%	30.29%	28.86%	36.36%	30.04%	40.43%	60.00%	56.27%	48.74%	39.65%
North America	14.04%	15.00%	19.35%	23.64%	28.13%	27.96%	31.67%	42.27%	45.69%	36.92%	38.33%	56.87%

Number of cross-border acquisitions/total number of firms in country												
Region	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Africa	0.30%	0.55%	1.62%	2.31%	2.01%	4.75%	6.54%	4.94%	4.07%	3.57%	3.34%	1.58%
Asia	0.35%	0.65%	0.73%	0.97%	1.75%	1.57%	1.36%	1.76%	2.65%	2.56%	3.05%	2.00%
Eastern Europe	0.00%	1.37%	2.20%	1.94%	1.24%	1.39%	3.17%	2.55%	7.92%	10.22%	8.36%	7.47%
Western Europe, non-E.U. countries	9.62%	6.33%	7.28%	6.78%	8.05%	8.03%	8.77%	11.93%	12.99%	11.71%	13.52%	8.56%
Central and South America	1.79%	0.94%	3.50%	2.72%	5.74%	6.28%	9.16%	12.99%	9.72%	8.80%	9.04%	5.65%
Western Europe, non E.U. countries	5.73%	5.27%	4.59%	4.45%	5.92%	5.88%	6.48%	8.12%	8.15%	8.53%	9.32%	4.78%
Oceania	12.94%	7.38%	4.29%	12.29%	9.11%	11.19%	10.65%	14.49%	18.81%	14.85%	13.37%	8.39%
North America	3.67%	2.35%	2.21%	2.28%	3.11%	3.75%	3.44%	4.69%	5.61%	5.81%	8.31%	12.10%

There are significant differences across regions. The market for corporate control is relatively active in the United States, Oceania, Central and South America, and Western Europe, but it is relatively weak in Africa and Asia.

In the next section, we analyze to what extent MLs have contributed to such an increase in the number of acquisitions within a country.

2.5 Domestic and cross-border mergers, and merger laws

2.5.1 *The effect of merger laws*

To analyze the effect of MLs on the frequency of acquisitions we compare our measures of merger activity before and after the enactment of merger regulation in the countries that have done so between 1990 and 2001. Providing results for the whole sample is not sensible because we would be unable to capture the effect of the laws themselves. The United States, for instance, enacted MLs in 1914; Argentina did it in 2001. However, one cannot conclude that it is because of the laws that the merger activity in the United States was larger than in Argentina in 1999.

We first restrict our analysis to 15 countries with observations pre- and post-merger law enactment. This subsample includes 8 Western European countries (Belgium, Denmark, Greece, Ireland, Netherlands, Norway, Sweden, and Switzerland) that passed national MLs after the 1989 European Directive on Mergers. It also includes 3 Latin American countries as well as South Africa, Taiwan, Thailand, and Turkey. In Table 2.7, we compare the merger frequencies around the year of enactment of merger laws. Note that we exclude the year when the law is passed. On average, we find that merger frequency increases from 8.6% to 12.6% after MLs are enacted. Especially significant are the results for Mexico, where merger frequency increases by more than 10%. There is no country where mergers are less frequent after MLs are put in place.

With respect to cross-border mergers, there are increases in all countries except for Belgium (interestingly, Belgium has a merger law quality index of 3 from a maximum value of 4).

2.5.2 *Cross-sectional evidence*

We do not claim any causal relationship between laws and merger activity. The results could be purely driven by an increasing trend in the market for corporate control in the last decade. Therefore, we go back to our original sample and perform a panel regression with measures of merger frequency by industry in each country, spanning the period 1990–2001.

There are several determinants of merger activity in an industry. In addition to the industry characteristics, the market valuation of the industry, the economic and financial development of the country, as well as institutional characteristics are employed to study the number of mergers.

Table 2.7 Merger activity and merger laws

Effect of merger laws on the number of acquisitions. Only those countries with information available in the prelaw period are shown. The number of acquisitions includes completed acquisitions in a given year, of companies domiciled in the corresponding country.

Country	Number of acquisitions				Number of acquisitions / Number of listed firms			
	Domestic		Cross-border		Domestic		Cross-border	
	Before the enactment of merger laws	After the enactment of merger laws	Before the enactment of merger laws	After the enactment of merger laws	Before the enactment of merger laws	After the enactment of merger laws	Before the enactment of merger laws	After the enactment of merger laws
Argentina	10	16	8	13	17.42%	22.46%	12.22%	17.86%
Belgium	13	17	12	13	10.48%	10.48%	9.68%	7.83%
Denmark	10	29	6	21	4.81%	11.08%	2.79%	7.89%
Greece	0	6	0	1	0.00%	2.46%	0.00%	0.59%
Ireland	9	17	5	11	13.64%	19.80%	7.58%	12.09%
Mexico	2	17	2	11	4.29%	15.17%	4.29%	10.02%
Netherlands	27	64	23	50	13.19%	24.28%	11.23%	19.08%
Norway	10	29	5	15	10.72%	14.45%	4.97%	7.30%
South Africa	45	101	11	18	10.58%	17.00%	2.64%	2.86%
Sweden	29	58	14	30	19.56%	20.69%	9.56%	10.80%
Switzerland	13	25	9	20	6.46%	9.68%	4.31%	7.74%
Taiwan	1	7	1	4	0.76%	2.09%	0.76%	1.17%
Thailand	7	20	3	11	2.45%	7.18%	1.20%	4.00%
Turkey	1	4	0	3	0.75%	3.79%	0.41%	2.74%
Venezuela	0	2	0	1		9.44%		6.96%
TOTAL	175	413	98	222	8.59%	12.55%	4.81%	6.82%

With respect to industry characteristics, we argue that the level of concentration in the industry will affect the likelihood of mergers. In industries with fewer participants, there is less room for consolidation. We then use the number of publicly listed firms in the industry as an exogenous variable in our panel regressions. Additionally, we control for the industry return in the previous year. The idea is that a stock price run-up in the industry deters mergers by making target firms too expensive. From the point of view of the acquiring firms, a stock price run-up in the industry makes industry participants more likely to engage in acquisitions. Finally, we estimate our panel regressions with industry-fixed effects in order to capture industry-specific, time-invariant factors that determine the likelihood of firms in the industry to acquire and be acquired by other firms.

Mergers are determined by the market valuation of an industry. In principle, an industry with a high market-to-book ratio is a growth industry, thereby attractive for potential acquirers. Alternatively, acquisitions are more likely when firms are more undervalued. We compute the average Tobin's Q in each industry in our sample to capture such effects. The average Tobin's Q is computed by adding up the market capitalization of all firms in an industry and dividing the result by the sum of all asset values of the same firms.

Merger activity is also determined by country characteristics and in particular by the economic and financial development in the country. We follow the general practice in the literature and we measure economic development with gross domestic product (GDP) per capita and the level of financial development with the ratio of total market capitalization to GDP. In addition, we control for the return of the stock market index in the country in the previous year. We compute value-weighted returns for all firms in the country using stock price information from Datastream.

Finally, mergers are determined by institutional characteristics. We capture these effects with a time-varying index of corruption constructed by the International Country Risk Guide. The index varies from zero to ten, with zero being for the most corrupted countries, and ten for the least corrupted countries. In addition, we use as determinants of merger activity the merger law quality index and two dummy variables that equal one whenever there are ACLs and MLs enacted in the country in that given year.

We estimate our panel regressions with year-fixed effects in addition to industry-fixed effects. We adjust standard errors for heteroskedasticity and report in all tables the economic significance of the coefficients. Economic significance levels allow us to compare the magnitude of the effect of all variables, and it is measured as the percentage change in the standard deviation of the endogenous variable that is caused by a one standard deviation change in the exogenous variable.

2.5.3 Regression results

Acquisitions of firms in the industry, both domestic and cross-border

In Table 2.8 we report aggregate results for domestic mergers and cross-border mergers. The endogenous variable is the number of firms in an industry that are targets of a merger divided by the number of listed firms in the country.

Table 2.8 Panel regressions—total merger activity by nationality of target firm

Panel regressions with the number of acquisitions in each category, divided by the number of publicly listed firms in a country, as endogenous variable. The Quality Index measures the quality of merger regulation in the country. Data on market capitalization to gross domestic product (GDP), GDP per capita is from the World Bank Development Indicators. The corruption index is obtained from the International Risk Guide. The number of firms is from the International Finance Centres' manuals. Industry and country stock returns are constructed from all the firms in each industry and country with data available in Datastream. The sample includes acquisitions of firms in the countries considered in the study. We estimate the model with robust standard errors adjusted for heteroskedasticity and with year- and industry-fixed effects. In brackets we report the economic significance of each coefficient: the effect of a one standard deviation increase in the corresponding exogenous variable on the standard deviation of the endogenous variable.

	Domestic target	Cross border, domestic target
Quality index	0.004 [0.007]	0.021*** [0.056]
Market capitalization to GDP	0 [0.009]	-0.000*** [-0.045]
Log (Tobin's Q) previous year	0.036*** [0.032]	0.003 [0.003]
Corruption index (more corruption, lower value)	0.074*** [0.177]	0.027*** [0.091]
Merger law existence	-0.046 [-0.027]	-0.004 [-0.003]
Antitrust law existence	0.192*** [0.093]	0.089*** [0.061]
Number of firms	-0.001*** [-0.059]	-0.001*** [-0.093]
GDP per capita	-0.000*** [-0.065]	0.000** [0.031]
Industry average stock return	0 [0.009]	0 [0.007]
National stock market return	0 [-0.012]	0 [-0.009]
Constant	-0.168*** [-0.315]	-0.076** [-0.202]
Observations	7947	7947
Number of industries	38	38
R-squared within	0.04	0.03
R-squared between	0.07	0.05
R-squared total	0.04	0.03

Normalized beta coefficients in brackets

*significant at 10%; **significant at 5%; ***significant at 1%

Because the effect of our control variables will be similar in all the remaining specifications, let us comment on the results at this point. We find that market valuations (Tobin's Q) positively affect merger activity. This is consistent with the idea that, the higher the Tobin's Q, the more attractive the industry is for potential acquirers. This effect is not significant for cross-border mergers.

Mergers are less likely in more developed countries, at least in our sample period. This is reflected in the negative (or insignificant) coefficients of the GDP per capita and the market capitalization to GDP ratio.

Our variable "Number of Firms" reflects the total number of firms in a given industry. We use this measure as a proxy for concentration. Ideally, the

Herfindal Index is a more appropriate figure. However, the Herfindal Index cannot be calculated for a number of industries related to countries for which data are not available. Therefore, we decided to employ the absolute number of firms in order to circumvent the loss of sample points. Not surprisingly, the larger the number of industry participants, the less the merger frequency. Even though concentration affects the number of mergers, it affects as well the denominator in our measure, hence the result.⁹ Stock returns—whether industry or country—do not determine merger activity.

With respect to merger and antitrust laws, two results deserve a comment. First of all, we do find that the existence of antitrust laws has a significantly positive effect on the frequency of both domestic and cross-border mergers. In economic terms, firms in countries with antitrust laws have a 20% higher probability of acquisition than firms in countries without ACLs. In other words, the enactment of ACLs increases the frequency of domestic mergers by 20%. The equivalent number for cross-border mergers is 9%.

The second result is that the quality of the law matters, but only for cross-border mergers. Domestic firms are more likely to be acquired the better the MLs are. In economic terms, a one standard deviation increase in the quality index (an increase of one point) increases the frequency of mergers by 0.06 standard deviations (equivalent to a frequency of 2%). Given that for the average industry in our sample, the frequency of mergers is 2%, this result means that having a law that is only one scoring point better (for instance, by having mandatory notification requirements) doubles the frequency of cross-border mergers in the country.

Acquisitions of firms in the industry, horizontal vs nonhorizontal

In Table 2.9, we classify acquisitions into horizontal and nonhorizontal. Our findings are similar to the previous section. It is noteworthy that there is a differential effect of regulation on the frequency of horizontal mergers. Intuitively, one expects that antitrust laws have a more significant effect on horizontal, anticompetitive mergers. In recent years, antitrust authorities have been concerned with market power coming from vertical integration. Therefore, this result is to be expected.

Acquisitions by firms in the industry

Last, we report regression results with the frequency of mergers by firms in the industry. The endogenous variable in these regressions measures the likelihood that a firm becomes an acquirer and how this is determined by merger laws. We report these results in Table 2.10.

We have concluded from the previous section that antitrust laws remove information asymmetries and make acquisitions more likely. We confirm this result here. When a country enacts ACLs, firms in that country increase their

⁹ If we use the absolute number of mergers as endogenous variable, the coefficient of the number of listed firms is positive and highly significant.

Table 2.9 Panel regressions—horizontal vs nonhorizontal mergers

Panel regressions with the number of acquisitions in each category, divided by the number of publicly listed firms in a country, as endogenous variable. Horizontal mergers are mergers where the acquirer and the target have the same two-digit main Standard Industrial Classification code. The Quality Index measures the quality of merger regulation in the country. Data on market capitalization to gross domestic product (GDP), GDP per capita is from the World Bank Development Indicators. The corruption index is obtained from the International Risk Guide. The number of firms is from the International Finance Centres' manuals. Industry and country stock returns are constructed from all the firms in each industry and country with data available in Datastream. The sample includes acquisitions of firms in the countries considered in the study. We estimate the model with robust standard errors adjusted for heteroskedasticity and with year- and industry-fixed effects. In brackets we report the economic significance of each coefficient: the effect of a one standard deviation increase in the corresponding exogenous variable on the standard deviation of the endogenous variable.

	Horizontal, domestic target	Horizontal, cross-border, domestic target	Vertical, domestic target	Vertical, cross-border, domestic target
Quality index	0.005 [0.015]	0.013*** [0.050]	-0.001 [-0.004]	0.009*** [0.041]
Market capitalization to GDP	-0.000*** [-0.038]	-0.000*** [-0.048]	0.000*** [0.054]	-0.000* [-0.023]
Log (Tobin's Q) previous year	0.026*** [0.038]	0.003 [0.007]	0.01 [0.015]	-0.001 [-0.002]
Corruption index (more corruption, lower value)	0.035*** [0.138]	0.014*** [0.069]	0.039*** [0.157]	0.013*** [0.081]
Merger law existence	-0.029 [-0.028]	-0.011 [-0.014]	-0.017 [-0.017]	0.008 [0.012]
Antitrust law existence	0.096*** [0.077]	0.055*** [0.057]	0.095*** [0.078]	0.034** [0.042]
Number of firms	-0.000*** [-0.034]	-0.001*** [-0.068]	-0.001*** [-0.063]	-0.001*** [-0.086]
GDP per capita	-0.000*** [-0.045]	0 [0.018]	-0.000*** [-0.063]	0.000** [0.034]
Industry average stock return	0 [0.008]	0 [0.004]	0 [0.007]	0 [0.007]
National stock market return	0 [-0.011]	0 [-0.009]	0 [-0.009]	0 [-0.006]
Constant	-0.085*** [-0.261]	-0.053*** [-0.216]	-0.083*** [-0.262]	-0.022 [-0.106]
Observations	7947	7947	7947	7947
Number of industries	38	38	38	38
R-squared within	0.03	0.02	0.04	0.02
R-squared between	0.18	0.11	0.01	0.01
R-squared total	0.03	0.02	0.04	0.02

Normalized beta coefficients in brackets
* significant at 10%; ** significant at 5%; *** significant at 1%

Table 2.10 Panel regressions—total merger activity by the nationality of the acquirer

Panel regressions with the number of acquisitions in each category, divided by the number of publicly listed firms in a country, as endogenous variable. The Quality Index measures the quality of merger regulation in the country. Data on market capitalization to gross domestic product (GDP), GDP per capita is from the World Bank Development Indicators. The corruption index is obtained from the International Risk Guide. The number of firms is from the International Finance Centres' manuals. Industry and country stock returns are constructed from all the firms in each industry and country with data available in Datastream. The sample includes acquisitions of firms in the countries considered in the study. We estimate the model with robust standard errors adjusted for heteroskedasticity and with year- and industry-fixed effects. In brackets we report the economic significance of each coefficient: the effect of a one standard deviation increase in the corresponding exogenous variable on the standard deviation of the endogenous variable.

	Domestic acquiror	Cross-border, domestic acquiror
Quality index	-0.015*** [-0.030]	0.003 [0.010]
Market capitalization to GDP	0.000*** [0.059]	0 [0.019]
Log (Tobin's Q) previous year	0.057*** [0.056]	0.024*** [0.039]
Corruption index (more corruption, lower value)	0.080*** [0.209]	0.033*** [0.137]
Merger law existence	-0.041 [-0.026]	0 [-0.000]
Antitrust law existence	0.190*** [0.101]	0.086*** [0.074]
Number of firms	-0.001*** [-0.033]	-0.001*** [-0.066]
GDP per capita	-0.000*** [-0.074]	0.000*** [0.034]
Industry average stock return	0 [0.008]	0 [0.005]
National stock market return	0 [-0.005]	0 [0.001]
Constant	-0.245*** [-0.504]	-0.153*** [-0.507]
Observations	7947	7947
Number of industries	38	38
R-squared within	0.06	0.04
R-squared between	0.11	0.13
R-squared total	0.07	0.05

Normalized beta coefficients in brackets

* significant at 10%; ** significant at 5%; *** significant at 1%

acquisition activity: The probability that a firm in a country with ACLs engages in a domestic acquisition is 19% higher, and the probability that the same firm engages in a cross-border deal increases by about 9%.

A very important result is that a higher quality of MLs deters domestic acquirers. That is, firms in an industry are 3% less likely to engage in domestic mergers when the merger law quality index increases by one standard deviation (one point). This is a reflection of the costs of compliance. Merger regulation affects both the target and the acquiring firm, but the severity of the

penalty in case of infringement affects the acquiring firm only. That is why tougher laws are associated with less acquisition activity by domestic firms.

2.5.4 Summary of the results

This study shows that MLs are a very important determinant of merger activity, and the study contributes to the law and finance literature (La Porta *et al.*, 2002) by showing that not only does the existence of the law matter, but also how well it is applied.

We focus on antitrust and competition laws and show that whenever countries introduce regulations that aim to protect domestic firms against unfair concentration, by setting uniform standards and imposing legal requirements, mergers become more frequent. The idea is that by making transactions more transparent, agents are more willing to initiate them.

We do not find that merger regulation *per se* has an effect on merger activities. However, this study shows that the better the quality of the law—measured by the severity of the penalties and the notification requirements imposed on the parties—the higher the frequency of cross-border acquisitions of domestic firms, and the higher the frequency of domestic acquisitions by domestic firms.

2.6 Conclusion

This study is a first attempt to quantify the effects of MLs on merger activity. We identify two different effects of MLs. First, MLs directly affect the frequency of acquisitions in a given country. This can have both positive and negative implications for the country. Positive implications because, if industry concentration is not at its optimal level, to the extent that MLs make acquisitions happen, they can create efficiency gains from integration. However, laws can have negative implications as well by preventing some profitable acquisitions from succeeding through their effects on domestic acquirers.

We analyze the effect of MLs on a sample of 41 countries with laws in place. There is strong evidence of a trend toward globalization in the financial markets. Especially after 1995, cross-border merger flows have increased dramatically. However, we do not find national laws having a significant effect on domestic or cross-border merger flows, after controlling for time effects and market conditions.

Our chapter contributes to the debate on the need for market regulation. However, some important extensions deserve further research. The effectiveness of competition laws obviously depends on the market and regulatory environments. But effectiveness should be reflected ultimately on the value of the corporate sectors. In the chapter, we do not take a stand on whether mergers are profitable for an industry. Therefore, it would be interesting to analyze the indirect effect of MLs on corporate value through their effects on competition.

References

- Bhattacharya, U., Daouk, H., Jorgenson, B., and Kehr, C. H. (1999). When an event is not an event: The curious case of an emerging market. *Journal of Financial Economics* 55, 69–102.
- Bradley, M., Desai, A., and Kim, E. H. (1988). Synergistic gains from corporate acquisitions and their division between the stockholders of target and acquiring firms. *Journal of Financial Economics* 21, 3–40.
- Brady, U. and Feinberg, R. M. (2000). An examination of stock-price effects of E.U. merger control policy. *International Journal of Industrial Organization* 18, 885–900.
- Cicero, M. J. (2001). International merger control. *Antitrust Magazine* 15, 1–13.
- Daines, R. (2001). Does Delaware law improve firm value? *Journal of Financial Economics* 62, 525–558.
- Deneckere, R. and Davidson, C. (1985). Incentives to form coalitions with Bertrand competition. *Rand Journal of Economics* 25, 35–57.
- Eckbo, E. (1982). Horizontal mergers, collusion, and stockholder wealth. *Journal of Financial Economics* 11, 241–273.
- Farrell, J. and Shapiro, C. (1990). Horizontal mergers: An equilibrium analysis. *American Economic Review* 80, 927–940.
- Gugler, K., Mueller, D. C., Yurtoglu, B. B., and Zulehner, C. (2000). “The Effects of Mergers: An International Comparison.” University of Vienna, working paper.
- Harris, R. S. and Ravenscraft, D. S. (1991). The role of acquisitions in foreign direct investment: Evidence from the U.S. stock market. *Journal of Finance* 46, 825–844.
- Jarrell, G., Brickley, J., and Netter, J. M. (1988). The market for corporate control: The empirical evidence since 1980. *Journal of Economic Perspectives* 2, 49–68.
- Jensen, M. C. and Ruback, R. S. (1983). The market for corporate control: The scientific evidence. *Journal of Financial Economics* 11, 5–50.
- La Porta, R., Lopez-de-Silanes, F., Shleifer, A., and Vishny, R. (2002). Investor protection and corporate valuation. *Journal of Finance*, forthcoming.
- Mitchell, M. and Mulherin, H. (1996). The impact of industry shocks on takeover and restructuring activity. *Journal of Financial Economics* 41, 193–229.
- Moon, H. S. and Walkling, R. A. (2000). Abnormal returns to rivals of acquisition targets: A test of the acquisition probability hypothesis. *Journal of Financial Economics* 55, 143–172.
- Perry, M. and Porter, R. H. (1985). Oligopoly and the incentive for horizontal merger. *American Economic Review* 75, 219–227.
- Salant, S. W., Switzer, S., and Reynolds, R. J. (1983). Losses from horizontal merger: The effects of an exogenous change in industry structure

- on Cournot-Nash Equilibrium. *Quarterly Journal of Economics* 98, 185–199.
- Schwert, G. W. (1996). Markup pricing in mergers and acquisitions. *Journal of Financial Economics* 41, 153–192.
- Stigler, G. (1950). Monopoly and oligopoly by merger. American Economic Review Papers and Proceedings XL. In “The Organization of Industry” (G. Stigler, ed.). Chicago, University of Chicago Press.

This page intentionally left blank

3 The governance motive in cross-border mergers and acquisitions

Stefano Rossi and Paolo Volpin

Abstract

The critical question in this chapter is whether cross-border mergers and acquisitions are a channel through which companies can opt out of a poor governance regime. The main prediction is that in cross-border mergers and acquisitions companies from countries with good corporate governance should be acquirers, and companies from countries with poor corporate governance should be targets. This hypothesis is confirmed using a sample of cross-border mergers and acquisitions in 49 countries in the 1990s. Targets tend to come from countries with lower judicial efficiency and less developed banking sectors than their acquirers. The average corporate governance of companies acquiring in one country is higher than the governance standards of that country. A second prediction is that cross-border merger and acquisition activity should be concentrated in industries that need more external capital and face greater agency problems. Hence, companies from countries with worse governance should be more likely to be acquired in cross-border deals in industries that need more external financing and in industries that face greater agency costs. This prediction is confirmed using a measure of external dependence at the industry level.

3.1 Introduction

Recent contributions in corporate governance show that there are large differences in the degree of investor protection across countries and that these differences correlate with both the development of capital markets and the ownership structure of firms.¹ Such differences affect the firm's ability to raise external capital and, ultimately, to face global market competition. If so, competition across regulatory regimes will put increasing pressure on politicians to improve governance and may trigger a worldwide convergence in corporate governance standards.² Alternatively, firms will develop informal arrangements

¹ See La Porta, Lopez-de-Silanes, Shleifer, and Vishny (1997), (1998), and La Porta, Lopez-de-Silanes, and Shleifer (1999).

² According to Henry (2000), in several countries drastic economic reforms have followed the liberalization of capital and goods markets.

based on trust and reputation to access external finance,³ and no convergence may occur.

The legal literature suggests three types of convergence in corporate governance: convergence in corporate law (formal convergence), in business practices (functional convergence), and in contracts (convergence by contract). While the former requires extensive legal and regulatory reform that may be difficult to implement effectively,⁴ the other two refer to more decentralized, market-based changes that do not require legal reforms. Contractual convergence refers to decisions by the firm to opt out of a governance regime by contract. An example is cross-listing in countries with better corporate governance and more developed capital markets. Reese and Weisbach (2002) and Pagano, Röell, and Zechner (2002) find that firms from countries with weak legal protection for minority shareholders list abroad more frequently than firms from other countries. Functional convergence refers to changes toward most successful practices, without any necessary change in laws or contracts. An example of a function that good governance systems should provide is that bad management should be replaced, as discussed by Kaplan (1997).

A lively debate has recently divided legal scholars on the possibility of effective worldwide convergence in corporate governance standards. Coffee (1999) argues that differences in corporate governance will persist but with some degree of functional convergence. Hansmann and Kraakman (2001) believe in formal convergence and argue that “the triumph of the shareholder-oriented model of the corporation over its principal competitors is now assured.” Bebchuk and Roe (1999) question the idea of a rapid convergence and argue that political and economic forces will slow down any change. Gilson (2001) argues that convergence will happen through all three channels.

We explore one particular type of convergence by contract, namely the one resulting from cross-border mergers and acquisitions. The intuition of how this channel operates is best described as follows: “When a British firm fully acquires a Swedish firm, the possibility for legal expropriation of investors diminishes. Because the controlling shareholders of the Swedish company are compensated in such a friendly deal for the lost private benefits of control, they are more likely to go along. By replacing the wasteful expropriation with publicly shared profits and dividends, such acquisitions enhance efficiency” (La Porta *et al.*, 2000: 23).

We present a simple model where the firm’s cost of external capital decreases when the control of the firm shifts from a country with poor corporate governance to one with better corporate governance. The intuition is that after the merger the management is subject to the governance regime of the acquiring company, and therefore the risk of expropriation is reduced. With a lower cost of capital comes a higher firm’s value. Hence, a surplus is generated when the

³ Franks, Mayer, and Rossi (2005) document dispersed ownership and strong takeover activity in the United Kingdom in the first half of the twentieth century in the absence of investor protection.

⁴ Pagano and Volpin (2005) analyze the conditions under which legal convergence may become possible.

acquirer faces a better governance regime than the target.⁵ The model therefore predicts that in cross-border mergers and acquisitions, companies from countries with good corporate governance should be acquirers and companies from countries with poor corporate governance should be targets.

This basic hypothesis is tested and confirmed in a sample of all cross-border mergers and acquisitions involving 49 countries in the 1990s. We use several proxies for the quality of the corporate governance regime in a country and find that targets tend to come from countries with lower investor protection and less developed financial sector. We also find that the average corporate governance of companies acquiring in one country is higher than the governance standards of the country, consistent with the findings of Rossi and Volpin (2004).

The model also delivers cross-industry predictions.⁶ Cross-border merger and acquisition activity should be concentrated in industries that need more external capital and face greater agency problems. The intuition is that the benefit of better governance standards is relatively larger in industries that need more external capital and face greater agency problems. Hence, we expect that companies from countries with worse governance should be more likely to be acquired in cross-border deals in industries that need more external financing and in industries that face greater agency costs. These predictions are tested and confirmed by using the measure of external dependence at the industry level developed by Rajan and Zingales (1998) and by developing a measure of agency problems at the industry level, following their methodology.

The phenomenon of cross-border mergers and acquisitions is recent and still largely unexplored by the finance literature. The literature has focused on shareholder wealth effects (Bris and Cabolis, 2003; Goergen and Renneboog, 2004) and bondholder wealth effects (Renneboog and Szilagyi, 2006) across countries, and on the relevance of industry shocks (Mitchell and Mulherin, 1996). This chapter offers an interpretation for the aggregate pattern of cross-border activity by showing that it serves a governance purpose, both across countries and across industries.

Section 3.2 presents a simple model of cross-border mergers and acquisitions; Section 3.3 contains the empirical analysis; Section 3.4 concludes.

3.2 A simple model of cross-border merger and acquisition activity

Consider the following two-period model of a firm in a generic moment of its life cycle. At $t = -1$, an entrepreneur/manager decides whether to sell the firm to a potential acquirer.

⁵ This result is consistent with recent evidence suggesting that the quality of a corporate governance regime is reflected in higher valuation. La Porta *et al.* (2002) show that across country valuation is positively correlated with investor protection when using indices of investor protection as a measure of the quality of a corporate governance regime within a country.

⁶ Rossi and Volpin (2004) do not study cross-industry variation of mergers and acquisitions.

At $t = 0$, with probability α the firm needs to raise external capital K to finance a profitable investment project. If this investment is not made, the firm produces an output equal to zero.

At $t = 1$, the manager faces a choice between a good project that succeeds with probability P and fails otherwise, and a bad project that succeeds with probability p and fails otherwise, where $P - p = \Delta > 0$. The bad project produces private benefits of control for the manager b . These private benefits are low ($b = 0$) with probability g , and large ($b = B > 0$), otherwise. As a simplification, we assume that the manager knows the size of the private benefits of control when he chooses the type of project at $t = 1$.

At $t = 2$, the security benefits are paid to investors and the manager enjoys the private benefits of control, if any. In case of success, the project pays a verifiable return R , in case of failure it pays zero.

We assume a competitive capital market with a constant required rate of return normalized to zero and no asymmetry of information between the entrepreneur and the market. We also make the following assumptions:

Assumption 1: $R\Delta - B \equiv I > 0$.

Assumption 1 implies that the extraction of private benefits is inefficient. In other terms, there is an agency cost measured by the parameter I ;

Assumption 2: $pR \geq K$.

Under assumption 2, the investment at $t = 0$ is always feasible. Removing this assumption will only add an extra source of inefficiency coming from a poor governance regime. Without assumption 2, the results in the chapter would be strengthened and the analysis would be complicated with no gain of intuition.

Assumption 3: $B > \Delta (R - K/P)$.

Assumption 3 ensures that governance plays a role. The intuition is that without governance the manager chooses to invest in the bad project and extract private benefits of control.

From $t = 0$, the model is a simplified version of Holmstrom and Tirole (1997), where the monitoring level is taken as exogenous. The additional building block is the decision at $t = -1$ to engage in merger and acquisition activity. The interesting parameters of the model are g , I , and α . The first one is directly affected by the quality of the governance regime in the country where the company sets its headquarters: the better the governance, the larger is g (and thus, the smaller the manager's ability to extract private benefits of control). The parameter I is affected by the extent of the agency problems in the industry: the greater the industry agency cost, the larger is I . Finally, the probability α characterizes the need of external capital within the industry: the greater the industry needs of external capital, the larger is α .

Section 3.2.1 describes the equilibrium in a close economy, while Section 3.2.2 studies cross-border merger and acquisition activity.

3.2.1 Equilibrium without cross-border mergers and acquisitions

The equilibrium is found by backward induction, starting at $t = 1$ with the choice of project by the manager. Two different cases must be considered. In the

first one, which happens with probability $1 - \alpha$, the firm needs no external capital at $t = 0$. The manager's decision depends on the effectiveness of the corporate governance regime.

With probability g , there is good governance, and therefore the manager's utility is pR if he chooses the good project, and pR if he chooses the bad project. In this case, the manager chooses to invest in the good project since $R\Delta > 0$. With probability $1 - g$, governance is not effective, and the manager's utility is instead pR if he chooses the good project, and $pR + B$ if he chooses the bad project.

Again, it is easy to see that the manager chooses to invest in the good project since $R\Delta > B$ by assumption 1. Hence, in the subgame in which the firm needs no external capital at $t = 0$, the manager chooses the good project *independently* of the effectiveness of the governance regime. The intuition for this result is that the manager fully internalizes the costs of the extraction of private benefits because he receives all proceeds from the investment decision.

In the second subgame the firm raises external capital at $t = 0$. We assume a generic financial contract that requires a payment $D \leq R$ if the project succeeds. Notice that this represents the most general type of financial contract available in this setup because there are no resources to be paid if the project fails. Again, we must examine two distinct subgames depending on the effectiveness of the governance regime. On the one hand, with probability g , there is good governance and therefore the manager's utility is $P(R - D)$ (if he chooses the good project) and $p(R - D)$ (if he chooses the bad project). The manager chooses to invest in the good project since $\Delta(R - D) \geq 0$. On the other hand, with probability $1 - g$, governance is not effective and the manager's utility is $P(R - D)$ (if he chooses the good project) and $p(R - D) + B$ (if he chooses the bad project). In this case the manager chooses to invest in the good project if and only if $\Delta(R - D) = B$.

Going backward to $t = 0$, the expected return for external investors is therefore:

$$A = \begin{cases} PD & \text{if } \Delta(R - D) \geq B \\ [P - (1 - g)\Delta]D & \text{if } \Delta(R - D) < B \end{cases} \quad (3.1)$$

Given a competitive capital market, D is determined such that $A = K$. It is easy to see that $D = K/P$.⁷

Also, by assumption 3, we have $\Delta(R - K/P) < B$. By combining these two results, it follows that $\Delta(R - D) < B$, that is, the manager chooses to extract private benefits of control if the corporate governance is not effective. This also implies that in equilibrium:

$$D = K/[P - (1 - g)\Delta] \quad (3.2)$$

Notice that the cost of the external capital, D/K , decreases with the quality of the governance regime, g . Proceeding backward to $t = -1$, the manager's expected utility is given by

⁷ This happens because if the investors expected the manager to choose the good project with probability 1, they would require a future payment $D = K/P$. On the other hand, if they expected the manager to choose the good project with probability $p < 1$, they would require a future Payment $D > K/P$.

$$U_E = \alpha\{[P - (1 - g)\Delta](R - D) + (1 - g)B\} + (1 - \alpha)PR \quad (3.3)$$

By substituting D using (3.2), we obtain that the manager's expected utility at $t = -1$ equals the net present value of the investment opportunity, that is:

$$U_E = [P - (1 - g)\Delta]R - \alpha K + \alpha(1 - g)B = PR - \alpha R - \alpha(1 - g)I \quad (3.4)$$

It is important to notice that U_E is increasing in g , because $I > 0$, by assumption 1. The intuition for this result is that the agency costs are ultimately borne by the manager because the external investors at $t = 0$ are fully rational. If he could, at $t = -1$, the manager would like to commit not to extract private benefits of control. As we will see, selling the firm to a raider coming from a country with better governance acts precisely as such a commitment device.

Proposition 1 summarizes the analysis above:

Proposition 1: As of $t = -1$, the value of the firm for the entrepreneur/manager is strictly increasing in the quality of the governance regime. Moreover, the marginal value of better governance is higher in industries with greater agency problems and in industries that need more external capital.

Notice that no surplus is created by a transfer of control within the same country. This result follows trivially because the governance regime does not change within a country.

3.2.2 Allowing for cross-border mergers and acquisitions

Can cross-border mergers and acquisitions increase the value of the firm? For simplicity, we assume that cross-border mergers and acquisitions operate in such a way that each firm is matched with one potential buyer via an exogenous and uniform random process. At $t = 0$, the matched pair evaluates the gains from trade and chooses cooperatively whether to merge and, if so, which party should control the board of the combined entity. From (3.4) a positive surplus is generated only if a firm 1 with bad corporate governance is acquired by a firm 2 with a better governance regime than 1 ($g_2 > g_1$) and the latter regime prevails. The surplus so generated equals

$$S = \alpha(g_2 - g_1)I > 0 \quad (3.5)$$

The following proposition summarizes the results that derive from (3.5).

Proposition 2: Companies in countries with bad corporate governance regimes should be acquired by companies from countries with better governance standards. Given the uniform matching process, companies in countries with worse governance are more likely to act as targets rather than acquirers in cross-border deals. Conversely, companies in countries with better governance are more likely to be acquirers rather than targets.

Notice that we assume that the potential buyer does not affect the firm's productivity, that is, the parameters $\{\alpha, R, P, \Delta, B, K\}$ will stay unchanged under the new owner. This is clearly an unrealistic assumption because mergers and acquisitions are often motivated by operating synergies and efficiency gains, which affect the target's productivity. We could easily incorporate in our model these other traditional explanations for mergers and acquisitions, but it would only complicate the analysis without adding to the basic intuition.

In the empirical section we will test the implications of Proposition 2 by focusing on the target ratio, T , which is defined as the frequency of cross-border deals where the target is a company from a given country over the total number of cross-border deals involving a company from that same country either as target or as acquirer:

$$T = \frac{\Pr(\text{Target})}{\Pr(\text{Target}) + \Pr(\text{Acquirer})} \quad (3.6)$$

Proposition 2 predicts that across countries T should be decreasing in proxies of the quality of the governance regime. Example 1 and Table 3.A1 in the Appendix illustrate Proposition 2.

3.2.3 Across industries

So far, we have assumed that the diffusion of the better governance standards is costless. A more realistic assumption is that this process requires effort by the two firms. Specifically, we now assume that it succeeds only if the two organizations invest a fixed amount of resources c , as in Burkart, Gromb, and Panunzi (1998). The assumption above captures the idea that mergers can always turn out to be unprofitable ex post due to difficulties to harmonize different corporate cultures.

The implication of this assumption is that the merger will be undertaken if and only if the surplus generated by the merger (3.5) is larger than the cost to administer the merger c . Since S is increasing in I and α , the more severe are the agency problems, and the greater the need of external capital in the target industry, the more likely the merger is to take place.

The conclusions of the analysis above can be summarized in the following proposition.

Proposition 3: The volume of cross-border merger and acquisition activity should be larger in industries with greater agency problems and with greater need of external capital. Given a uniform matching process, (1) in industries with greater agency problems, companies in countries with worse governance are more likely to act as a target in cross-border deals; (2) in industries with more external dependence, companies in countries with worse governance are more likely to act as a target in cross-border deals.

In the empirical part we will test the implications of Proposition 3 by focusing on the target ratio, T , as defined in (3.6). Within a panel of countries and industries, Proposition 3 predicts that the target ratio is relatively higher in industries that are more plagued by agency problems in countries with less developed governance regimes. In other words, the second mixed derivative of

T with respect to g and I should be negative, that is $d^2T/(dg_1dI) < 0$. Similarly, Proposition 3 predicts that the target ratio is relatively higher in industries that are dependent on external financing in countries with less developed governance regimes. In other words, the second mixed derivative of T with respect to g and a should be negative, that is $d^2S/(dg_1dI) < 0$. Numerical examples 2 and 3 and Table 3.A2 in the Appendix illustrate these predictions.

3.2.4 Extension

In a related study, Burkart, Gromb, and Panunzi (2000) argue that the governance mechanism just described may not be fully operational. Their point is that the party in control may prefer to keep the firm under his control rather than selling it to a foreign buyer even if selling is efficient. The reason is that the coalition of incumbent and raider fails to internalize all the gains from trade in the presence of minority shareholders.

To incorporate this effect in our model, assume that the decision to sell the firm is taken after $t = 0$, that is after the company raises the external capital. In this case the surplus for the manager from a change in control is zero if no external capital was raised at $t = 0$. If the company raised external capital with D as the promised repayment, the surplus from relinquishing control over company 1 to country 2 is given by

$$S' = (g_2 - g_1)[\Delta(R - D) - B] \quad (3.7)$$

By assumption 3, the term in square brackets is negative. Hence, a positive surplus is created by selling control from a company with better governance to one with poor governance. The intuition for this result is that, after the financial contracts are set, the external investors can be expropriated, and the more so in countries with poorer governance.

This result casts some doubts on the possibility that cross-border mergers and acquisitions can effectively improve corporate governance. It is ultimately an empirical issue whether the argument proposed in section 3.2.2 or this one prevails. The explanatory power of these two competing hypotheses will then be assessed in the empirical section 3.3.

Notice that there is one prediction from Proposition 3 that continues to hold in this setup. Indeed, in Proposition 3, $d^2S/(dg_1dI) < 0$. Similarly here, $d^2S'/(dg_1dI) < 0$, because $\Delta(R - D) - B = I - D\Delta$. Hence, a prediction that is robust from a theoretical point of view is that in industries with greater agency problems, companies in countries with worse governance are more likely to act as a target in cross-border deals. As a result, one should expect the target ratio to be relatively higher in countries with worse governance.

3.3 Empirical analysis

Our sample contains all mergers and acquisitions, as reported by Thomson Financial Securities Data, announced between January 1, 1990, and December,

31, 1999, and completed as of December 31, 2000, where the ultimate parent company of either acquirer or target (or both) belongs to one of the 49 countries studied by La Porta *et al.* (1998). We focus on mergers (business combinations where the number of companies decreases after the transaction) and acquisitions of majority interests (all cases in which the acquirer owned less than 50% of the target company's stock before the deal, and more than 50% after the deal) because we want to focus on transactions clearly motivated by changes in control. Ideally, we would like to include all countries available in Thomson's database. However, the availability of empirical measures of corporate governance limits the set of countries to the 49 countries examined by La Porta *et al.* (1998). In fact, the impact of cross-border mergers and acquisitions outside these 49 countries is only marginal: Deals where neither acquirer nor target belongs to our sample are only 502, less than 4% of the total.

Table 3.1 Cross-border mergers and acquisitions: summary statistics

Volume is the percentage of traded companies targeted in a completed deal. Hostile takeover is the number of attempted hostile takeovers as a percentage of domestic traded firms. Cross-border ratio is the number of cross-border deals as a percentage of all completed deals.

Country	Deals as target		Deals as acquirer	
	N. deals	Cross-border (%)	N. deals	Cross-border (%)
Argentina	330	53.0	153	12.4
Australia	975	25.1	897	22.7
Austria	250	51.2	277	57.4
Belgium	294	40.5	397	55.9
Brazil	364	47.5	181	10.5
Canada	1769	22.6	2079	31.6
Chile	111	65.8	73	50.7
Colombia	65	64.6	32	37.5
Denmark	341	36.4	381	44.6
Ecuador	20	70.0	9	33.3
Egypt	37	51.4	21	9.5
Finland	698	21.2	713	23.7
France	1986	31.3	2263	41.3
Germany	3629	24.4	3528	27.5
Greece	134	20.9	145	26.2
Hong Kong	425	35.8	427	36.1
India	168	54.2	89	16.9
Indonesia	104	54.8	71	33.8
Ireland	127	50.4	209	66.0
Israel	129	46.5	122	41.0
Italy	1036	34.8	955	28.8
Japan	665	12.3	974	38.5
Jordan	9	55.6	5	20.0
Kenya	2	0.0	4	0.0

(Continued)

Table 3.1 (Continued)

Country	Deals as target		Deals as acquirer	
	N. deals	Cross-border (%)	N. deals	Cross-border (%)
Malaysia	1129	9.7	1163	13.1
Mexico	209	47.8	155	29.7
Netherlands	636	39.5	980	60.5
New Zealand	185	42.7	130	26.2
Nigeria	6	66.7	4	0.0
Norway	366	35.2	392	38.8
Pakistan	14	64.3	6	0.0
Peru	88	58.0	36	0.0
Philippines	110	35.5	82	9.8
Portugal	200	36.5	185	28.1
Singapore	343	27.1	418	40.0
South Africa	524	23.3	501	19.2
South Korea	100	51.0	90	46.7
Spain	779	35.8	684	27.0
Sri Lanka	38	47.4	22	4.5
Sweden	681	33.0	876	47.7
Switzerland	473	42.3	740	62.3
Taiwan	53	52.8	60	43.3
Thailand	150	44.7	101	14.9
Turkey	65	47.7	56	30.4
United Kingdom	3891	21.3	4533	34.3
United States	14,656	9.0	16,742	18.9
Uruguay	17	94.1	5	60.0
Venezuela	80	48.8	47	27.7
Zimbabwe	9	44.4	5	20.0

The dataset is described in Table 3.1, where all mergers and acquisitions are sorted by country. The sample includes 42,813 deals. The cross-border mergers and acquisitions are 12,653, that is, 29% of the total. It emerges immediately from Table 3.1 that different countries play different roles in the cross-border mergers and acquisitions market. Some act mainly as targets, others as acquirers. In the first two columns, respectively, we report the number of deals where companies from each country are targets and the percentage of them where acquirers come from abroad. In the last two columns, we reverse the viewpoint in considering deals where companies from each country are acquirers and the percentage of them where the target company is from abroad.

The pattern of cross-border merger and acquisition activity over time is described in Figure 3.1. The absolute level of cross-border activity and its relative size with respect to the total merger and acquisition activity follows an upward trend. Consistent with evidence on the United States (see for instance Andrade *et al.*, 2001),

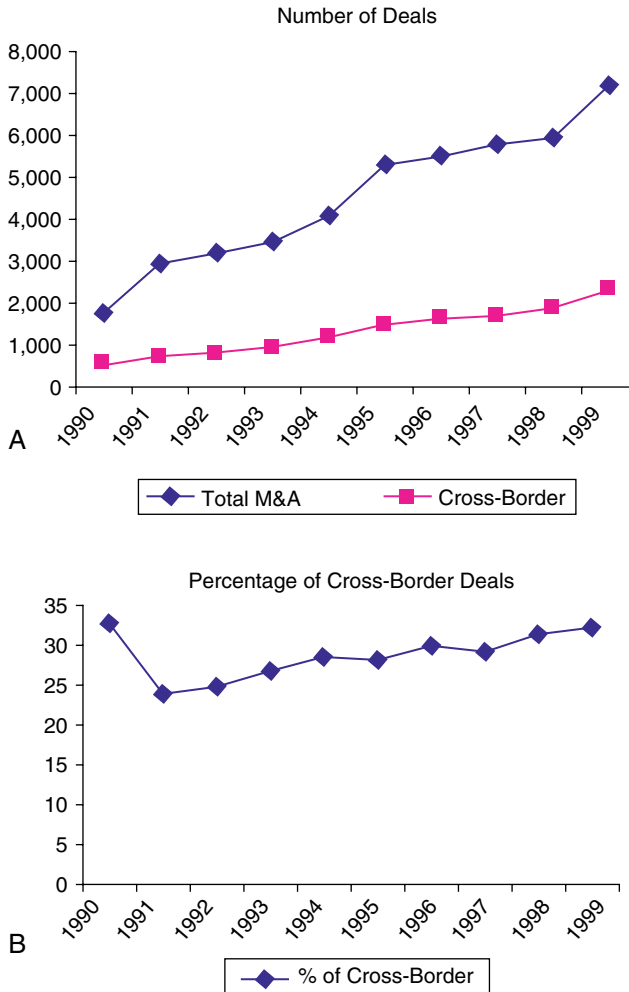


Figure 3.1 Time series of merger and acquisition activity (M&A)

the worldwide level of merger and acquisition activity picks up strongly in 1993 and keeps growing fast until 1999. Nonetheless, the fraction of cross-border deals increases steadily from 24% in 1991 to 32% in 1999. This suggests an increasing importance of cross-border deals over time, and possibly a cross-border deal wave.

The dataset also provides information about the value of each deal. However, we choose to focus on the number of deals rather than on their value because the latter is reported only for a subsample of the deals. Moreover, the deals where value is reported are concentrated in countries with more strict disclosure requirements. Using deals' value, such systematic differences across countries are likely to produce serious biases in the analysis.

3.3.1 The Empirical methodology

The model presented in Section 3.2 generates three empirical predictions: (1) at the country level the target ratio should be negatively correlated with measures of the quality of the corporate governance regime; (2) at the industry level, in countries with a poorer governance regime, the target ratio should be relatively higher in industries with more severe agency problems; and, (3) at the industry level, in countries with a poorer governance regime, the target ratio should be relatively higher in industries with higher external financial dependence.

The first prediction is tested by estimating the following regression across countries:

$$T_i = \alpha + \beta X_i + \gamma \text{Corporate governance}_i + e_i \quad (3.8)$$

The dependent variable in (3.8) is the target ratio, which is computed as the fraction of cross-border deals as target over the total number of cross-border deals (both as target and as acquirer). In computing this index we consider only mergers and acquisitions of majority interests because, as already mentioned, we want to focus on transactions clearly motivated by changes in control. As control factors, X_i , we use the logarithm of the gross national product and a measure of the openness of the equity market. The latter is defined as the ratio of the number of cross-border deals to the total number of deals involving a company from country i as the target. To compute this variable we count all deals (not only the cases of change of control) reported by Thomson Financial Securities Data.

As main regressors, we use several proxies for the quality of the governance regime within a country. These are indices of the development of the country's legal and financial institutions because, as argued by Allen and Gale (2000) and La Porta *et al.* (2000), the country's legal and financial system shapes governance at firm level. As a proxy for the legal determinants of governance, we use: (1) judicial efficiency, which is a rating of the quality of the judicial system at a country level (Source: La Porta *et al.*, 1998), (2) shareholder protection, which is the product of "antidirector rights" and "rule of law" as defined in La Porta *et al.* (1998), and (3) creditor protection, which is the product of "creditor rights" and "rule of law" as defined in La Porta *et al.* (1998). As a proxy for the financial determinants of governance, we use: stock market development, which is the ratio of stock market capitalization to gross domestic product (GDP), and bank development, which is the ratio of private credit by deposit money banks and other financial institutions to GDP. These variables are evaluated in 1995 and the source is Beck *et al.* (2000). As a further measure of the quality of the governance regime, we include accounting standards, which is an index ranking the amount of disclosure of companies' annual reports obtained from La Porta *et al.* (1998).

We use as the industry classification the three-digit ISIC codes in order to use the data by the United Nations, INDSTAT-4, on value added by industry. The estimated regression is described below, where i is the index of the country and j identifies the industry.

$$T_{ij} = \beta X_{ij} + \gamma Y_j + \text{Corporate governance}_i + \delta_j + \zeta_i + \varepsilon_{ij} \quad (3.9)$$

The dependent variable in (3.9) is the target ratio at country and industry level. As in specification (3.8) only mergers and acquisitions of majority interests are included. As control variable, we use the industry value added, which is defined as the industry total value added as reported in INDSTAT-4 as a percentage of the gross national product in 1990. Fixed effects by industry and country are included.

The main regressors in (3.9) are two interactive variables. The first one is the product of an index of the quality of the corporate governance regime at the country level and a proxy for the extent of the agency problems in the industry. For the former we use any of the proxies used in regression (3.8). The latter, called agency, is computed as the fraction of firms with both low q (below 33 percentile) and high cash flows (above 67 percentile) within each three-digit ISIC code. This variable is computed using data from all U.S. firms available in COMPUSTAT in the 1990s and is meant to capture the agency costs of free cash flow as discussed by Jensen (1986).⁸ Notice that the agency indicator and the corporate governance measures are not included in specification (3.9) as independent regressors because we control for fixed effects by country and industry.

In the second interactive variable, the index of the quality of the corporate governance regime at the country level multiplies a proxy for the need of external finance in the industry. The latter, called external dependence, is the median fraction of capital expenditures not financed with cash flow from operations for each three-digit ISIC code. This variable is also computed on U.S. data for the 1990s obtained from COMPUSTAT, in a similar fashion as Rajan and Zingales (1998). For each company in COMPUSTAT, the fraction of capital expenditure not financed with cash flow from operations is computed as capital expenditure (#128) minus cash flow from operations divided by capital expenditures. Cash flow from operations is defined as the sum of cash flow from operations (#110) plus decreases in inventories (annual change of item #3), decreases in receivables (annual change of item #2), and increases in payables (annual change of item #70).⁹ The interpretation of the coefficient on the interactive terms in regression (6) is akin to a second mixed derivative. This feature enables us to test directly the predictions (2) and (3). This methodology is in the spirit of the analysis by Rajan and Zingales (1998) and Cetorelli and Gambera (2001). The main difference is that we focus on mergers and acquisitions rather than on growth.

Summary statistics of all variables used in the analysis are provided in Table 3.2. The proxies for agency and external dependence by industry are instead reported in Table 3.A3 of the Appendix. The tobacco industry is the most

⁸ The matching between International Standard Industrial Classification and Standard Industrial Classification codes follows the guidelines in the U.S. Department of Commerce (1979).

⁹ For some companies this item is not defined. We then compute cash flow from operations as the sum of items #123, 125, 126, 106, 213, and 217.

Table 3.2 Summary statistics of the variables used in the analysis

Target ratio is the number of cross-border mergers and acquisitions as target to total number of cross-border mergers and acquisitions (both as target and as acquirer). This is reported at a country level respectively for all industries, for manufacturing industries, for services, for trade sector, for financial sector and natural resources. It is also reported for subsamples 1990–1994 and 1995–1999. Log(GNP) is the logarithm of the gross national product (GNP) in 1995 (in \$m). Openness is the ratio computed at a country level of the number of cross-border deals as target to total deals, where deals are defined as any purchase or exchange of voting shares. Accounting standards is an index ranking the amount of disclosure of companies' annual reports at a country level. Judicial efficiency is a rating on the quality of the judicial system at a country level. Shareholder protection is the product of “antidirector rights” and “rule of law” as defined in La Porta *et al.* (1998). Creditor protection is the product of “creditor rights” and “rule of law” as defined in La Porta *et al.* (1998). Stock market development is the ratio of stock market capitalization to gross domestic product (GDP) in 1995. Bank development is the ratio of private credit by deposit money banks and other financial institutions to GDP in 1995. Industry value added is the total industry value added as a percentage of GNP for each three-digit International Standard Industrial Classification (ISIC) code and country. Industry target ratio is computed for each country and ISIC code as the percentage of cross-border mergers and acquisitions as target over the total number of cross-border mergers and acquisitions in the country. Agency is the fraction of firms with both low q (below 33%) and high cash flows (above 67%) for each three-digit ISIC code computed on U.S. data. External dependence is the median fraction of capital expenditures not financed with cash flow from operations for each three-digit ISIC code computed on U.S. data.

Variable	N. obs.	Mean	Std dev.	Min	Max
Target Ratio _{<i>i</i>}	49	0.617	0.181	0.257	1
Log(GNP) _{<i>i</i>}	49	11.7	1.58	8.49	15.7
Openness _{<i>i</i>}	49	0.483	0.164	0.112	0.909
Stock Market Development _{<i>i</i>}	48	0.553	0.552	0.010	2.46
Bank Development _{<i>i</i>}	49	0.730	0.521	0.076	2.17
Accounting Standards _{<i>i</i>}	41	60.9	13.4	24	77
Judicial Efficiency _{<i>i</i>}	49	7.67	2.05	2.5	10
Shareholder Protection _{<i>i</i>}	49	20.4	12.9	0	50
Creditor Protection _{<i>i</i>}	47	15.3	9.47	0	34.3
Target Ratio _{<i>i</i>}	48	0.621	0.220	0.228	1
Target Ratio _{<i>i</i>} Services	48	0.631	0.202	0	1
Target Ratio _{<i>i</i>} Trade Sector	44	0.574	0.207	0.200	1
Target Ratio _{<i>i</i>} Financial Sector	47	0.593	0.215	0	1
Target Ratio _{<i>i</i>} Natural Resources	46	0.577	0.235	0.125	1
Target Ratio (1990–1994) _{<i>i</i>}	48	0.600	0.176	0.311	1
Target Ratio (1995–1999) _{<i>i</i>}	48	0.621	0.201	0.184	1
Industry Value Added _{<i>ij</i>}	744	0.380	0.737	0	7.99
Industry Target Ratio _{<i>ij</i>}	744	3.46	1.74	0	100
Agency _{<i>i</i>}	28	0.054	0.062	0	0.286
External Dependence _{<i>i</i>}	28	-0.381	1.07	-5.29	1.85

plagued by the agency costs of free cash flow, while footwear, plastic products, and pottery appear immune to the problem.

3.3.2 Results

Table 3.3 describes the relationship between the quality of the governance regime and cross-border merger and acquisition activity. As described in specification (3.8), all regressions control for the logarithm of gross national product and for the openness of the equity market. We report the results of four regressions. In the first one, we use as main regressors four indicators of the quality of legal protection within the country. Consistent with the empirical prediction in

Table 3.3 Tests of the governance motive for cross-border mergers and acquisitions

The table presents the results of four OLS regressions. The dependent variable is the target ratio. As independent variables are several proxies of the quality of a corporate governance system and two control variables. Accounting standards, judicial efficiency, shareholder protection, and creditor protection are obtained from La Porta *et al.* (1998). Bank development, the ratio of private domestic credit to gross domestic product (GDP) in 1995, and stock market development, the ratio of stock market capitalization to GDP in 1995, are computed using Beck *et al.* (2000). The control variables are the logarithm of gross national product and openness, which measure the incidence of cross-border deals over total number of deals. Robust standard errors are reported in parentheses. Superscripts ***, **, * indicate statistical significance at 1%, 5%, and 10% level, respectively.

	(1)	(2)	(3)	(4)
Stock market development		-0.057*	-0.070**	-0.069***
		(.030)	(.032)	(.021)
Bank development		-0.037	-0.040	
		(.031)	(.033)	
Openness	0.330***	0.260**	0.282***	0.213**
	(.117)	(.098)	(.099)	(.083)
Accounting standards	-0.002	0.000	-0.000	
	(.001)	(.002)	(.001)	
Judicial efficiency	-0.006		-0.011	
	(.009)		(.009)	
Shareholder protection	0.001		0.002	
	(.001)		(.001)	
Creditor protection	-0.000		0.001	
	(.001)		(.001)	
Log (GNP per capita)	-0.079***	-0.081***	-0.081***	-0.089***
	(.019)	(.015)	(.021)	(.010)
Constant	1.27***	1.24***	1.29***	1.31***
	(0.329)	(0.155)	(0.151)	(0.115)
R ²	0.805	0.706	0.868	0.840
N. observations	40	40	39	48

Proposition 2, we find that coefficients on indicators of legal development are negative, and in particular the coefficient on judicial efficiency is significant at the 1% level. In the second regression, we use three indicators of the development of its financial institutions as proxy for the quality of a country's governance regime. Again, consistent with the prediction in Proposition 2, we find that financial development negatively affects the target ratio, with the coefficient on bank development significant at 1% level.

Regression (3.3) presents the full specification, where we include as proxies for the quality of a governance regime all the variables previously introduced. The coefficients on judicial efficiency and bank development are significant at the 1% and 5% level, respectively, while coefficients on other indicators are not significant. Interestingly, the coefficient on accounting standards is always negative but is only significant at the 10% level when included in the second specification, along with indicators of financial development. This finding may suggest that the nature of the indicator of accounting standards is closely related to features of legal development within a country. The fourth regression includes as main regressors only the significant variables of the previous analysis, namely judicial efficiency and bank development. Again, consistent with previous findings, the coefficients of the two main regressors are negative and both significant at the 1% level. Interestingly, we note that an increase in 1 point in the rating of judicial efficiency decreases the target ratio by 3%, that is, the probability that a country will act as a target in the international market of corporate control is significantly and strongly affected by the level of judicial efficiency.

In Table 3.4, we extend our basic analysis by partitioning our sample in five groups, according to the industry of the target company. The observations are classified in five macroindustries, as defined by Thomson Securities: manufacturing, services, trade, financial, and natural resources. As main regressors, we include judicial efficiency and bank development, as in the synthetic specification developed in Table 3.3. Consistent with previous results, the coefficients of the two variables are always negative and strongly significant in the manufacturing, services, and (to a lesser extent) natural resources sectors. In the trade sector, only the coefficient on bank development is significant (at the 5% level), while no coefficient is significant in the financial sector. In partial anticipation of further analysis below, these findings seem to be consistent with the predictions of our theory, to the extent that one believes these two latter sectors will be less plagued by the agency problem and less dependent on external finance.

Overall, the evidence indicates that both legal and financial institutions play a strong role in shaping cross-border merger and acquisition activity. In particular, inefficient courts and underdeveloped banking sectors seem to be the best predictors of the probability for a country to be a target in the international market of cross-border mergers and acquisitions.

We now turn to Proposition 3 to verify whether the proxies for agency problem and external dependence help explain cross-industry variation in the target ratio.

Table 3.4 Analysis by industry

This table reports results of regressions where the dependent variable is the target ratio and the independent variables are a measure of the quality of the governance regime (stock market development), and two control variables (the logarithm of gross national product per capita and openness, which measure the incidence of cross-border deals over total number of deals). The sample of cross-border mergers and acquisitions is partitioned in five groups according to the industry of the target company: manufacturing, services, trade, financial, and natural resources, as classified by Thomson Financial Securities. Robust standard errors are reported in parentheses. Superscripts ***, **, * indicate statistical significance at 1%, 5%, and 10% level, respectively.

	Manufacturing	Services	Trade	Financial	Nat. resources
Stock market development	-0.070** (.027)	-0.093*** (.028)	-0.053 (.037)	-0.040 (.042)	-0.011 (.037)
Openness	0.335** (.132)	0.221 (.143)	0.043 (.226)	0.376** (.159)	0.415** (.163)
Log (GNP per capita)	-0.103*** (.011)	-0.056** (.025)	-0.069** (.031)	-0.059*** (.019)	-0.105*** (.019)
Constant	1.38*** (.139)	1.06*** (.275)	1.20*** (.369)	0.95*** (.240)	1.30*** (.234)
R ²	0.805	0.407	0.255	0.395	0.671
No. observations	48	47	43	46	45

Table 3.5 reports the results of six regressions, one for each proxy of corporate governance. The structure of the regression is described in (3.9). The main regressor is the product of one of the six indicators of the quality of the governance regime at country level and the proxy for agency problems at industry level reported in Appendix A. In all regressions we control for fixed effects by country and industry, as well as for industry value added. Consistent with the empirical implication in Proposition 2, we find that the coefficients on such interaction terms are always negative. Moreover, they are significant when the quality of a governance regime is proxied by judicial efficiency, shareholder protection, stock market, and bank development. We also estimate a specification, with all measures of corporate governance together interacting with agency. The results, unreported, are that shareholder protection is the only significant interactive variable, with a negative and strongly significant coefficient. This may suggest that shareholder protection is the crucial institutional feature to alleviate the agency problem.

In Table 3.6 we add the interactive variable for external dependence. The results suggest that external dependence significantly affected the pattern of cross-border mergers and acquisitions when interacted with accounting standards and judicial efficiency. In these cases, we do find, as predicted by Proposition 2, that in countries with a poorer governance regime the target ratio is relatively higher than in industries with higher external dependence. At the same time the results on agency continue to hold.

Table 3.5 Corporate governance and mergers and acquisitions

The observations have been classified into 28 manufacturing industries, according to International Standard Industrial Classification. The dependent variable y_{ij} is the ratio of the number of cross-border deals in industry j where a company from country i is a target as a percentage of the total number of cross-border deals in the country. The main regressor is the interactive term between corporate governance in country i and the measure of the agency problems in industry j . The fraction of value added produced by firm j in country i is introduced as control variable. The regression contains fixed effects by country and industry (not reported). Robust standard errors are in parentheses. Superscripts $***$, $**$, $*$ indicate statistical significance at 1%, 5%, and 10% level, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)
(Accounting standards) $_i$ *	-0.133 (.152)					
(Agency) $_i$ (Judicial efficiency) $_i$ *		-1.50* (.799)				
(Agency) $_i$ (Shareholder protection) $_i$ *			-0.478*** (.165)			
(Agency) $_i$ (Creditor protection) $_i$ *				-0.099 (.167)		
(Agency) $_i$ (Stock market development) $_i$ *					-5.11** (2.50)	
(Agency) $_i$ (Bank development) $_i$ *						-6.89* (4.19)
(Agency) $_i$ (Industry value added) $_{ij}$	0.036 (.157)	0.004 (.160)	-0.003 (.161)	0.079 (.175)	0.006 (.161)	0.011 (.159)
Adjusted R ²	0.630	0.828	0.829	0.773	0.823	0.828
No. observations	708	744	744	725	726	744

After that we put together our previous findings and ask two different questions. The first one is what defines the set of governance rules in a specific country that are relevant in a cross-border transaction. We find that a measure of the quality of accounting standards seems to subsume all the characteristics of a governance regime that are relevant in the international market of corporate control. The second question we ask is what shareholders ultimately seek when opting out of a poor legal regime via a cross-border deal. Table 3.7 reports our findings. We consider two sets of interaction terms as our main regressors. On the one hand, we find that the interaction of accounting standards and external dependence is significant in our main specifications, which suggests that the quality of a governance regime is best summarized by a measure of the quality of the

Table 3.6 Agency, external dependence, and cross-border mergers and acquisitions

The observations have been classified in 28 manufacturing industries, according to International Standard Industrial Classification. The dependent variable y_{ij} is the ratio of the number of cross-border deals in industry j where a company from country i is a target as a percentage of the total number of cross-border deals in the country. The main regressors are the interactive term between corporate governance in country i and the measures of agency problems and external dependence of industry j . The fraction of value added produced by firm j in country i is introduced as a control variable. The regression contains fixed effects by country and industry (not reported). Robust standard errors are reported in parentheses. Superscripts ***, **, * indicate statistical significance at 1%, 5%, and 10% level, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)
(Accounting standards) _{<i>i</i>} *	-0.261 (.189)					
(Agency) _{<i>i</i>}						
(Accounting standards) _{<i>i</i>} *	-0.019* (.010)					
(External dependence) _{<i>i</i>}						
(Judicial efficiency) _{<i>i</i>} *		-2.41** (1.01)				
(Agency) _{<i>i</i>}						
(Judicial efficiency) _{<i>i</i>} *		-0.128** (.060)				
(External dependence) _{<i>i</i>}						
(Shareholder protection) _{<i>i</i>} *			-0.509*** (.169)			
(Agency) _{<i>i</i>}						
(Shareholder protection) _{<i>i</i>} *			-0.006 (.013)			
(External dependence) _{<i>i</i>}						
(Creditor protection) _{<i>i</i>} *				-0.188 (.221)		
(Agency) _{<i>i</i>}						
(Creditor protection) _{<i>i</i>} *				-0.011 (.011)		
(External dependence) _{<i>i</i>}						
(Stock market development) _{<i>i</i>} *					-6.42** (2.96)	
(Agency) _{<i>i</i>}						
(Stock market development) _{<i>i</i>} *					-0.141 (.172)	
(External dependence) _{<i>i</i>}						

(Continued)

Table 3.6 (Continued)

	(1)	(2)	(3)	(4)	(5)	(6)
(Bank development) _i *						-6.58 (4.53)
(Agency) _i						
(Bank development) _i *						0.044 (.323)
(External dependence) _i						
(Industry value added) _{ij}	0.004 (.159)	0.019 (.162)	-0.002 (.161)	-0.077 (.174)	0.002 (.161)	-0.010 (.159)
Adjusted R ²	0.632	0.828	0.829	0.773	0.823	0.828
No. observations	708	744	744	725	726	744

accounting standards. On the other hand, we interact agency with measures of shareholder protection, judicial efficiency, and stock market development, respectively. Interestingly, shareholder protection (not significant when considered in isolation in previous analysis) becomes significant when interacted with agency. This finding indicates that the main feature of investor protection sought by minority shareholders in cross-border transactions has to do with the quest for better ways to remove inefficient management.

Overall, we find evidence in favor of Proposition 3. At the industry level, in countries with a poorer governance regime, the target ratio is relatively higher in industries with more severe agency problems and with higher external dependence. The results are stronger for the proxy of agency problems. This is, again, consistent with the discussion in Section 3.2.4.

3.3.3 Other tests

Proposition 2 predicts that companies from countries with worse governance regimes are more likely to be targets in cross-border deals, and, conversely, companies from countries with better governance standards are more likely to be acquirers. Hence, a natural way to test these predictions is simply to compare, for each country, the governance regime of the country with the governance regime of foreign firms engaging in cross-border deals with domestic firms. To this extent, for each country we compute the average (median) corporate governance standard of foreign companies acquiring in the country, and the average (median) corporate governance standard of companies acquired by domestic firms. Our hypothesis is that the governance standard of acquiring firms is greater than the governance standard for the country itself, which in turn is greater than the governance standard of acquired firms. We perform (in Table 3.8) tests of equality of means and medians using the six proxies of governance standards introduced before.

Table 3.8 Alternative test

The six tables present tests on the equality of means and medians for each proxy of the quality of the governance standards for both acquiring and acquired firms. The measures of governance standards are accounting standards, judicial efficiency, shareholder protection and creditor protection, stock market development, and bank development. The mean and median values of each index for the acquiring (acquired) firms are compared with the reference country. ***, **, * indicate statistical significance at 1%, 5%, and 10% level, respectively.

(a) Accounting standards					
	Reference country (1)	Acquiring firms (2)	Acquired firms (3)	Test 1 (1) = (2)	Test 2 (1) = (3)
Mean	60.9	65.9	61.1	4.48***	0.380
Median	64.0	66.4	63.3	4.09***}	-0.143
(b) Judicial efficiency					
	Reference country (1)	Acquiring firms (2)	Acquired firms (3)	Test 1 (1) = (2)	Test 2 (1) = (3)
Mean	7.67	8.52	7.74	5.87***	1.24
Median	7.25	8.27	7.70	4.49***	0.851
(c) Bank development					
	Reference country (1)	Acquiring firms (2)	Acquired firms (3)	Test 1 (1) = (2)	Test 2 (1) = (3)
Mean	0.730	0.989	0.751	6.82***	1.03
Median	0.645	0.945	0.701	5.08***	2.22**
(d) Stock market development					
	Reference country (1)	Acquiring firms (2)	Acquired firms (3)	Test 1 (1) = (2)	Test 2 (1) = (3)
Mean	0.553	0.703	0.573	4.65***	0.936
Median	0.327	0.572	0.426	3.96***	2.06**
(e) Shareholder protection					
	Reference country (1)	Acquiring firms (2)	Acquired firms (3)	Test 1 (1) = (2)	Test 2 (1) = (3)
Mean	20.4	28.1	21.7	7.77***	2.84***}
Median	20	26.9	19.3	5.33***	-2.30**
(f) Creditor protection					
	Reference country (1)	Acquiring firms (2)	Acquired firms (3)	Test 1 (1) = (2)	Test 2 (1) = (3)
Mean	15.3	16.5	15.3	1.76*	-0.126
Median	15.6	16.6	15.5	1.96*	-0.021

The results of the first set of tests are strongly consistent with the governance motive in cross-border mergers and acquisitions, that is, firms acquiring in a country come from countries endowed with better governance standards than the ones available in the country. This result holds across all six proxies of governance standards. The null hypothesis of equality is always rejected at the 1% level (with the exception of creditor protection, for which it is rejected at the 10% level). We regard this result as a confirmation of our previous findings, as it is an obvious counterpart to the analysis of cross-sectional variation in the target ratio.

The results on the second set of tests, whether the governance standard of a country itself is greater than the governance standard of acquired firms, are mixed. The null hypothesis of equality is seldom rejected. Moreover, the sign of the difference in governance standards between the country and the foreign firms acquired by domestic firms is often different from what we would expect. For instance, consider the case of shareholder protection. If we look at the difference between the median shareholder protection of the countries in our sample and the median shareholder protection of acquired firms, we see that, as predicted by our theory, the former is significantly greater than the latter. However, if we look at the means, the result is exactly the opposite, and significant. One interpretation of these results is that the test is far from perfect. For instance, it does not control for important factors like the country openness to international equity flows. From this perspective the test presented in Table 3.3 is more reliable.

Finally, we take into account the possible objection that, with cross-border mergers and acquisitions being a recent phenomenon, and coming in a period of upward trend in overall merger activity, they could just be driven by the same determinants as those of the more recent merger wave in the second half of the 1990s. To this extent, we split the sample of merger and acquisition deals into two subsamples according to the year when the transactions were completed. In unreported tests, we find that the results for the two subsamples 1990 to 1994 and 1995 to 1999 are not significantly different from each other.

3.4 Conclusion

In this chapter we have presented a simple model where cross-border mergers and acquisitions are motivated by the quest for better governance. In our model, shifting control of the firm from a country with poor corporate governance to one with better corporate governance creates a surplus because the control transfer reduces the cost of external capital. The intuition for this result is that the better governance regime of the acquiring company reduces the risk that investors are expropriated. The model therefore predicts that in cross-border mergers and acquisitions companies from countries with good corporate governance should be acquirers and companies from countries with poor corporate governance should be targets.

This hypothesis is tested and confirmed in a sample of all cross-border mergers and acquisitions involving 49 countries in the 1990s. We use several proxies for

the quality of the corporate governance regime in a country and find that targets tend to come from countries with lower investor protection and less developed financial markets than the acquirers.

The model also predicts that cross-border merger and acquisition activity should be concentrated in industries that face greater agency problems and need more external capital because the gains from a cross-border deal are larger in industries with greater agency problems and in industries that need more external capital. These two predictions are tested and confirmed by using proxies for the agency problems and external dependence at the industry level estimated from U.S. data, by following the methodology developed by Rajan and Zingales (1998).

Given the large size of the sample, we do not analyze the impact of cross-border deals on the performance of companies. Therefore, the chapter does not study the postmerger behavior of firms, nor the price reaction at the announcement of the merger or acquisition. Bris and Cabolis (2003) do so and find results that are consistent with our model (see also Goergen and Renneboog, 2004). Future research is needed to analyze the consequences of cross-border deals for managerial turnover (as in Martin and McConnell, 1991) investment activity, and operating performance (as in Healy, Palepu, and Ruback, 1992).

Chapter 3 Appendix

Example 1: Suppose that there are six countries with one company each. The quality of the governance regime in country i is $g_i = i/6$, for $i = \{1, \dots, 6\}$. The common production technology is summarized by the following parameter values: $\alpha = 1$, $K = 1$, $R = 2$, $\Delta = 0.2$, $P = 0.6$, $B = 0.1$, which together imply $I = 0.3$. At $t = -1$, one match randomly occurs. Given that there are six companies, the possible matching are fifteen. Hence, the probability of a specific match is $1/15$.

The outcome of the cross-border merger and acquisition activity in this world is described in the following table:

As in Proposition 2, the likelihood of being involved in a deal as a target decreases in g , the probability of acting as an acquirer increases in g , and the target ratio decreases in g .

Table 3.A1 Numerical example 1

Country	1	2	3	4	5	6
g	$1/6$	$1/3$	$1/2$	$2/3$	$5/6$	1
Pr(Acquirer)	0	$1/15$	$2/15$	$1/5$	$4/15$	$1/3$
Pr(Target)	$1/3$	$4/15$	$1/5$	$2/15$	$1/15$	0
T	1	$4/5$	$3/5$	$2/5$	$1/5$	0

Example 2: Within the same setup of Example 1, assume that there are two industries in each of the six countries. The two industries, A and B, differ for the gravity of the agency problems, namely $I_A = 0.3$ and $I_B = 0.2$. There is also a fixed cost to successfully undertake the merger $c = 0.04$. Hence, the merger will take place only if the surplus S given in (3) is larger than c . Notice that if $c = 0$, the pattern of cross-border mergers and acquisitions do not differ across industries and are described in Example 1.

With a positive cost to administer the merger, the cross-border merger and acquisition activity is as follows:

In industry A, the pattern of cross-border mergers and acquisitions does not change from Example 1 (in which $c = 0$). In industry B, instead, the introduction of a positive fixed cost to administer the merger changes considerably the pattern of merger and acquisition activity. For example, the merger between companies 3 and 4 is not feasible anymore because the surplus generated is $S = 1/30 < 0.04 = c$. As in Proposition 3, across countries and industries the target ratio decreases in an interaction term of g and I .

Example 3: Within the same setup of Example 1, assume that there are two industries in each of the six countries. The two industries, A and B, differ for the need of external financing, namely $\alpha_A = 1$ and $\alpha_B = 0.5$. There is also a fixed cost to successfully undertake the merger $c = 0.04$. Hence, the merger will take place only if the surplus S given in (3) is larger than c . Notice that if $c = 0$, the pattern of cross-border mergers and acquisitions does not differ across industries and is described in Example 1.

With a positive cost to administer the merger, the cross-border merger and acquisition activity is as in Example 2: In industry A, the pattern of cross-border mergers and acquisitions does not change from Example 1 (in which $c = 0$). In industry B, instead, the introduction of a positive fixed cost to administer the merger prevents mergers from happening between two firms with a differential corporate governance of $1/6$. For example, the merger between companies 3 and 4 is not feasible anymore because the surplus generated is $S = 1/40 < 0.04 = c$. As in Proposition 3, across countries and industries the target ratio decreases in an interaction term of g and a .

Table 3.A2 Numerical examples 2 and 3

Country	1	2	3	4	5	6
G	1/6	1/3	1/2	2/3	5/6	1
<i>Industry A</i>						
Pr(Acquirer)	0	1/15	2/15	1/5	4/15	1/3
Pr(Target)	1/3	4/15	1/5	2/15	1/15	0
T_A	1	4/5	3/5	2/5	1/5	0
<i>Industry B</i>						
Pr(Acquirer)	0	0	1/15	2/15	1/5	4/15
Pr(Target)	4/15	1/5	2/15	1/15	0	0
T_B	1	1	2/3	1/3	0	0

Table 3.A3 Agency and external dependence across industries

Agency is computed as the fraction of firms with both low q (below 33 percentile) and high cash flows (above 67 percentile) within each three-digit International Standard Industrial Classification (ISIC) code in the United States. External dependence is the median fraction of capital expenditures not financed with cash flow from operations for each three-digit ISIC code in the United States. These variables are computed using data from all U.S. firms available in COMPUSTAT in the 1990s.

ISIC	Sector	Agency	External dependence
311	Basic Food Products	0.020	-0.246
312	Other Food Products	0.013	-0.126
313	Beverages	0.053	-0.043
314	Tobacco	0.286	-5.289
321	Textile	0.028	-0.448
322	Apparel	0.021	-0.283
324	Footwear	0.000	-0.908
331	Wood Products	0.037	-0.257
332	Furniture	0.027	-0.663
341	Paper and Products	0.175	-0.141
342	Printing and Publishing	0.071	-0.519
351	Basic Chemicals	0.160	-0.267
352	Other Chemicals	0.016	1.850
353	Petroleum Refineries	0.071	-0.110
354	Petroleum and Coal Products	0.084	0.176
355	Rubber Products	0.014	-0.689
356	Plastic Products	0.000	-0.359
361	Pottery	0.000	-0.499
362	Glass	0.071	0.031
369	Nonmetal Products	0.091	-0.154
371	Iron and Steel	0.053	-0.034
372	Nonferrous Metals	0.061	-0.349
381	Metal Products	0.019	-0.517
382	Machinery	0.019	-0.094
383	Electric Machinery	0.030	-0.011
384	Transportation Equipment	0.022	-0.130
385	Professional Goods	0.026	-0.238
390	Other Industries	0.043	-0.340

References

- Allen, F. and Gale, D. (2000). "Comparing Financial Systems." MIT Press, Cambridge, MA.
- Andrade, G., Mitchell, M., and Stafford, E. (2001). New evidence and perspectives on mergers. *Journal of Economic Perspectives* 15, 103–120.
- Bebchuk, L. A. and Roe, M. J. (1999). A theory of path dependence in corporate governance and ownership. *Stanford Law Review* 52, 127–170.

- Beck, T., Demirguc-Kunt, A., and Levine, R. (2000). A new database on financial development and structure. *World Bank Economic Review* 14, 597–605.
- Bris, A. and Cabolis, C. (2003). “Adopting Better Corporate Governance: Evidence from Cross-Border Mergers.” Unpublished working paper.
- Burkart, M., Gromb, D., and Panunzi, F. (1998). Why higher takeover premia protect minority shareholders. *Journal of Political Economy* 106, 172–204.
- Burkart, M., Gromb, D., and Panunzi, F. (2000). “Convergence of Corporate Governance Systems.” Unpublished working paper.
- Cetorelli, N. and Gambera, M. (2001). Banking market structure, financial dependence, and growth: International evidence from industry data. *Journal of Finance* 56, 617–648.
- Coffee, J. (1999). The future as history: The prospects for global convergence in corporate governance and its implications. *Northwestern University Law Review* 93, 641–708.
- Franks, J., Mayer, C., and Rossi, S. (2005). “Ownership: Evolution and Regulation.” Unpublished working paper.
- Gilson, R. (2001). Globalizing corporate governance: Convergence of form or function. *American Journal of Comparative Law* 49, 329–363.
- Goergen, M. and Renneboog, L. (2004). Shareholder wealth effects of European domestic and cross-border takeover bids. *European Financial Management Journal* 10, 9–45.
- Hansmann, H. and Kraakman, R. (2001). The end of history for corporate law. *Georgetown Law Journal* 89, 439–468.
- Healy, P. M., Palepu, K. G., and Ruback, R. S. (1992). Does corporate performance improve after mergers? *Journal of Financial Economics* 31, 135–175.
- Henry, P. B. (2000). Stock market liberalization, economic reform, and emerging market equity prices. *Journal of Finance* 55, 529–564.
- Holmstrom, B. and Tirole, J. (1997). Financial intermediation, loanable funds and the real sector. *Quarterly Journal of Economics* 112, 663–692.
- Jensen, M. C. (1986). Agency costs of free cash flow, corporate finance and takeovers. *American Economic Review* 76, 323–329.
- Kaplan, S. N. (1997). Corporate governance and corporate performance: A comparison of Germany, Japan, and the U.S. *Journal of Applied Corporate Finance* 9, 86–93.
- La Porta, R., Lopez-de-Silanes, F., and Shleifer, A. (1999). Corporate ownership around the world. *Journal of Finance* 54, 471–517.
- La Porta, R., Lopez-de-Silanes, F., Shleifer, A., and Vishny, R. W. (1997). Legal determinants of external finance. *Journal of Finance* 52, 1131–1150.
- La Porta, R., Lopez-de-Silanes, F., Shleifer, A., and Vishny, R. W. (1998). Law and finance. *Journal of Political Economy* 101, 678–709.
- La Porta, R., Lopez-de-Silanes, F., Shleifer, A., and Vishny, R. W. (2000). Investor protection and corporate governance. *Journal of Financial Economics* 58, 3–27.

- La Porta, R., Lopez-de-Silanes, F., Shleifer, A., and Vishny, R. W. (2002). Investor protection and corporate valuation. *Journal of Finance* 57, 1147–1170.
- Martin, K. J. and McConnell, J. J. (1991). Corporate performance, corporate takeovers and management turnover. *Journal of Finance* 46, 671–687.
- Mitchell, M. and Mulherin, J. H. (1996). The impact of industry shocks on takeover and restructuring activity. *Journal of Financial Economics* 41, 193–229.
- Pagano, M., Röell, A., and Zechner, J. (2002). The geography of equity listing: Why do companies list abroad? *Journal of Finance* 57, 2651–2694.
- Pagano, M. and Volpin, P. F. (2005). The political economy of corporate governance. *American Economic Review* 95, 1005–1030.
- Rajan, R. G. and Zingales, L. (1998). Financial dependence and growth. *American Economic Review* 88, 559–586.
- Reese, W. A., Jr. and Weisbach, M. S. (2002). Protection of minority shareholder interests, cross-listing in the United States, and subsequent equity offerings. *Journal of Financial Economics* 66, 65–104.
- Renneboog, L. and Szilagyi, P. G. (2006). “How Do Mergers and Acquisitions Affect Bondholders in Europe? Evidence on the Impact and Spillover of Governance and Legal Standards.” Working paper, European Corporate Governance Institute.
- Rossi, S. and Volpin, P. F. (2004). Cross-country determinants of mergers and acquisitions. *Journal of Financial Economics* 74, 277–304.
- U.S. Department of Commerce (1979). “Correlation between the United States and International Standard Industrial Classifications.” Technical paper no. 1.

This page intentionally left blank

4 Corporate governance convergence through cross-border mergers: the case of Aventis

Arturo Bris and Christos Cabolis

Abstract

In this chapter we illustrate the role of cross-border mergers in the process of corporate governance convergence. We explore in detail the corporate governance provisions in Rhône-Poulenc, a French company, and Hoechst, a German firm, and the resulting structure after the two firms merged in 1999 to create Aventis, legally a French corporation. We show that, despite the nationality of the firm, the corporate governance structure of Aventis is a combination of the corporate governance systems of Hoechst and Rhône-Poulenc, where the newly merged firm adopted the most protective provisions of the two merging firms. In some cases, this resulted in Aventis' borrowing from the corporate governance structure of Hoechst while in others Aventis replicated Rhône-Poulenc's structure. Most interesting is the situation where Aventis introduced improved provisions over both systems. The resulting corporate governance system in Aventis is significantly more protective than the default French legal system of investor protection.

4.1 Introduction

The extant corporate governance literature, pioneered by La Porta *et al.* (1997, 1998, 2000, and 2002), provides strong evidence that countries with a common law system protect investors better than countries with civil law. Better protection translates into more valuable firms (La Porta *et al.*, 2002) and more developed financial markets (La Porta *et al.*, 1997), at least since the end of World War II (Rajan and Zingales, 2003). Once a “better” corporate governance system has been recognized, the natural question becomes whether and how countries converge toward that system.

Gilson (2000) identifies three kinds of corporate governance convergence: functional, formal, and contractual convergence. Functional convergence occurs when institutions are flexible enough to respond to demands by market participants, and no formal change in the rules is necessary. Formal convergence occurs when a change in the law forces the adoption of best practices. Finally, contractual convergence occurs when firms change their own

corporate governance practices by committing to a better regime, possibly because the legal system lacks flexibility or laws cannot be changed.

The evidence on functional and formal convergence is mixed. An example of functional convergence is the creation of new exchanges in Europe, which give investors the protection that the law does not provide.¹ At the same time, Gilson (2000) also recognizes the limits of functional convergence by pointing out that these countries have started to make reforms at the formal level as well. In the matter of formal convergence, Johnson and Shleifer (1999) and Coffee (1999a) analyze the experience of Poland and the Czech Republic and show that the better protection provided by the Polish commercial code resulted in a more developed stock market. In this case, however, Pistor *et al.* (2001) conclude that, as in medicine, transplants are sometimes rejected, and countries that have adopted U.S.-type corporate laws do not experience the expected corporate development.

Evaluating the impact of contractual convergence is equally complicated. Of this type of convergence the most noticeable example can be found in the case of the general principles issued by CalPERS as a precondition for investing in foreign securities. Another example is foreign listing. Dual listing of securities in the United States is a means for foreign issuers to commit to better governance (Coffee, 1999b). However, the choice of a U.S. market is not necessarily a signal of good governance since some companies list in a foreign market only because they cannot go public in their own (Coffee, 1999b). Additionally, non-U.S. companies are exempt from several disclosure requirements, so they do not fully adopt the U.S. system of corporate governance.²

We suggest that cross-border mergers provide an alternative mechanism for the contractual transfer of corporate governance. In a cross-border merger, the target usually adopts the accounting standards, disclosure practices, and governance structures of the acquirer. For example, in the 1999 acquisition of Canadian Seagram by French Vivendi, the newly merged firm adopted the French accounting system. Similarly, Seita, a French tobacco company, was acquired in October 1999 by Tabacalera, from Spain, to form a new entity called Altadis, which started to report under Spanish GAAP. DaimlerChrysler, the result of the merger of a German and a U.S. company, is domiciled in Germany and, as such, has adopted a two-tier board structure, as required by German law.

More generally, Bris and Cabolis (2002 and 2004) show that accountability and transparency are valued by shareholders and therefore, improvements in

¹ U.S. companies must file quarterly reports with the Securities and Exchange Commission that contain interim financial information. Non-U.S. companies are not required to file quarterly reports. Also, non-U.S. companies and their officers, directors, and controlling shareholders are exempt from the insider trading rules that apply to U.S. companies.

² Hoechst AG Archive: http://www.archive.hoechst.com/english_3er/hoechst_ag/frameset.html

both dimensions through cross-border mergers imply a substantial premium. However, Bris and Cabolis (2004) show that higher merger premia in cross-border mergers relative to matching domestic acquisitions are significant in acquisitions where the acquirer buys 100% of the target. This is because according to international law, a 100% acquisition by a company from a foreign country results in a change of nationality for the target, and therefore a change in the law that protects shareholders.

An important point to be emphasized is that corporate law provides the minimum standards that a firm must comply with in order to be legally operational. However, nothing precludes merging firms to adopt stricter rules than the ones prescribed in the law. Indeed, the anecdotal evidence we provide above points to situations where firms opt for more austere practices than the ones imposed by the relevant corporate law. Because the contractual arrangements between the merging parties are cumbersome, it is useful to study in detail the corporate governance structures resulting from a particular merger. In this chapter we describe and analyze the 1999 merger between the French firm Rhône-Poulenc and the German firm Hoechst that resulted in the creation of Aventis, a new entity domiciled in France.

Our chapter describes a case of corporate governance convergence through a cross-border merger where the resulting entity is more protective of shareholders than the two original firms, and where the new entity improves the default legal system prescribed in the national corporate code.

The chapter proceeds as follows. In Section 4.2, we outline why we study the case of Aventis and we briefly present our results. In Section 4.3, we describe the merging companies, Rhône-Poulenc and Hoechst. In Section 4.4, we depict the merger and outline the formation of Aventis. In Section 4.5, we analyze and compare the corporate governance characteristics of the two merging parties, relative to their corresponding corporate codes. In Section 4.6, we establish in detail the corporate governance structure of Aventis, and in Section 4.7, we conclude.

4.2 Aventis: characteristics and main results

We consider this case to be representative of the recent trend in cross-border mergers and acquisitions. Moreover, from the corporate governance standpoint, the case of Aventis is worth studying for reasons related to the environment of the firms, the industry, and the countries.

First, it was a merger of “equals.” Aventis was formed as an exchange of Rhône-Poulenc shares for Hoechst shares. After the exchange, former Hoechst shareholders owned the majority of Rhône-Poulenc shares. However, Rhône-Poulenc owned 96% of Hoechst’s shares, and Rhône-Poulenc changed its name to Aventis. Therefore, there was not a “formal” acquirer in the development of Aventis. This is important because it shaped the perception of the population in the two countries involved, and it determined the legal effects of the merger. It is the latter that makes this case crucial in the study of corporate governance.

Second, both firms operated multinationally, belonged in the same industry (pharmaceuticals), and were listed on the New York Stock Exchange.

Finally, the two merging parties come from countries with different legal origins, following the definition in La Porta *et al.* (1998). However, the two merging parties come from countries with similar institutional characteristics, economic development, and financial markets. Furthermore, both France and Germany are members of the European Union and the European Monetary System. Thus, some aspects of the deal that are usually relevant in other cross-border mergers were not challenging here: combination of different markets, exchange rate considerations, and the domicile of the newly created firm. However, one of the major difficulties in the deal was the integration of the managerial cultures in the two firms. The case is a good example of a merger where the design of governance rules facilitated the integration of the two different managerial cultures.

Aventis is legally a French corporation. In this chapter we show that, despite the nationality of Aventis, its corporate governance structure combines the corporate governance systems of Hoechst and Rhône-Poulenc. Indeed, Aventis borrowed some features of the Hoechst governance system that were more protective to investors than the respective provisions in the Rhône-Poulenc corporate governance code. Interestingly, we document that both companies operated under stricter corporate governance rules than the ones dictated by their respective national corporate laws. Aventis' corporate governance, in turn, was designed combining, not the national corporate laws in both countries—the systems by default—but the stricter rules of the two companies.

We specifically study two main characteristics of the Aventis code of corporate governance: the organization of the Board of Directors, and the structure and functioning of the shareholder meetings. With respect to the Board of Directors, we describe the two-tiered German-style corporate governance structure adopted by Aventis. It consists of a supervisory board of independent directors elected by shareholders and a management board of top executives selected by the supervisory board. The two-tier structure permits oversight of management by representatives of shareholders and employees. Consistent with the German model, the management board must prepare an annual management report on the company. At the annual shareholders' meeting, the supervisory board must comment on both, the management report and financial statements. However, Aventis borrows from Rhône-Poulenc some other characteristics of the board that favor shareholders relative to those in Hoechst: a smaller board size, fewer employees on the board, and the requirement that board members must own at least one share in the company.

With respect to the functioning of the shareholder meetings, we find that both Rhône-Poulenc and Hoechst were very similar prior to the merger. However, rather than combining the two structures, Aventis introduced new provisions that improved the governance structure of both merging companies. For instance, while Rhône-Poulenc and Hoechst require a deposit of shares within 5 and 7 days prior to the meeting, respectively, Aventis reduces such period to only 3 days.

Finally, with respect to shareholder protection, the starting point is that Aventis is a corporation formed under the laws of France. Because the merging parties were multinational entities, the levels of creditor protection and rule of law in Aventis are determined by the courts of the country where the corporate assets are located. Moreover, because both Rhône-Poulenc and Hoechst had American Depositary Receipts (ADRs) trading in U.S. markets, matters relating to trading in Aventis ordinary shares or ADRs are justiciable in the courts of the markets in which trading occurs (France, Germany, and the United States). Creditor matters and operational matters generally are justiciable by courts in the various jurisdictions in which the claims arise, or in which the defendant is located. With respect to director liability to shareholders or to the corporation, such matters are subject to adjudication by the courts of France, irrespective of the location of the shareholders. Therefore, determining the default legal system applicable to shareholder protection matters is a more direct and focused issue to be addressed.

4.3 The merging parties

4.3.1 *Hoechst AG*

After a long history, modern Hoechst was reborn as an industrial chemical and dyes company in December 1951. Over the next 40 years, Hoechst developed into a worldwide chemical and life science company through organic growth and acquisitions.³ In 1994, following a comprehensive strategic review, Hoechst reorganized as a holding company and shifted its focus exclusively to life sciences.⁴ This organizational and strategic change allowed Hoechst to “promote entrepreneurial initiative and accountability as well as to facilitate the divestment of non-core activities.”⁵ Hoechst implemented the strategy through a series of acquisitions and joint ventures in the 1990s.

At the time of the merger, Hoechst had seven primary businesses. They included Hoechst Marion Roussel (HMR), AgrEvo, HR Vet, Dade Behring, Centeon, Celanese (with several smaller chemical companies), and Messer. HMR, the pharmaceutical group, developed drugs in a range of therapeutic areas.⁶ AgrEvo, a joint venture with Schering, produced and sold crop protection agents and pest control products.⁷ HR Vet researched, developed, produced, and sold products to “prevent and treat diseases suffered by farm animals and domestic pets.”⁸ The Dade Behring and Centeon joint ventures

³ Merger Report, p. 10.

⁴ Merger Report, p. 11.

⁵ Merger Report, p. 8.

⁶ Merger Report, p. 15.

⁷ Hoechst Annual Report 1997, p. 4.

⁸ Merger Report, p. 13.

focused on blood plasma protein and diagnostics respectively.⁹ Celanese and Messer produced chemicals, acetate products, and industrial gases.¹⁰

Hoechst AG had “subscribed capital of DM 2,939,768,450 (€ 1,503,079,741), which was divided into 587,953,690 shares.”¹¹ In Tables 4.1a and 4.1b, we report the premerger characteristics of Hoechst. Hoechst had 161,618 employees in 1996, with the majority in Europe (62%) and the Americas (26%).¹² The company spent € 3.99 billion on research and

Table 4.1A Hoechst premerger assets, debt, and sales (from 1997)

Category	Final book value, 1997 (in MM)
Fixed assets	
Intellectual property	1466
Land, buildings	5209
Goodwill	13,734
Plant and machinery	7201
Other plants, factory, office equipment	1666
Advanced payments for tangible fixed	1785
Assets and construction in process	
Investments	
Shares in subsidiaries	759
Shares in associated companies	5727
Loans to subsidiaries	14
Loans to companies in which a participating Interest is held	96
Investments in securities	356
Other investments	551
Derivative instruments—currency	6605
Derivative instruments—interest rate	5968
Corporate debt and liabilities	
Loans	2391
Liabilities due to bank	12,617
Liabilities related to leasing contracts	137
Commercial paper	729
Other miscellaneous liabilities (tax, payroll, interest, bills payable, etc.)	5351
Other financial obligations (to third parties arising from capital projects started)	1590
Commitments not in balance sheet (guarantees, warranty agreements, notes payable, etc.)	611

(Source: Hoechst 1997 Annual Report, pp. 78–85)

⁹ SEC Form 14D-9.

¹⁰ Merger Report, p. 7.

¹¹ Hoechst 1996 Annual Report, p. 18.

¹² Hoechst 1997 Annual Report, p. 1.

Table 4.1B Hoechst sales by region, 1995

Region	Percentage of sales/assets/operating profit
Europe	60% (Sales) / 46% (Assets) / 76% (Profit)
Americas	31% (Sales) / 18% (Assets) / 47% (Profit)
Asia, Africa, Australasia	9% (Sales) / 6% (Assets) / 7% (Profit)

development in 1997.¹³ Table 4.2 contains key Hoechst personnel and their role in the merger.

4.3.2 Rhône-Poulenc

Rhône-Poulenc, a major chemical and industrial conglomerate, was nationalized by the French government in 1982 and privatized in 1993. In the late 1990s, Rhône-Poulenc and Hoechst followed parallel paths, as Rhône-Poulenc also focused on “separating its life sciences businesses from its industrial chemicals businesses, forming joint ventures, and making important acquisitions and divestitures to strengthen these businesses.”¹⁴

At the time of the merger, Rhône-Poulenc operated in the pharmaceutical, plant, and animal health, and chemicals industry segments.¹⁵ The pharmaceutical businesses included Rhône-Poulenc Rorer, Centeon, and Pasteur Merieux. Their products ranged from cardiology, oncology, and respiratory drugs to vaccines and plasma proteins.¹⁶ The Rhône-Poulenc plant and animal health

Table 4.2 Key personnel from Hoechst

Name	Position	Role in Merger
Horst Waesche	HMR	Involved in early meetings
Klaus-Jurgen Schmieder	CFO	Primary negotiator
Dr. Gerhard Prante	CEO, AgrEvo	Involved in early meetings
Richard Markham	Management board member	Involved in early meetings
Jurgen Dourmann	CEO	Primary negotiator
Utz-Hellmuth Felcht	Celanese, Herberts, Ticona	
Justus Mische	Trevira	
Claudio Sonder	AgrEvo, Hoechst Roussel Vet Nutrinova	
Ernst Schadow	Director of Personnel Messer Group, Hostalen	

¹³ Merger Report, p. 27.

¹⁴ Merger Report, p. 26.

¹⁵ Merger Report, pp. 31–36.

¹⁶ R-P 1996 Annual Report, p. 22.

division included Rhône-Poulenc Agro, Rhône-Poulenc Animal Nutrition, and Merial. They helped prevent and cure animal diseases and enhance “the profitability and quality of animal production.”¹⁷ Rhône-Poulenc also had a 67% share in Rhodia, which conducted its specialty chemical business.¹⁸

Rhône-Poulenc had € 1,421,611,212.24 in subscribed capital, divided into 372,255,840 shares with a nominal value of € 3.82 each.¹⁹ Tables 4.3A and 4.3B have sales by region and corporate assets and liabilities. The company had 75,000 employees worldwide in 1996; the majority lived in France (45%), elsewhere in Europe (17%), or in the United States (18%).²⁰ Rhône-Poulenc invested 9% of 1996 net sales in research and development and had at least 15 products in its pharmaceutical pipeline.²¹ These new developments complemented an already large portfolio of pharmaceutical, animal health, and chemicals products. Table 4.4 includes key Rhône-Poulenc personnel and their role in the merger.

Table 4.3A Rhône-Poulenc assets, debt, and sales (from 1997)

Category	Net book value, 1998 (in MM)
Assets	
Cash, marketable securities, short-term deposits	11,018
Net trade accounts and notes receivable	10,993
Net inventories	14809
Prepaid expenses	15,100
Property, plant, and equipment	35,019
Intangible assets	54,516
Investments	
Investments in equity method investees	7963
Deposits and long-term receivables	3000
Other investments, deferred charges, other assets	7096
Corporate debt and liabilities	
Current liabilities	54,398
Long-term debt (debentures and bank borrowing)	25,369
Other long-term liabilities (pension, deferred taxes, etc.)	17,333
Redeemable partnership interests	2608
Interests in net assets of subsidiaries	6743
Amortizable preferred securities	2,227

(Source: Rhone-Poulenc 1998 Annual Report, pp. F13–F15)

¹⁷ Merger Report, p. 39.

¹⁸ *Ibid.*, pp. 38–39.

¹⁹ R-P Annual Report 1996, p. 38.

²⁰ R-P Annual Report, 1996, p. 18.

²¹ SEC Form 14D-9, p. 61.

Table 4.3B Rhône-Poulenc sales by region, 1997

Region	Percentage of sales
Europe (excluding Commonwealth of Independent States [CIS])	45.1%
CIS and Africa	3.5%
North and Central America	23.6%
South America	10%
Asia/Pacific	9.2%

(Source: Rhône-Poulenc 1998 Annual Report, p. 1)

Table 4.4 Key personnel from Rhône-Poulenc

Name	Position	Role in merger
Jean-Rene Fortou	Chairman/CEO	Primary negotiator
Igor Landau	Group President	
Phillipe Desmarescaux	Group President, Scientific Affairs, Industry, and Safety	
Jean Jacques Bertrand	Vice Chairman, Rhône-Poulenc Pharma; Chairman/CEO, Pasteur Merieux Connaught	Involved in early meetings
Alain Godard	Chairman of Rhône-Poulenc Plant and Animal Health	Involved in early meetings
Patrick Langlois	CFO	Primary negotiator
Rene Penisson	Supervises HR and Corporate Communications, supervises W. European and N. African zones	
Martin Pinot	Executive Committee Member	Involved in early meetings
Michel De Rosen	Chairman, Rhône-Poulenc Pharma and Rhône-Poulenc Rorer; supervises N. American zone	
Jean Pierre Trouflet	Chairman of Rhodia; supervises Commonwealth of Independent States (CIS), Middle Eastern, E. European zones	Involved in early meetings
Thierry Soursac	Executive VP, Rhône-Poulenc Rorer	Involved in early meetings

(Source: Rhône-Poulenc, 1998 Annual Report, p. 77)

4.3.3 Pharmaceutical and life sciences market

The life sciences market grew rapidly in the 1990s, driven by “growing populations, increasing life expectancies, and higher standards of living...and...by the advances of basic knowledge and applied technology in the areas of biotechnology and genetic engineering.”²² Two trends characterized the industry, according to merger documents. First, “new companies with innovative products and smaller companies with positions in niche markets were emerging at a rapid pace.”²³ Second, rising costs “and faster product obsolescence made it increasingly difficult for existing companies to maintain a leading position...on the basis of their own resources.”²⁴ This led to intense consolidation and a string of mergers that included Upjohn and Pharmacia in 1995, Astra and Zeneca in 1999, and Sanofi and Synthelabo in 1999.²⁵ Still, the pharmaceutical market was relatively fragmented, as “the leading 20 companies accounted for only 57% of prescription pharma sales.”²⁶

In the agricultural market, “changing business dynamics spurred cooperation and consolidation.”²⁷ Unlike pharmaceutical, however, “the global crop sciences market [was] already relatively concentrated, with the top ten manufacturers accounting for over 80% of total sales in 1997.”²⁸ Regional demand in the crop protection market was seasonal and influenced by global farm commodity prices.²⁹ Significant scale and scope helped companies thrive in the agricultural market.

4.4 The merger: The formation of Aventis

4.4.1 Preliminary steps and the exchange

The merger identified three preliminary steps: a share repurchase by Hoechst, a special dividend payment for Hoechst shareholders, and a divestiture of Celanese that included Hoechst specialty chemical assets and € 1 billion in consolidated net debt.³⁰ Hoechst held the open-market share repurchase to reduce the number of shares outstanding in order to increase the earnings per share going forward.³¹ The special dividend served as an added incentive for shareholders to tender and compensate Hoechst shareholders for tax credits that were to be issued after the completion of the exchange.³² The Celanese divestiture further

²² Merger Report, p. 37.

²³ Merger Report, p. 37.

²⁴ SEC Form 14D-9, p. 61.

²⁵ SEC Form 14D-9, p. 61.

²⁶ Merger Report, p. 45.

²⁷ Merger Report, p. 45.

²⁸ Merger Report, p. 16.

²⁹ Merger Report, pp. 57–58.

³⁰ Merger Report, p. 57.

³¹ *Ibid.*, p. 57.

³² Merger Report, p. 64.

increased Aventis' focus on life sciences.³³ Though it was a condition of the exchange offer, the divestiture would have happened even if the exchange failed. In advance of the conversion to Aventis, the companies planned several changes to their businesses. All noncore life-sciences entities from the two companies were to be divested, "in order to better represent the focus of Aventis on life sciences."³⁴ Hoechst also decided to sell its Hoechst Roussel vet business, since it did not fit into the other animal nutrition businesses of Aventis.

During the exchange, which took place in October 1999, Rhône-Poulenc acquired 90% of Hoechst.³⁵ Hoechst shareholders received one Rhône-Poulenc share for every 1.333 Hoechst shares they held.³⁶ Rhône-Poulenc also agreed to acquire the holdings of Gallus GmbH, a subsidiary of Kuwait Petroleum Company that held about 25% of Hoechst shares.³⁷ The exchange ratio was based on the ratio of the market valuations, each company's outstanding share numbers, and the number of desired Aventis shares.³⁸ The exchange was conditional on Rhône-Poulenc purchasing at least 90% of Hoechst.³⁹ However, either party could reduce the requirement to 75%, according to a clause in the

Table 4.5 Merger history and exchange timeline

Early 1998
<ul style="list-style-type: none"> • The group president and CFO of Rhône-Poulenc met with Hoechst's CFO and board member Mr. Waesche to discuss a combination of their life sciences businesses. • Exploratory meetings between the chairman of Rhône-Poulenc Rorer, chairman of Pasteur Merieux Connaught, executive VP of Rhône-Poulenc Rorer, and the chairman of Hoechst Marion Roussel.
August 1998
<ul style="list-style-type: none"> • Meetings between senior management of the companies' agriculture and pharmaceutical sectors. They included the managing director of Rhône-Poulenc Agro/Rhodia's VP for strategic projects, chairman of Rhône-Poulenc Plant and Animal Health, CEO of AgrEvo, and the head of Hoechst Marion Roussel from Hoechst. • The CFOs of Rhône-Poulenc and Hoechst meet to discuss the "legal, tax, and financial implications of a life sciences combination" and possible structures (SEC Form 14D-9, p. 100).

(Continued)

³³ Merger Report, p. 64.

³⁴ SEC Form 14D-9, p. 2. Hoechst still exists primarily because it is organized under German law, which does not have a procedure to eliminate minority shareholders involuntarily. From time to time, Aventis has purchased Hoechst shares when they have become available, and as of July 2004 owns approximately 98% of Hoechst's shares.

³⁵ Merger Report, p. 2.

³⁶ Merger Report, p. 94.

³⁷ SEC Form 14D-9, p. 2.

³⁸ SEC Form 14D-9, p. 3.

³⁹ SEC Form 14D-9, p. 2.

Table 4.5 (Continued)

September and October 1998
<ul style="list-style-type: none"> • A series of meetings between the CEOs and the CFOs to review the earlier meetings and discuss a joint venture among their life sciences businesses.
November 1998
<ul style="list-style-type: none"> • Each company began their preliminary due diligence for the merger. • Company CEOs and CFOs, plus others including Mr. Dormann and Mr. Fourtou, meet to discuss issues in Merger Agreement Step One.
December and January 1998/1999
<ul style="list-style-type: none"> • Companies sign Merger Agreement Step One. Announce their intention to “constitute a life sciences joint venture composed of their life sciences subsidiaries, followed by a full merger of Rhône-Poulenc and Hoechst within a few years” (SEC Form 14D-9, p. 100). • Held a series of implementation meetings to prepare antitrust filings, documentation, and final merger agreement. Also conducted due diligence of the others’ operations and finances.
February–May 1999
<ul style="list-style-type: none"> • Meetings between company CEOs and CFOs to complete due diligence and resolve all outstanding issues. • Announce their desire to expedite the merger plan. A working group from both companies discussed and decided on an accelerated merger plan and a structure for the business combination. • Boards of both Rhône-Poulenc and Hoechst (their management board) approved the combination. • Companies agreed on the one-step merger plan and signed the business combination.
Exchange timeline proposed in the 14D-9 (SEC Form 14D-9, p. 5)
<p><i>October 26, 1999:</i> Beginning of the offer period</p> <p><i>November 26, 1999:</i> Expiration of the initial offer period</p> <p><i>November 29, 1999:</i> Hoechst American Depository Shares (ADS) suspended from New York Stock Exchange (NYSE) trading; Aventis ADSs begin trading on NYSE (on a “when issued” basis)</p> <p><i>November 29, 1999:</i> Hoechst and Rhône-Poulenc announce results of exchange offer</p> <p><i>December 9, 1999:</i> Hoechst shareholders meet to approve the special dividend</p> <p><i>December 15, 1999:</i> Rhône-Poulenc shareholders meet to approve issuance of new shares</p> <p><i>December 20, 1999:</i> Delivery of Aventis shares and ADSs</p> <p><i>December 20, 1999:</i> Aventis ADSs start regular trading on NYSE</p>

(Source: All events quoted from SEC Form 14d-9, pp. 20, 84, 85)

contract.⁴⁰ Following the successful completion of the exchange, Hoechst shareholders would receive the dividend and Celanese shares. Barring antitrust problems, Rhône-Poulenc would be renamed Aventis and begin operations. Table 4.5 outlines the merger history and exchange timeline.

The one-step structure of the merger/exchange allowed stakeholders to “directly invest in Aventis rather than indirectly through Hoechst and Rhône-Poulenc as envisaged in the two-step process....”⁴¹ The benefits of this structure also included the immediate unification of “the shareholder base of Hoechst and...Rhône-Poulenc,” a faster realization of synergies for Aventis shareholders, and a shorter time schedule for the combination of the companies.⁴² Overall, Aventis would own 90% of Hoechst, while the remaining 10% would be owned by minority shareholders.⁴³

4.4.2 *Strategic rationale*

The Hoechst and Rhône-Poulenc management cited the geographic fit between the companies, their complementary product mixes, and shared entrepreneurial vision as factors that led to the merger.⁴⁴ However, their primary cited motivators were: “the creation of one of the world’s largest life sciences companies; the opportunity to maintain adequate financial, marketing, and technological strength in light of industry consolidation; and the potential for synergies.”⁴⁵ They hoped Aventis would achieve: global scale, enhanced innovation potential, strong product portfolio with high growth potential and a promising product pipeline, steady flow of product launches, expanded global sales and marketing forces, and improved cost position through better manufacturing administration and research and development.⁴⁶ The realization of these objectives would significantly increase returns for shareholders.

The merging parties described the deal as a “merger of equals” and tried to structure it appropriately. If 100% of the shareholders accepted, Hoechst shareholders would end up with a 53% stake in Aventis.⁴⁷ According to a “merger of equals” analysis by Lazard Freres, Hoechst would contribute 47% of sales, 51% of earnings before interest, tax, and amortization, and 46% of net income.⁴⁸ They also split representation on the management and supervisory boards between the two companies.

⁴⁰ Merger Report, p. 52.

⁴¹ Merger Report, pp. 52–53.

⁴² SEC Form 14D-9, p. 44.

⁴³ SEC Form 14D-9, pp. 65–66.

⁴⁴ SEC Form 14D-9, pp. 66 and 68.

⁴⁵ Merger Report, p. 38. (check!)

⁴⁶ *Ibid.*, pp. 2.

⁴⁷ SEC Form 14D-9, pp. 73–74.

⁴⁸ Merger Report, p. 50.

4.4.3 Investor benefits, synergies, and synergy value

Both companies adopted a focus in the 1990s on “higher-margin and higher-growth life science activities.”⁴⁹ The merger would validate this strategy and create “a pure life sciences entity with the necessary critical mass, the potential for product innovation, and a more effective sales and marketing force” to drive higher growth rates and better earnings per share.⁵⁰ The projected gains included annual gross margin improvements of between 0.5 and 1% and net margin improvements of 1.5–2.0% from 1999 to 2002.⁵¹ The “earnings impact of synergies [achieved through] substantial operational efficiencies and potential of earnings growth” would drive these gains.⁵²

The companies anticipated about € 1.2 billion per year in direct cost savings and synergies.⁵³ They anticipated € 700 million in savings from sales, general, and administrative efficiencies and an additional € 500 million to be split between research and development and drug innovation and approval.⁵⁴ Each business segment would realize savings according to their filings. They predicted € 750 million in their pharmaceutical business, € 350 million in their crop science division, and € 100 million in corporate functions.⁵⁵ They hoped to apply these savings to “additional product discovery and development activities” that would strengthen Aventis and improve their portfolio.⁵⁶

4.4.4 Aventis: mission and structure after the merger

The mission of Aventis was to “discover, develop and market innovative drugs for unmet medical needs in major therapeutic areas. Its key strategic goals would be to focus on key growth products in the areas of prescription drugs and vaccines and to obtain a leadership position in innovation in order to be able to ensure a steady launch of new innovative products.”⁵⁷ It would continue to divest its industrial businesses after the merger to help meet these goals.

Aventis would work in two industry sectors: pharmaceuticals and agricultural products. The pharmaceutical division, managed by Aventis Pharmaceutical, would be “a German entity headquartered in Frankfurt.”⁵⁸ It would contain five businesses: Aventis Pharma, Centeon, Aventis Vaccines, Pasteur-Merieux, and Dade Behring.⁵⁹ The crop sciences division would be a French entity

⁴⁹ Merger Report, p. 50 for quote; SEC Form 14D-9, p. 65.

⁵⁰ SEC Form 14D-9, p. 65.

⁵¹ Merger Report, p. 50.

⁵² SEC Form 14D-9, p. 64.

⁵³ *Ibid.*, p. 64.

⁵⁴ SEC Form 14D-9, p. 64.

⁵⁵ Merger Report, p. 44.

⁵⁶ Merger Report, p. 38.

⁵⁷ *Ibid.*, p. 56.

⁵⁸ SEC Form 14D-9, p. 44.

⁵⁹ *Ibid.*, p. 44.

headquartered in Lyon. It would contain: Aventis Crop Science, Aventis Animal Nutrition, and Merial.⁶⁰ According to pro-forma projections, the pharmaceutical sector would account for 73% of Aventis' 1998 net sales, and the agricultural sector accounted for the remaining 27%.⁶¹

The overall corporate headquarters would be in Strasbourg, France, which gave Aventis a French incorporation. It considered itself a European multinational, however, and planned to “explore economically feasible possibilities for its transformation into a European stock corporation with corporate domicile in France once such form becomes available.”⁶² As a French company, it “would benefit from reduced income tax rates through the French regime of worldwide tax consolidation (*régime du benefice consolide*).”⁶³ Former German Hoechst shareholders would also benefit from a French tax credit—*avoir fiscal*—which amounted to 50% of the net dividend.⁶⁴

Aventis would have a corporate governance structure composed of a 10-member supervisory board and a 4-member management board.⁶⁵ The role of the two boards is detailed in Section V. Table 4.6 presents the proposed board members and executive committee at the time of the merger.

In 1999, Aventis had net sales of € 18.4 million with earnings of € .96 per share.⁶⁶ Its shareholders were located in Europe (approximately 40%), the United States (22%), and in Kuwait (14%).⁶⁷ In the same year, Aventis spent € 3 million on research and development, with € 2.5 million going to the pharmaceutical group (roughly 17% of net sales).⁶⁸ The company ended 1999 with 100,000 employees, who were located in Europe (54%), North America (20%), and Asia (14%).⁶⁹ It was projected to have the sixth-largest worldwide pharmaceutical sales force, with 18,000 sales representatives.⁷⁰ This was just one indication of its significant size and scope in life sciences.

4.5 Corporate governance: Rhône-Poulenc, Hoechst, and the French and German corporate codes

4.5.1 Sources of data and overview of results

In this section, we analyze the differences between the French corporate code and the German corporate code. These dictate the corporate governance

⁶⁰ SEC Form 14D-9, p. 74.

⁶¹ Merger Report, p. 53.

⁶² Merger Report, p. 58.

⁶³ Merger Report, p. 58.

⁶⁴ SEC Form 14D-9, p. 94.

⁶⁵ Aventis Annual Report 1999, p. 1.

⁶⁶ *Ibid.*, p. 40.

⁶⁷ *Ibid.*, p. 23.

⁶⁸ *Ibid.*, p. 35.

⁶⁹ SEC Form 14D-9, p. 50.

⁷⁰ “Modern German Corporation Law Volumes I & II,” by Enno W. Ercklentz Jr., 1979 Oceana Publications, Inc., Dobbs Ferry, NY. “French Company Law” by J. Le Gall, general editor Robert R. Pennington, LL.D., Oyez Publishing, London.

Table 4.6 Proposed Aventis Board, 1999

Supervisory board members		
Name	Former position	Former company
Dr. Martin Fruhauf	Chairman, supervisory board; member, management board	Hoechst
Dr. Hubert Markl	Member, supervisory board	Hoechst
Dr. Gunter Metz	Member, supervisory board; former deputy chairman of management board	Hoechst
Seham A. Razzouqi	Member, board of directors of Kuwait Petroleum Corp.; Managing Director of Finance, Administration, and External Relations of Kuwait Petroleum	Hoechst
Dr. Hans-Jurgen Schinzler	Member, supervisory board	Hoechst
Marc Vienot	Member, board of directors	Rhône-Poulenc
Jean-Marc Bruel	Member, board of directors	Rhône-Poulenc
Serge Kampf	Member, board of directors	Rhône-Poulenc
Didier Pineau-Valencienne	Member, board of directors	Rhône-Poulenc
Michel Renault	Member, board of directors	Rhône-Poulenc
Management board members		
Name	Former position	Former company
Jurgen Dormann (Chairman)	Chairman, board of management	Hoechst
Horst Waesche	Member, management board	Hoechst
Jean-Rene Fortou (Vice Chairman)	Chairman and CEO	Rhône-Poulenc
Igor Landau	Group president; member, board of directors	Rhône-Poulenc
Executive committee members		
Name	Former position/company	Position within Aventis
Richard Markham	Hoechst Marion Roussel, Chairman of Management Board	CEO of Aventis Pharma
Jurgen Dormann (Chairman)	Hoechst, Chairman of Board of Management	Chairman of Management Board
Alain Godard	Rhône-Poulenc Plant and Animal Health, President	CEO of Aventis Agriculture
Klas Schmieder	Hoechst, CFO	Chief Admini- strative Officer
Rene Penisson	Rhône-Poulenc, Director of Human Resources	Chief Human Resources Officer
Patrick Langlois	Rhône-Poulenc, CFO	CFO

(Source: Form 14D-9, p. 95-99)

systems by default of Rhône-Poulenc and Hoechst, respectively. Once we determine the intrinsic differences between the two systems, we characterize the improvements that the two companies had adopted with respect to their default system. In the final section of the chapter, we compare the resulting corporate governance structure of Aventis relative to the two original companies.

In what follows, we have used the following data sources. The description of the legal systems is taken from the respective corporate codes.⁷¹ We obtain firm-specific corporate governance provisions from the Hoechst and Rhône-Poulenc F-4 and 20-F documents filed with the Securities and Exchange Commission in the years 1997, 1998, and 1999, and the Aventis forms F-4 and 20-F for the years 2000 and 2001. We also obtain information from the companies' annual reports and bylaws, and from the "Report on the Business Combination of Hoechst and Rhône-Poulenc."⁷²

La Porta *et al.* (1998) compare the legal systems of 49 countries and construct indices of shareholder rights, creditor rights, accounting standards, and law enforcement. In particular, they show that France has an index of antidirector rights of three (over a maximum of six), and Germany has an index of one. The French law explicitly allows proxy voting by mail and constrains directors' rights to new equity issues. Moreover, it requires a minimum of 10% to call an extraordinary shareholder meeting. In contrast, the German law does not contemplate the possibility of proxy voting by mail nor does it limit directors' rights to equity issuance. With respect to the call of an extraordinary shareholder meeting, it requires a minimum of 5%. With respect to shareholders' rights, Germany is the least protective country among all countries of German legal origin.

Table 4.7 summarizes the index of antidirector rights. In addition to the country-specific index we construct a firm-specific index. Whenever the corporate charter is silent with respect to some component of the index, we assign to the firm the value of that component in the corresponding country. This is because the country's corporate code is the firm's default system. Otherwise we characterize the index component as described in the corporate charter. This methodology allows us to construct indices of antidirector rights for both Rhône-Poulenc and Hoechst.

Our results in Table 4.7 summarize the main finding of this chapter. Rhône-Poulenc, a French company, has an index of antidirector rights that mirrors the one established in the French corporate code. In particular, Rhône-Poulenc's system of corporate governance provides to its shareholders the same rights to block decisions by the board to issue new securities that the French corporate code requires. Because Rhône-Poulenc is silent with respect to proxy by mail

⁷¹ Available at www.archives.hoechst.com.

⁷² "Discussion of Individual Corporate Governance Codes Relevant to the European Union and its Member States." Anex IV. Weil, Gotshal & Manges, LLP, in consultation with the European Association of Securities Dealers (ESAD) and European Corporate Governance Network, page 64. Most of the information in the current section comes from this report.

Table 4.7 Antidirector rights index

We construct an index of shareholder rights following La Porta *et al.* (1998). The indices for France and Germany are from La Porta *et al.* (1998). The indices corresponding to Rhône-Poulenc and Hoechst are obtained either from the corresponding company's charter, or from the default system in the corporate law when the corporate charter is silent. In parentheses, the table reports the source of each of the index components. The Aventis' index is from the company's charter, or the French corporate code when the charter is silent. The index of shareholder rights is the sum of six indicators 0/1 corresponding to the rows One Share–One Vote, Proxy by Mail Allowed, Shares Not Blocked Before Meeting, Cumulative Voting/Proportional Representation, Oppressed Minority, Pre-emptive Rights to New Issues, Mandatory Dividend; and an indicator equal to one when the percentage of Share Capital to Call Extraordinary Shareholder Meeting is less or equal than 10%. The index ranges from zero to six.

	Rhône-Poulenc		Hoechst		Aventis
	Corporate Law (France)	Company	Corporate Law (Germany)	Company	
One share–one vote	0	0	0	1 (Charter)	1 (Charter)
Proxy by mail allowed	1	1 (Law)	0	1 (Charter)	1 (Charter)
Shares not blocked before meeting	0	0	0	0	0
Cumulative voting/proportional representation	0	0	0	0	0
Oppressed minority	0	0	0	0	0
Pre-emptive rights to new issues	1	1 (Charter)	0	0 (Charter)	1 (Charter)
% of share capital to call extraordinary shareholder meeting	10%	10% (Law)	5%	5% (Law)	10% (Law)
Mandatory dividend	0	0	0	0	0
Antidirector rights	3	3	1	3	4

and the percentage of shares to call an extraordinary shareholder meeting, the French system is the default. In total, Rhône-Poulenc has an index of antidirector rights of three.

Hoechst is more stringent than the German corporate code. For instance, Hoechst charter has an explicit “one-share-one-vote” provision and allows proxy voting by mail. These provisions, however, are not required by the German corporate code. Interestingly, it also declares the absence of limits in the directors' discretion to issue new capital. Finally, because the charter is silent on the percentage of shares required to call an extraordinary meeting, the German system becomes the default system (5%), and Hoechst has a total index of antidirector rights of three. Therefore, Hoechst provisions are more protective of shareholders than the prescriptions in the German corporate law.

As the previous section established, Aventis is a French company. In the absence of any contract between the merging parties, Aventis should have, by default, an antidirector rights index of three. Table 4.7 shows instead that Aventis has an index of four. Not only Aventis' charter borrows the "one-share-one-vote" provision from Hoechst. It also recognizes that proxy by mail is allowed, even though the French law already incorporates such provision. In sum, Aventis' index of antidirector rights is constructed upon the default French system (the percentage of share capital required to call an extraordinary meeting and proxy by mail), some features of the Rhône-Poulenc system (pre-emptive rights to new issues), and some features of the Hoechst system (one-share-one-vote). Therefore, by adapting the most protective provisions from each of the two companies, Aventis improves the protection given to minority shareholders relative to the original companies.

Because the La Porta *et al.* (1998) index of antidirector rights is only a summary indicator, in what follows we describe in detail the main differences between the French and German systems.

4.5.2 *The French and German systems*

The main difference between the French corporate code and the German corporate code regards the structure of the board of directors. The German law permits only a two-tier structure, while the French law allows a choice between a unitary structure and a two-tier structure. This option was introduced under the 1966 legislation reform and is based on the German corporate law. Most French companies, though, have the unitary structure.⁷³

Unitary system

As stated above, the unitary system is allowed in France only, and it is comparable to the U.S. structure of the board of directors. In that sense, the unitary system has a board of directors or *Council d'administration* whose members are elected at the general meeting of shareholders. The law states that this board is composed of at least three and no more than twelve members (twenty-four in case of a merger), which can be either individuals or corporations. According to the law, members of the board can be of any nationality unless the bylaws of the company provide something different. There are some requisites stated in the law to be eligible as a member of the board. Some of the most important requisites are:

- Lawyers, notaries, and accountants are not allowed on the board
- Each director has to hold a required number of shares when appointed
- Directors are appointed for a fixed period of time not to exceed 6 years if elected by the general meeting, or 3 years if nominated by the statutes
- Employees can be appointed directors if they comply with certain requirements
- Companies with at least 50 employees must have a *comite d'entreprise*

⁷³ *Ibid.*, p. 65.

Traditionally, the board of directors possesses broad power and the authority to act in the name of the company. The president of the board of directors is usually given extensive power to act on behalf of the company in the statutes of the corporation. The president usually dominates the board and the management of the company. This dual power has been recently criticized, and the two-tier system aims to solve this kind of problem.

The French law stated that at least two thirds of the board must be nonexecutives. This description, however, does not include executives of subsidiaries and affiliated companies who are not considered company executives.⁷⁴

Two-tier system

The two-tier structure was introduced in France under the 1966 legislation reform, which was based on the German corporate law. The two-tier structure attempts to solve and separate some of the problems that arise in the unitary system, where the president of the board traditionally controls both the board and management.

The principal duty of the board of supervisors is to supervise and monitor the management of the company, but it does not partake in the company's day-to-day business. Similar to the board of directors in the French unitary system, the members of the supervisory board are elected at the general meeting of shareholders in France as well as in Germany. In Germany, though, only natural persons can be appointed as members of the board of supervisors.

In France, members of the board of supervisors should own at least one share of the company, just as members of the board of directors do. In Germany, however, this requirement does not exist. In the French case, the supervisory board has a minimum of three members and a maximum of twelve (twenty-four if merger), just as the board of directors does.

In Germany, the Co-Determination Act—introduced after World War II and expanded in the 1970s—states that companies with fewer than 2,000 employees should have two thirds of the supervisory board elected by shareholders and one-third elected by the employees. In companies with more than 2,000 employees, the ratio is one-half elected by the shareholders and one-half by the employees.⁷⁵ The general rule in Germany states that the supervisory board shall consist of three members. Exceptions allow the board of supervisors to have as many as 21 members. For companies with more than 20,000 employees the board of supervisors consists of 20 members equally representing the shareholders and the employees.

In France, the members of the supervisory board are appointed for a maximum term of 6 years if elected at the general meeting or 3 years if nominated by the statutes, just as the members of the board of directors above. In Germany, the maximum term is 5 years. In both countries, the members of

⁷⁴ *Ibid.*, p. 90.

⁷⁵ This reason was pointed out to us by Aventis officials.

the supervisory board appoint the management board and the president of the management board for a set term.

In the French case, the powers of the management board are stated as “the same as those of the board of directors.” In sum, the management board in France is responsible for ensuring the company’s compliance with the law as well as preserving the financial integrity of the company’s financial system. In both countries, it is the duty of the management board to elect the chairman of the management board. The principal function of the management board in both countries consists of the direction of the company’s internal affairs and the representation of the corporate entity in its dealings with the outside world. The German law goes further and states that in complying with its principal function, the management board should take into account not only the interests and well-being of the company and its shareholders, but also those of the employees and the larger surrounding community. The German law also provides some statutory duties of the management board, which essentially consist of the periodic submission of reports to the board of supervisors, maintaining the proper books and records, preparing and executing the resolutions of the meeting of shareholders, and effecting all filings and recordings with the Commercial Register.

General meetings are called by the management board in both countries, but the supervisory board has the power to do so if necessary. In the German law, shareholders holding 5% or more of the stated capital may request the management board to call a meeting of shareholders. In France, however, shareholders owning at least 10% can do so. Notice of the call of the meeting must be given by publication in the respective gazettes provided in each of the two laws. While the French law requires a minimum quorum of a quarter of the shares outstanding to hold a meeting, the German law does not require such quorum. In both countries resolutions are passed by the simple majority rule unless otherwise specified in the articles. Both laws appoint the chairman of the supervisory board and chairman of the shareholders meetings.

4.6 Corporate governance of Aventis

The corporate governance structures at Rhône-Poulenc, Hoechst, and the resulting Aventis are quite different. Even though the format and sections of the bylaws of Aventis are more like those of Rhône-Poulenc, the corporate governance structure *per se* is more like that of Hoechst.

4.6.1 Supervisory board/board of directors

On the one hand, Rhône-Poulenc was established in France, under the predominant unitary system. This system is comparable to the structure in place in the United States. It has a board of directors or *council d’Administration* whose members are elected at the general meeting of shareholders and a chairman of the board. Hoechst, on the other hand, was established in Germany

under the two-tiered system, which consists mainly of a board of supervisors and a board of management. Finally, Aventis, even though incorporated in France, was structured as Hoechst, with a two-tier system allowed in France since the legislation reform in 1966. The companies agreed that Aventis should have a two-tiered German-style corporate governance structure primarily because this model would be more familiar to the former Hoechst shareholders and the new Aventis management, which was headed by former Hoechst executives.⁷⁶

The board of directors from Rhône-Poulenc had a minimum of 12 members and a maximum of 18, 3 of whom were employee representatives. The supervisory board from Hoechst had 20 members, half of whom were employee representatives. Aventis has a supervisory board of 16 members, 4 of whom are employee representatives. All nonemployee representatives were/are elected at the general meeting of shareholders. According to this, Hoechst's employees have lower representation in the supervisory board, while Rhône-Poulenc's employee representation has, in the worst case, remained the same and, in the best case, increased by 8.3%.

All Hoechst supervisory board members had to be individuals and, even though the French law allows corporations to be members of the board of supervisors, Rhône-Poulenc's and Aventis' bylaws state that only natural persons are eligible.

While the members of the board of directors at Rhône-Poulenc had to hold at least 10 shares during their term in office, the members of the supervisory board at Hoechst did not have to hold any shares. Aventis combines these two different approaches and requires members of the supervisory board to own at least one share in the corporation, however, only one current member owns just one share.

The term in office of Rhône-Poulenc was 6 years, while in Hoechst it was 5 years. Aventis has maintained the Hoechst term. The members of the board of directors of Rhône-Poulenc could not be older than 65, while that restriction did not exist at Hoechst's supervisory board. Aventis incorporated the requirement that no more than one-third of the members of the supervisory board in office at any time may be 75 years of age or more.

The board of directors of Rhône-Poulenc had to meet as often as corporate matters required. At Hoechst, meetings of the supervisory board had to be held at least every 6 weeks, while at Aventis the term is one every quarter. Rhône-Poulenc proceedings were subject to quorum and majority, while at Hoechst, resolutions of the supervisory board were passed by simple majority. Aventis adopted Hoechst's structure. Members of the board of directors, as well as members of the supervisory board, can be re-elected.

⁷⁶ As of August 12, 2004, Sanofi-Synthelabo has secured almost 90% of the voting rights in Aventis. The deal was accepted by Aventis' board in May 2004.

At Rhône-Poulenc, members of the board of directors received an attendance fee, while at Hoechst it was composed of a fixed part (DM 5000 for all members except the chairman and the vice chairman, who received [2x] and [1.5x] respectively), and a variable part. Aventis adopted the same fixed/variable structure as Hoechst.

At Hoechst and Aventis, the supervisory board appoints the members of the management board as well as the chairman of the management board for a fixed term. The supervisory board fixes the remuneration of the management board and can call general meetings, however, the management board holds this primary obligation. Finally, the supervisory board shall review the financial statements and the report of the management board.

Table 4.8 shows that, in six out of eleven features of the board of directors that we investigate, Aventis borrows the alternative that is the most protective with respect to shareholders. Within the remaining five features, two of them are almost similar to the most protective system (ownership limit to become a member of the board, and frequency of meetings), while the other three are hard to classify (majority rules, age limit, and fees).

4.6.2 Management board

Rhône-Poulenc did not have a management board. For Hoechst and Aventis, the management board bears the responsibility to manage the corporation. The term for members of the management board at Hoechst was 5 years and that term has been maintained in Aventis. The number of members of the management board was set by the supervisory board at Hoechst, but it is fixed at 7 in the bylaws of Aventis. The management board is responsible to call shareholders' meetings in both cases (Hoechst and Aventis).

On the one hand, the German law stated that members of the management board at Hoechst could not be removed arbitrarily but only for a material cause. On the other hand, Aventis' bylaws state that such members can be revoked at any time by the supervisory board in accordance with the provisions of the French commercial law.

While at Hoechst members of the management board did not have any restrictions on age, at Aventis they cannot serve if they are older than 65. This restriction seems to be carried over from the Rhône-Poulenc restriction imposed over the members of the board of directors.

Decisions of the management board are passed by the simple majority rule and, while at Hoechst the chairman had casting vote in case of equality of votes, this power has been removed from Aventis' chairman. Additionally, at Hoechst there were no limitations regarding the decisions made by the management board, while at Aventis, the French law requires some decisions to be approved by the supervisory board, as well as any decision that is of major strategic importance.

In both cases, Hoechst and Aventis, members of the management board are entitled to attend supervisory board meetings when considered necessary.

Table 4.8 Supervisory board/board of directors

The table shows the characteristics of the board of directors (supervisory board in Hoechst and Aventis) for the two merging companies and the resulting Aventis. We determine the most protective system between the two merging companies. The last column compares the most protective system with the resulting characteristic in Aventis.

	Rhône-Poulenc	Hoechst	Most protective	Aventis	Is Aventis the most protective system?
Unitary system/two-tier system	Unitary	Two-tier	Two-tier	Two-tier	✓
Members	12–18 members	20 members	12–18 members	16 members	✓
Employees on the board	3 (16–25%)	10 (50%)	3(16–25%)	4 (25%)	✓
Who can be a member of the board	Individuals and corporations	Only individuals	Only individuals	Only individuals	✓
Ownership limits to become a member of the board	At least 10 shares	No limit	At Least 10 Shares	At Least 1 Share	✓
Term	6 Years	5 Years	5 Years	5 Years	
Age limit	At most 65 Years old	No restriction	At most 65 years old	At most 1/3 of members 75 years or older	
Frequency of meetings	As often as necessary	At least once Every 6 weeks	As often as necessary	Once every quarter	
Majority rule	Majority rule	Simple majority	Simple majority	Simple majority	
Fees	Attendance fee	Fixed part + variable component	Fixed part + variable component	Fixed part + variable component	

Control over management board	No management board	Supervisory board appoints the members of the Management Board as well as the Chairman of the Management Board for a fixed term. The Supervisory Board fixes the remuneration of the Management Board and can call general meetings. The Supervisory Board shall review the financial statements and the report of the Management Board	As Hoechst	As Hoechst	✓
-------------------------------	---------------------	---	------------	------------	---

(Source: Companies' Bylaws, Annual Reports, and SEC filings)

4.6.3 Shareholders' meetings

Shareholders' meetings at Rhône-Poulenc were called according to the French law, as well as those of Aventis. Hoechst's general meetings were called according to the German law.

Holders of Rhône-Poulenc shares had to deposit their shares at least 5 days prior to the general meeting to have the right to attend. Hoechst shareholders had to deposit their shares no later than the end of the seventh day before the meeting. Aventis has the same restrictions with Rhône-Poulenc but reduces the term to 2 days before the meeting.

At Rhône-Poulenc, notice of the general meetings had to be published in the French *Bulletin des Annonces Légales Obligatoires* (BALO) and had to comply with all the information required in the French law. The case of Hoechst was similar but complying with German law. Aventis' notices are more like those of Rhône-Poulenc, but they introduce new technological ways of communicating meetings, such as e-mail and any other telecommunication tools recently developed.

All three corporations allow proxies. Rhône-Poulenc allows also mail voting, and Aventis introduces videoconference and telecommunication tools as means to vote. The general rule is that each share carries one vote, but Rhône-Poulenc and Hoechst had special multiple voting rights depending on the year in which the shares were acquired. Aventis does not have any of multiple voting rights. All resolutions at general meetings are passed by the simple majority rule at Rhône-Poulenc, Hoechst, and Aventis.

Table 4.9 summarizes the requirements and procedures of the shareholder meetings in Rhône-Poulenc, Hoechst, and Aventis. Although there are minor differences between Rhône-Poulenc and Hoechst prior to the merger, we can conclude that the resulting requirements at Aventis are even more stringent than in the founding companies.

4.7 Conclusion

Extensive academic research has documented a strong association between good investor protection and measures of financial development. In the area of cross-border mergers, Bris and Cabolis (2004) present evidence that shareholders of a company that is acquired by a firm operating in a more protective corporate governance environment realize substantial gains. The use of large samples of cross-border mergers necessarily abstracts from issues of private contracting between merging parties. Nevertheless, the design of the corporate governance framework that the new merged entity adopts is of crucial importance, and it is addressed in this chapter.

We explore in detail the corporate governance provisions in Rhône-Poulenc, a French company, and Hoechst, a German firm, and the resulting structure after the two firms merged in 1999 to create Aventis, legally a French corporation. We show that, despite the nationality of the firm, the corporate governance

Table 4.9 Shareholder meetings

The table shows the shareholder meetings for the two merging companies and the resulting Aventis. We determine the most protective system between the two merging companies. The last column compares the most protective system with the resulting characteristic in Aventis.

	Rhône-Poulenc	Hoechst	Most protective	Aventis	Is Aventis the most protective system?
Deposit of shares	Within 5 days before meeting	Within 7 days before meeting		Within 3 days before meeting	
Notice of meetings	Published in <i>BALO (Bulletin des Annonces Légales Obligatoires)</i>	Published in official bulletin	Published in official bulletin	Published in <i>BALO (Bulletin des Annonces Légales Obligatoires)</i>	✓
Proxy voting	YES	YES	YES	YES. Videoconference and telecommunication tools are allowed	✓
One-share, one-vote rule	YES	YES. Multiple voting rights depending on the year of acquisition of shares	YES	YES	✓
Majority rule	Simple majority	Simple majority	Simple majority	Simple majority	✓

(Source: Companies' Bylaws, Annual Reports, and SEC Filings)

(Continued)

Table 4.9 (Continued)

	Rhône-poulenc	Hoechst	Most protective	Aventis	Is Aventis the most protective system?
Unitary system	Two-tier	Two-tier	Two-tier	Two-tier	✓
Members	12–18 members	20 members	12–18 members	16 members	✓
Employees on the board	3 (16–25%)	10 (50%)	3 (16–25%)	4 (25%)	✓
who can be a member of the board	Individuals and corporations	Only individuals	Only individuals	Only individuals	✓
Ownership limits to become a member of the board	At least 10 shares	No limit	At least 10 shares	At least 1 share	✓
Term	6 years	5 years	5 years	5 years	✓
Age limit	At most, 65 years old	No restriction	At most, 65 years old	At most, 1/3 of members 75 years or older	
Frequency of meetings	As often as necessary	At least once every 6 weeks	As often as necessary	Once every quarter	

Majority rule Fees	Majority rule Attendance fee	Simple majority Fixed part + variable Component super- visory board appoints the members of the as management board well as the chairman of the management board for a fixed term. The supervisory board fixes the remuneration of the management board and can call general meetings. The supervisory board shall review the financial state- ments and the report of the management board.	Simple majority Fixed part + variable Component as Hoechst	Simple majority Fixed part + variable Component as Hoechst	✓
Control over management board	No management board				

structure of Aventis is a combination of the corporate governance systems of Hoechst and Rhône-Poulenc. Indeed Aventis adopted some of the features of the Hoechst system that were more protective to investors than similar provisions in the Rhône-Poulenc corporate governance code.

We study two main characteristics of the Aventis code of corporate governance: the organization of the board of directors and the structure and functioning of the shareholder meetings. With respect to the board of directors, we first describe how Aventis adopted a two-tiered German-style corporate governance structure consisting of a supervisory board and a management board of top executives selected by the supervisory board. However, Aventis borrowed from Rhône-Poulenc some other characteristics of the board that favor shareholders relative to those in Hoechst.

With respect to the functioning of the shareholder meetings, we find that both Rhône-Poulenc and Hoechst were very similar prior to the merger. Aventis, however, rather than combining the two structures, introduced improved provisions that were not present in the merging companies.

In sum, our chapter describes a case of corporate governance convergence through a cross-border merger where the resulting entity is more protective of shareholders than the two original firms, and where the new entity improves the default legal system prescribed in the national corporate code.

At the time this chapter is being written, Aventis' shareholders have accepted a friendly offer to merge with Sanofi-Synthelabo, its French rival.⁷⁷ The French government has welcomed the deal between the country's two main pharmaceutical groups, which would lead to the creation of the world's third-largest pharmaceutical company behind U.S. giant Pfizer and Britain's GlaxoSmithKline.

A natural extension to our study is an analysis of the effects that the improved corporate governance of Aventis relative to the minimum legal requirements have played in the consummation of the deal. Bris and Cabolis (2004) show that shareholders of a company acquired by a more protective firm realize substantial gains. In their article, however, the large sample of cross-border mergers that they study does not allow for incorporating the role of private contracting among the merging parties. This important issue in the study of corporate governance is clearly addressed in this chapter.

References

- Bris, A. and Cabolis, C. (2002). "Corporate Governance Convergence by Contract: Evidence from Cross-Border Mergers." Yale School of Management International Center for Finance, working paper No. 02-32.
- Bris, A. and Cabolis, C. (2004). "The Value of Investor Protection: Firm Evidence from Cross-Border Mergers." Yale School of Management International Center for Finance, working paper No. 04-32.

- Coffee, J. C. (1999a). "Privatization and Corporate Governance: The Lessons from Securities Market Failure." Center for Law and Economic Studies, Columbia University School of Law, working paper No. 158.
- Coffee, J. C. (1999b). "The Future as History: The Prospects for Global Convergence in Corporate Governance and its Implications." Center for Law and Economic Studies, Columbia University School of Law, working paper No. 144.
- Gilson, R. J. (2000). "Globalizing Corporate Governance: Convergence of Form or Function." Stanford Law School, working paper No. 192.
- Johnson, S. and Shleifer, A. (1999). "Coase v. the Coasians." Massachusetts Institute of Technology and Harvard, manuscript.
- La Porta, R., Lopez-de-Silanes, F., Shleifer, A., and Vishny, R. (1997). Legal determinants of external finance. *Journal of Finance* 52, 1131–1150.
- La Porta, R., Lopez-de-Silanes, F., Shleifer, A., and Vishny, R. (1998). Law and finance. *Journal of Political Economy* 106, 1113–1147.
- La Porta, R., Lopez-de-Silanes, F., Shleifer, A., and Vishny, R. (2000). Investor protection and corporate governance. *Journal of Financial Economics* 58, 3–27.
- La Porta, R., Lopez-de-Silanes, F., Shleifer, A., and Vishny, R. (2002). Investor protection and corporate valuation. *Journal of Finance* 57, 1147–1170.
- Pistor, K., Keinan, Y., Kleinheisterkamp, J., and West, M. (2001). "Legal Evolution and the Transplant Effect: Lessons from Corporate Governance Law Development in Six Transplant Countries." Working paper.
- Rajan, R. and Zingales, L. (2003). The great reversals: The politics of financial development in the 20th century. *Journal of Financial Economics* 69, 5–50.

Acknowledgments

We thank Elyssa Back and Lucas Kappaz for excellent research assistance. We are particularly grateful to Ruth Williams, from Aventis Global Media Relations, United States; Owen K. Ball Jr., senior corporate counsel, Aventis Pharmaceuticals; and Corrine Hoff, Aventis Corporate Media Relations, for the information they provided. We would also like to thank the participants of the Hellenic Finance and Accounting Association Meetings in Athens in December 2005 and of the European Financial Management Association Meetings in Madrid in June 2006. All errors are our sole responsibility.

This page intentionally left blank

5 Whither hostility?

William W. Bratton

Abstract

The hostile takeover and the regulatory barriers impeding it have for decades held a central place in policy discussions respecting U.S. corporate law. The hostile takeover's proponents assume that it belongs to an identifiable class of disciplinary mergers that create value by separating poor managers from valuable assets. The opponents question the productivity assertion even as they simultaneously assert that hostile takeovers amount to a threat necessitating regulatory barriers. Hostility lost its salient role in the U.S. merger market due to the recovery of stock market prices and constraints on the availability of debt capital. In the changed environment, cooperation made better cost sense. Antitakeover regulation cannot be dismissed as irrelevant, for it raises the cost of hostility. But results yielded by studies of target characteristics and merger motivation suggest that any negative consequences for economic welfare are modest. Meanwhile, hostility recently has returned in the form of hedge fund shareholder activism. Now governance and the boardroom are the venues, rather than the market for corporate control.

5.1 Introduction

The hostile takeover has for decades held a central place in policy discussions respecting U.S. corporate law. Its proponents make it the lynchpin of an efficient, market-driven governance framework (Bebchuk, 2002). Opponents see a destabilizing force that impairs the operation of corporate institutions (Blair, 2004; Stout, 2003). Their debate devolves on legally sanctioned antitakeover barriers like poison pills and staggered boards, which make hostile takeovers more expensive and thereby reduce their incidence. Remove the barriers, say the proponents, and market discipline finally will make the corporate governance system work. Leave them in place, say the opponents, to prevent rapacious raiders from tearing asunder productive firms.

This chapter intervenes in the debate to suggest that the participants consider the implications of a line of empirical studies. The proponents assume that hostile takeovers belong to an identifiable class of mergers that create value by separating poor managers from valuable assets. The opponents question the productivity assertion even as they simultaneously assert that hostile takeovers amount to a threat necessitating regulatory barriers. Meanwhile, economists have been testing merger and governance data for a quarter century to verify that mergers actually

perform the function described. Confirming data become more elusive as more tests are run. Becht, Bolton, and Roell (2002) describe the empirical results as “surprisingly sketchy.” Section 5.2 surveys this sketchy territory.

Section 5.3 suggests that the sketchy results can be best understood in historical context. Disciplinary mergers, to the extent they exist at all, appeared cognizable numbers only in the mid- and late 1980s, motivated by governance and market conditions specific to the time. Since then, no comparable opportunities have arisen. These assertions give rise to a prediction: Should conducive conditions reappear at some future date, we can, based on the record of the 1980s, be confident of the appearance of successful bids despite regulatory barriers. The prediction relies on an important legal point, first articulated by John Coates (2000): Poison pills can be created by target managers on an as-needed basis and provide as much defensive capability as do the statutory alternatives. It follows that state-of-the-art defensive technology was readily available even as the hostile tender offer reached its high water mark in the late 1980s. It further follows that regulation cannot plausibly be assigned primary responsibility for its subsequent decline.

Takeovers, of course, continue to play an important role in the evolution of corporate structures. But the transactions are cooperative. Disciplinary mergers arguably exist as well, cabined in the friendly zone of private equity investment. Until very recently, hostility could be said to have migrated from the world of corporate governance and mergers and acquisitions to the world of policy discussion, where proponents advocate not only the hostile tender offer but open access for challengers to board seats (Bebchuk, 2005a; Bebchuk, 2005b).

Hostility resurfaced in practice in 2005. Led by the hedge funds, the new activists target companies, take large positions in their stock, criticize their business plans and governance practices, and confront their managers, demanding action enhancing shareholder value. Managers have been acceding to these demands at an impressive rate. Section 4 shows that mergers do play a role in this new hostile outburst. Merger announcements occasion hedge fund interventions. But the takeover no longer serves as the attack vehicle. The new activists do not as a rule present themselves as merger partners. They instead reverse the historical pattern and use the proxy system. They may thereby cause a reversal in standing policy assumptions. Legal corporate governance remains obsessed with the takeover because it assumes the proxy system to be moribund. That assumption may change as disciplinary intervention gravitates to the boardroom.

5.2 Discipline as a motivation for mergers

If mergers, particularly hostile takeovers, play a central disciplinary role in corporate governance, then we should expect to see three classes of confirming data. First, takeover targets should be substandard performers when compared to the overall market and industry peers. Second, successful takeovers should have

observable governance causes and effects. Third, hostile takeovers should more starkly evidence these disciplinary earmarks than do friendly mergers. Researchers have for decades worked diligently to supply this verification. This section shows that the results are equivocal. The strongest evidence confirming the theory concerns top management turnover: Takeovers tend to imply changes at the top. The result is unsurprising. But a corollary result does surprise: Hostile takeovers are only slightly more likely to trigger top team removal than are friendly mergers. Evidence on antecedent target performance is more equivocal still. The most supportive results tell us that the market for corporate control does not target underperforming industries; it instead targets underperforming firms in successful industries. But even that limited confirmation dates from some time ago. More recently, as methodology has become more sophisticated, the disciplinary merger has tended to disappear as a statistically identifiable class of transaction. Explanations of merger activity have at the same time become more capacious, encompassing macroeconomic factors in addition to finance and governance. As the picture becomes more complicated, the disciplinary merger becomes more elusive.

The discussion that follows starts with the prevailing theory of motivations for mergers and takeovers. It then reports the results of tests of management turnover and target characteristics and introduces the industry shock explanation for merger activity. Finally, it sorts the results, describing their implications for the theory of the disciplinary merger.

5.2.1 The theory of the disciplinary merger

The takeover-centered model of corporate governance follows from an economic theory of mergers. The theory in turn assumes the efficient market hypothesis (EMH), which asserts that a firm's stock price accurately reflects its intrinsic value. From this it follows that a bidding firm will pay a premium over the market price of a target's stock only if the proposed combination creates new value—value sufficient to cover the price paid and assure a profit. The theory posits that a merger or takeover can create the necessary value in two cases. The first is the synergistic merger—a transaction where valuable synergies arise from combining the operations of the bidder and target firms, effects such as cost savings or technological advances. The second case is the disciplinary merger—a transaction motivated by target management's failure to maximize value and the bidder's desire to create value by correcting the suboptimal conduct (Martin and McConnell, 1991).

The theory offers two descriptions of conditions that make a firm a candidate for a disciplinary merger, one open-ended and the other more particular. In the general description, incumbent management is incompetent and incapable of running the firm efficiently, or firm governance otherwise has broken down. A target might be hobbled by any or all of excessive perquisite consumption, excessive compensation, overpayment for supplies, labor, or raw materials, or self-enriching or self-aggrandizing projects (Brealy and Myers, 1991). The disciplinary acquirer

creates value by cleaning house. The more specific description sets out three prevalent diagnoses of management failure. Under the first, target management makes ill-advised diversifying acquisitions; the successful outside bidder divests the unrelated lines of business. Under the second, the target invests in excess productive capacity; the bidder downsizes or otherwise constrains investment policy. Under the third, the target's capital structure is underleveraged; the bidder steps up borrowing (Holmstrom and Kaplan, 2001). Note that while all three bidder correctives impose "discipline," broadly conceived, all three also implicate differences of opinion respecting the target firm's business plan rather than a diagnosis of poor governance practice, narrowly conceived (Franks and Mayer, 1996). Note also that the policy stakes differ within the group of three. The first case, diversification and unbundling, corrects the results of poor business decisions in the past. Stakeholder interests are not necessarily implicated. The stakes rise in the cases of investment policy and leverage, because the target's course of conduct has had the additional effect of sacrificing returns to the shareholders while benefiting the interests of other stakeholders like employees and bondholders (Holmstrom and Kaplan, 2001).

The disciplinary merger is implied by agency theory as well as by the EMH. Agency theory posits that agents can be expected to slack off and behave opportunistically. If a firm's internal governance mechanisms fail to check the tendency, its stock price declines, attracting a hostile bid. The hostile bidder thus performs a backstop governance role (Sinha, 2004). Expanding this story, we can posit an ideal world in which all management groups are subject to hostile offers all the time by other managers who value the corporate assets more highly (Jensen, 1988). In the ideal world, assets constantly move to the highest valuing user, maximizing shareholder value and economic welfare.

In the standard agency story, synergistic mergers are likely to be friendly, negotiated transactions, while disciplinary mergers are likely to follow from hostile tender offers. Because friendly mergers presuppose the agreement and participation of incumbent management, they do not necessarily implicate disciplinary motives or effects. Indeed, pursuit of synergies from asset combinations sometimes improves the lot of all of the firm's stakeholders. Hostiles, in contrast, are thought more single-mindedly to serve the target shareholders' interests and to threaten target stakeholder interests (Schwert, 2000).

5.2.2 Management turnover

Top team removal is the *sine qua non* of governance discipline. Collective action problems put executive tenure out of the shareholders' hands and into those of the board, and the board likely will be friendly to the incumbent chief. A successful acquisition transfers the power to remove the acquiring firm. If discipline motivates mergers, then we at a minimum should expect to see the removal power liberally exercised. We have solid confirmation of the point from Martin and McConnell (1991), which finds that 41.9% of top target executives are

removed in the wake of mergers, in contrast with an average turnover rate of 9.1% in the antecedent 5-year period.

But turnover *per se* thus tells us little about takeover motivations. All mergers implicate the possibility that only one of the two premerger CEOs will continue in the position, and it hardly is surprising that the target CEO tends to be an exiting executive.¹ In addition, turnover can result from differences of opinion over the appropriate business plan rather than from the bidder's analysis of substandard performance (Franks and Mayer, 1996). Attention accordingly devolves on a subsidiary proposition: If hostile takeovers play a special disciplinary role within the wider world of mergers and acquisitions, they should imply materially greater incidence of removal than do other mergers and acquisitions. But there is a problem here too—the very occurrence of a battle over control negates collaboration, implying a greater incidence of turnover whatever the motivation for the hostile bid.

Survey results are mixed in any event. Franks and Mayer's study comparing friendly and hostile bids in the United Kingdom shows a stark increase in board turnover in the wake of hostiles. Specifically, they found that 50% of directors resign after accepted bids and 90% resign after successful hostiles, and that the CEO or board chair changed or there were no promotions from the target board to the main board in 88% of the hostile and 60% of the friendly transactions (Franks and Mayer, 1996). One comparison of bids in the United States repeats this result, comparing samples of tender offers in the 1980s and 1990s (Kini, Kracaw, and Mian, 2004). But another U.S. study shows no significant differential of CEO turnover between hostile and friendly offers (Martin and McConnell, 1991).

It seems safe to conclude that successful merger bids, both hostile and friendly, implicate top team turnover and thus are significant governance events. But the theory of the disciplinary merger goes further when it asserts that poor management attracts bidders who profit through its correction. To confirm the theory one therefore needs to take the proof further and show that disciplinary energies are concentrated on poorly performing firms (Franks, Mayer, and Renneboog, 2001). A famous study by Morck, Shleifer, and Vishny (1989) establishes the correlation. The study tracks the histories of the 1980 *Fortune* 500 firms until 1985, showing that hostile offers tend to occur in underperforming industries and tend to target one-person management teams. In addition, friendly transactions implicating top team turnover tend to involve firms underperforming their industries. Similarly, boards of firms underperforming their own industries are more likely to turn over the top team voluntarily. Morck, Shleifer, and Vishny (1989) conclude that friendly boards rouse themselves to remove a CEO when industry data provide a clear case for so doing. Given industry-wide malaise, boards are less likely to act. The hostile offerer shows up in the backstop role predicted by the theory.

¹ Coates (1999: 859) notes that directors at 14,000 companies forced managers to surrender control in 1998 alone.

Subsequent searches for correlation between postmerger turnover and premerger performance yield less satisfying results. Martin and McConnell (1991) find some ties between tender offers, removal, and poor performance, but no special ties between *hostile* tender offers and poor performance. They take a sample of 253 tender offers from the period 1958 to 1984 and separate them into two groups depending on whether the CEO was removed.² They find that firms in the removal, or “disciplinary” sample, did not significantly underperform the market as a whole, but did underperform other firms in their industry. Meanwhile, firms in the nonremoval sample performed as well as others in their industry. Subsequent analysis of the same data by Kini, Kracaw, and Mian (1995) adds a wrinkle to these results: the poor performance to turnover tie obtains for firms with inside boards but not for firms with boards dominated by outside directors. That team’s later study (Kini, Kracaw, and Mian, 2004) encompasses tender offers for the periods 1979 to 1988 and 1989 to 1998 and makes a historical distinction—a weakly significant negative relation between performance and turnover obtains for 1980s takeovers but not for 1990s takeovers.

Significantly, the turnover rate for the firms in Martin and McConnell (1991) does not differ as between hostile and friendly tender offers. Neither is there any difference in the performance profile of firms subject to hostile offers,³ nor any difference in bidder gains based on the type of offer.

The Franks and Mayer study of tender offers in the United Kingdom also fails to confirm the theory’s prediction that target underperformance attracts hostile bids. In a sample of friendly and hostile bids from the period 1980 to 1986, friendly targets do perform better than hostile targets for periods of 1 and 2 years prior to the offer. But the difference is not statistically significant at the 5% level. Moreover, both the turnover and nonturnover firms have similar abnormal share performance in preceding years. Finally, the performance of both the hostile and friendly target firms proves almost identical to that of a sample of nonmerging firms (Franks and Mayer, 1996) and Franks, Mayer, and Renneboog (2001) confirm these results in a subsequent study of a larger sample.⁴ They conclude that hostile offers in the United Kingdom, while significant in their turnover impact, are not focused on poor performance.

5.2.3 Target performance

The studies of Morck, Shleifer, and Vishny; Martin and McConnell; Kini, Kracaw, and Mian; and Franks, Mayer, and Renneboog figure into a larger

² See also Kini, Kracaw, and Mian (2004: 1511), which finds a weakly significant negative relationship between pretakeover performance and posttakeover CEO turnover in samples of hostile and friendly takeovers, 1979–1988 and 1989–1998.

³ Kini, Kracaw, and Mian (2004: 1512) repeat this finding.

⁴ They study 250 U.K. companies over the period 1988–1993 in respect of a menu of different governance devices.

literature inquiring into the performance of merger targets. Various metrics have been employed, including long-term stock returns and operating evidence based on accounting data such as earnings, cash flows, and operating ratios. Comment and Schwert (1995) provide a good example. This looks at a range of factors to see whether any consistently predict that a firm will become a hostile target—ownership, abnormal return, sales growth, leverage, Tobin's q ratio, market to book value ratio, and size. Only size proves a consistently successful predictor—bigger firms prove less likely to be targets. Coming to the same question from another angle is a survey of plant productivity by McGuckin and Nguyen (1995).⁵ This finds that high productivity plants are more likely to experience ownership change, suggesting that acquirers generally purchase good rather than bad businesses and that synergies are the dominant motive for mergers. Evidence of acquisition of less productive facilities, and hence disciplinary motivation, shows up only in respect to a small number of large plants.⁶

Overall results in the literature are mixed (Agrawal and Jaffe, 2003a)⁷ but the trend over time goes against findings of poor target performance. Agrawal and Jaffe (2003a), surveying the findings, conclude that the null hypothesis of no pretakeover target underperformance cannot be rejected.

Agrawal and Jaffe also have their own study, encompassing 2000 takeovers across the period 1926 to 1996. Following Lyon, Barber, and Tsai (1999), they test for stock returns by equally weighted portfolios of monthly abnormal returns, including both target operating results and target stock returns for each of 10 years prior to each transaction. The data yield only sporadic evidence of target underperformance. For example, hostile tender offer targets show no significant difference respecting operating metrics. The stock returns of tender offer targets (both friendly and hostile) underperform only on an 8-year interval prior to the transaction but not on any other interval—not in the authors' view a result signaling an efficient market corrective (Agrawal and Jaffe, 2003a; Agrawal and Jaffe, 2003b).

It should be noted that Agrawal and Jaffe's startling findings address only the question whether takeover targets underperform *on average*. When they shift perspectives and sort out the poorly performing firms in advance to see what happens to them, some significant results do show up. For example, the authors take their operating measure and sort outcomes respecting the subclass of poor performers. There turn out to be no significant differences between poor performers acquired

⁵ The study collects evidence on 28,704 plants during the period 1977–1987.

⁶ The inconsistency between the two studies as to size is noted.

⁷ An early paper (Smiley, 1976) does find statistically significant evidence of underperformance for the average tender offer target. A second paper (Mitchell and Lehn, 1990) finds evidence of underperformance by focusing on prior acquisition activity rather than on overall performance. There also are studies that look for correlations between firm characteristics and the adoption of defensive devices like poison pills. Factors like board composition, management compensation, and ownership structure are surveyed in addition to performance measures and stock return. Here too results are inconsistent. For an overview of the literature, see Coates (2000: 306–310).

by merger and by tender offer. But when the subset of poor performers acquired by tender offer is sorted between resisting and nonresisting targets, there emerges a performance-related tendency to resist that is statistically significant at the 5% level (Agrawal and Jaffe, 2003a). When the same exercise is performed with a stock return metric, the picture becomes starker still. Within the group of poor performers, there is a tendency toward tender offer over merger that is statistically significant at the 1% level. Poor performers also tend to resist.

5.2.4 Waves and shocks

Brealey and Myers once noted that the tendency of mergers to occur in waves is one of the great unanswered questions in finance (Brealey and Myers, 1996). The open question holds out negative implications for the theory of the disciplinary merger. If discipline holds out arbitrage profits to potential bidding firms, then one would expect to see constant activity over time. Indeed, discipline would appear to hold out particular value during recessions, when firms experience higher cost pressures. Instead, merger waves are positively correlated to stock market performance (Mitchell and Mulherin, 1996).

Recent studies go beyond the stock price correlation and introduce macroeconomic and regulatory variables. Within a given merger wave, activity tends to focus on specific industries. In addition, activity within a given industry tends to cluster in a period of 2 or 3 years within a given wave (Andrade, Mitchell, and Stafford, 2001), signaling deal-making pressure.⁸ During the wave of the 1980s there were seven industries (entertainment, drugstores, petroleum, broadcasting, textiles, tire and rubber, and steel) in which three fourths of firms received a bid or restructured (Mitchell and Mulherin, 1996). At the other extreme, in three industries only one-third or fewer firms received a bid during the period. Merger activity in the 1990s was even more concentrated on specific industries—industries different from those affected during the previous decade (Andrade, Mitchell, and Stafford, 2001).

Mitchell and Mulherin, who generate the findings, propose that external shocks trigger these industry-wide concentrations of activity. They define a “shock” as any factor that alters industry structure. Industry structure at any time includes the number of firms and their size and follows from factors such as technology, supply and demand, and regulation (Mitchell and Mulherin, 1996). Different shocks can have different implications for business plans. Sometimes a shock creates a need for greater capacity, whether through internal expansion or merger. Alternatively, a shock can imply excess capacity and trigger downsizing by merger or restructuring (Andrade, Mitchell, and Stafford, 2001). In the 1990s merger wave, the most potent shock was deregulation,

⁸ For a confirming price study showing that bidder returns are higher when the bid is less anticipated, see Song and Walking (2005).

explaining 50% of annual deal volume. In the 1980s, in contrast, companies in deregulatory windows made up only 10% to 15% of merger activity.

5.2.5 Implications

Industry shock theory encourages movement away from the binary categorization of mergers as synergistic or disciplinary. Synergy stories tend to be told when firms within an industry restructure by combining. The industry shock account, by introducing an element of macroeconomic compulsion, introduces a disciplinary gloss, albeit a gloss unrelated to governance and agency costs. Contrariwise, shock-induced restructuring may coincide with industry decline, with merger partners looking for synergies that lessen the shock's negative effects. This downside territory, previously thought to be disciplinary, emerges as with a tie to business planning within the sector and thus may be termed synergistic. Shock theory also destabilizes the traditional assumption that a successful merger creates a gain over the combining firms' antecedent market capitalizations. Given a negative shock, mergers can occur in loss situations, ameliorating the losses without avoiding them entirely (Mitchell and Mulherin, 1996). Finally, given external pressure to combine or otherwise restructure, we would not necessarily anticipate strong correlations between mergers and antecedent target performance data.

Industry shock theory's proponents claim neither fully to explain interindustry variation in merger activity nor to offer a unitary explanation of motivations for mergers. Shocks, like the disciplinary merger itself, have to be inferred. The theory can be verified only by resorting to proxies like sales and employment data and foreign competition. Nor does anything prevent shock theory from operating together with a disciplinary description, even as it complicates the concept of discipline and removes corporate governance and agency costs as explanations for many transactions.

The mixed results on target premerger performance do not compel us to jettison the disciplinary merger either, even as they directly test for its existence and answer equivocally. Just as the null hypothesis of no average abnormal underperformance by takeover targets survives the testing, so, strictly speaking, does the hypothesis that companies in need of discipline attract takeover bidders. Given this, one can anticipate a "burden of proof" dismissal of the studies by advocates of tender offer deregulation. It would proceed along the following lines: (a) The disciplinary merger has stood at the center of the legal theory of the firm for 4 decades because it follows directly from prevailing theories of markets and agency relations; (b) it also generates important (and unpopular) policy implications; (c) therefore, the burden of proof lies on the proponent of its displacement, and (d) mixed results do not meet the burden.

The theory of the firm, however, is not a litigated subject matter, or at least need not be approached as such. The survival of the null hypothesis of no average abnormal underperformance by takeover targets in the teeth of 3 decades of concerted falsification effort does have destabilizing implications for received

theory. The instability more than justifies *de novo* review of basic assumptions informing legal policy discussions. We should, first, consider the implications of the points of weakness revealed in the prevailing account, and, second, take the strongest results as a base point for patching together an alternative description and considering its normative implications for regulation.

The studies make one point consistently: The targets of hostile tender offers and other tender offers, whether friendly and negotiated or unfriendly but unopposed, do not tend to have different characteristics. This implies that disciplinary theory draws excessively bold lines when it ties poor performance to hostility. It also casts doubt on the theory's account of takeover defense. Under this, (1) poor performance means poor governance, (2) poor governance means entrenchment, and (3) entrenched boards are the ones that resist premium bids. If hostile and friendly targets have the same profile, then poor performance need not imply resistance, and resisting boards need not necessarily be entrenched. Maybe the offer is below market. At the same time, hostility has no necessary connection to performance. It may depend less on the nature of the target and its business than on the reaction of target management to the acquisition proposal. Even then the situation can be fluid. An unwanted, unfriendly initial offer can, given negotiation, lead to a friendly tender offer and merger; a friendly negotiation can break down and lead to a hostile offer (Schwert, 2000). In neither case would perceptions of hostility have any necessary economic substance. Hostility and resistance thus do not necessarily follow from target entrenchment. They may merely reflect one side's negotiating strategy. In Schwert's view, the strategic explanation is the more likely of the two. Where hostility is an incident of strategic negotiation, the factor triggering resistance is likely to be the offer price. The bidder incurs the costs of hostility when it wants to cram down a good deal for itself and a target says no to a lowball offer.

The negotiation reading is underscored by the trend of results of studies of pretakeover target performance. Morck, Shleifer, and Vishny reported in 1988 that friendly bidders acquire target firms that underperform their industries and hostile bidders focus on underperforming industries. Martin and McConnell reduced the description's disciplinary content when reporting in 1991 that disciplinary bidders focus on firms underperforming their industries and avoid underperforming industries. Agrawal and Jaffe cut back further in 2003, finding no persuasive evidence of underperformance at all. Assuming that we can credit the results,⁹ the disciplinary merger has disappeared, statistically speaking. It

⁹ It should be noted that the methodologies employed in testing for long-term abnormal returns respecting stock prices remain controversial (Rau and Vermaelen, 1998: 224–225). Bhagat and Jefferis (2002: 89–90) argue that we should not credit the results. They enter a methodological objection. Studies that consider interrelations between governance, takeovers, turnover, performance, and capital structure do so two variables at a time. They argue for an interrelated approach based on a series of simultaneous equations specifying the relations of multiple variables. They present a study of hostile tender offer activity between 1984 and 1987. When they compare takeover and takeover defense variables by themselves the result is that defensive devices reduce

has no systematic existence. This has the effect of collapsing the synergistic and disciplinary categories and opening things up for more particular motivational descriptions. The policy implication is stark: If there is no clear cut class of disciplinary target firms, then antitakeover regulation may not entail the staggering welfare costs that many suggest.

None of the foregoing denies the possibility of entrenchment or makes governance irrelevant as a takeover motivation. Agrawal and Jaffe's data set includes only completed mergers. They cause the disciplinary merger to disappear by looking at all transactions in the aggregate and testing for poor performance as a cause. When they sort poor performers *ex ante* and look for the characteristics of mergers in the subclass, it appears that poor performance does go together with tender offers and management resistance. That finding neatly dovetails with Morck, Shleifer, and Vishny's association of hostile offers and one-person operations and Kini, Kracaw, and Mian's association of insider boards and top team turnover. It seems that hostile offerers do battle with entrenched managers within the class of poor performers. It follows that even as the disciplinary merger disappears from the general description, that the threat of a tender offer can have residual disciplinary effects. These results are not surprising. The question goes to their magnitude and policy salience.

5.3 The decline of the hostile takeover

One last finding needs to be integrated into the account—Kini, Kracaw, and Mian conclude that the tie between poor performance and removal holds for takeovers in the 1980s but not in the 1990s. This suggests that motivational profiles shifted between those two merger waves and that the description needs to be put into historical context. Significantly, when Agrawal and Jaffe describe the characteristics of transactions involving poor performers, they do so for their sample as a whole, without breaking out separate results for separate time periods. This section looks into the history.

The hostile takeover surged and peaked in the 1980s. It then nearly disappeared for a few years, and finally reappeared in the 1990s as a much reduced segment of the overall market for corporate control. Figure 5.1 draws on the Mergerstat database to compare the total number of public company acquisitions completed during the period 1974–2005 to numbers of formally registered tender offers and of registered tender offers formally opposed by target management.

the number of takeovers. When they introduce a performance variable, the sign of the relationship between defensive devices and takeovers reverses. The bottom line is that defensive devices are irrelevant and underperformance is a strong indicator. (*Ibid.* 6–7, 91–92). Whether the methodology achieves general acceptance remains to be seen.

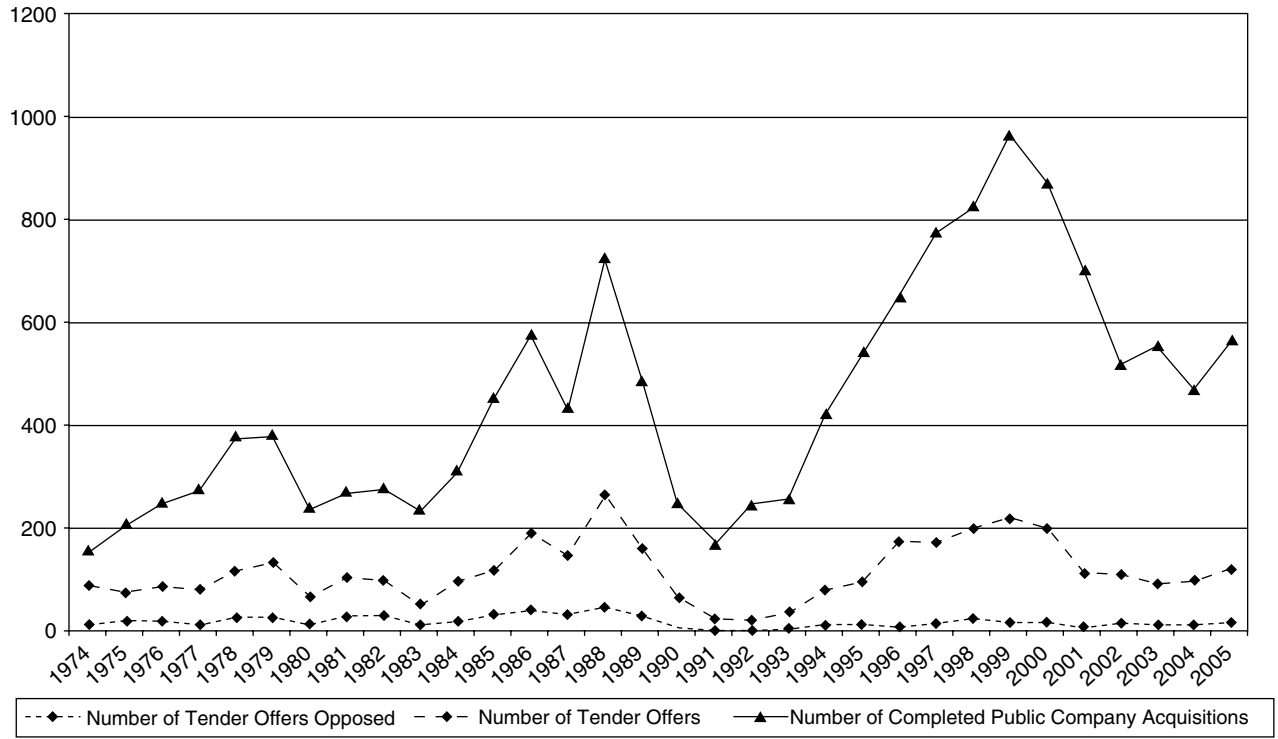


Figure 5.1 Tender offers as a subset of total number of mergers
 Source: Mergerstat.

The merger waves of the 1980s and 1990s show up clearly, punctuated by a fall off in overall activity between 1989 and 1994. For present purposes, the most significant difference lies in the waning of hostility. Although absolute numbers of tender offers recovered in the mid-1990s, they did so as a diminished proportion of overall merger activity. Moreover, the hostile tender offer did not reappear on a proportionate basis within the tender offer subset. Although it still exists, it has almost disappeared, relatively speaking.

Meanwhile, another acquisition mode characteristic of the 1980s, the leveraged buyout, has returned. Figure 5.2 presents Mergerstat data on numbers of going private transactions as a percentage of total public company acquisitions.

Mergerstat defines “going private” as an acquisition of a publicly traded company by a private investment group or individual where the buyer is not an operating business. The data thus pick up classic 1980s leveraged buyouts and their evolutionary successors, contemporary private equity transactions. Like hostile tender offers, going private deals almost disappear in the early 1990s. Unlike hostile takeovers, they make a significant comeback.¹⁰ They have done so with a modified business approach, less extreme respecting leverage and more sensitivity to synergies. But they still represent an institutional sector holding out the possibility of discipline postclosing. Preclosing hostility, however, is avoided. These are friendly combinations. Although the disciplinary merger has disappeared statistically, it survives here institutionally in substantially modified form.

This 1980s to 1990s comparison has important implications for the theory of the disciplinary merger. The surge and sudden decline of hostile offers presents a causation question. If the change should be ascribed to antitakeover regulation, there arises an inference of a disciplinary deficit and concomitant opportunity cost. If, however, the change should be ascribed to other factors, then this disciplinary disappearance need not imply significant opportunity costs.

A majority of the states in the United States added antitakeover provisions to their corporate codes during the 1980s. These make hostile acquisitions more expensive and less likely to succeed by interpolating shareholder votes or freezing target assets.¹¹ The statutes began to appear in 1982, when the U.S. Supreme Court, in *Edgar v MITE*,¹² invoked the commerce clause to invalidate an earlier generation of state statutes that subjected hostile tender offers to substantive review by state securities administrators. The post-1982, second-generation

¹⁰ Going private transactions tend to involve smaller firms, so a comparison based on transactional value rather than numbers of transactions would show a smaller percentage for going private.

¹¹ More specifically, the statutes tended either to condition the voting right of bidders on the approval of the shareholders as a whole, to impose freeze periods on combinations between bidders and targets, or to require that an equal price be paid in the second stage of a two-tier acquisition. For a summary see Romano (1993: 53–57, 74–75).

¹² *Edgar v MITE*, 457 U.S. 624, 640–646 (1982).

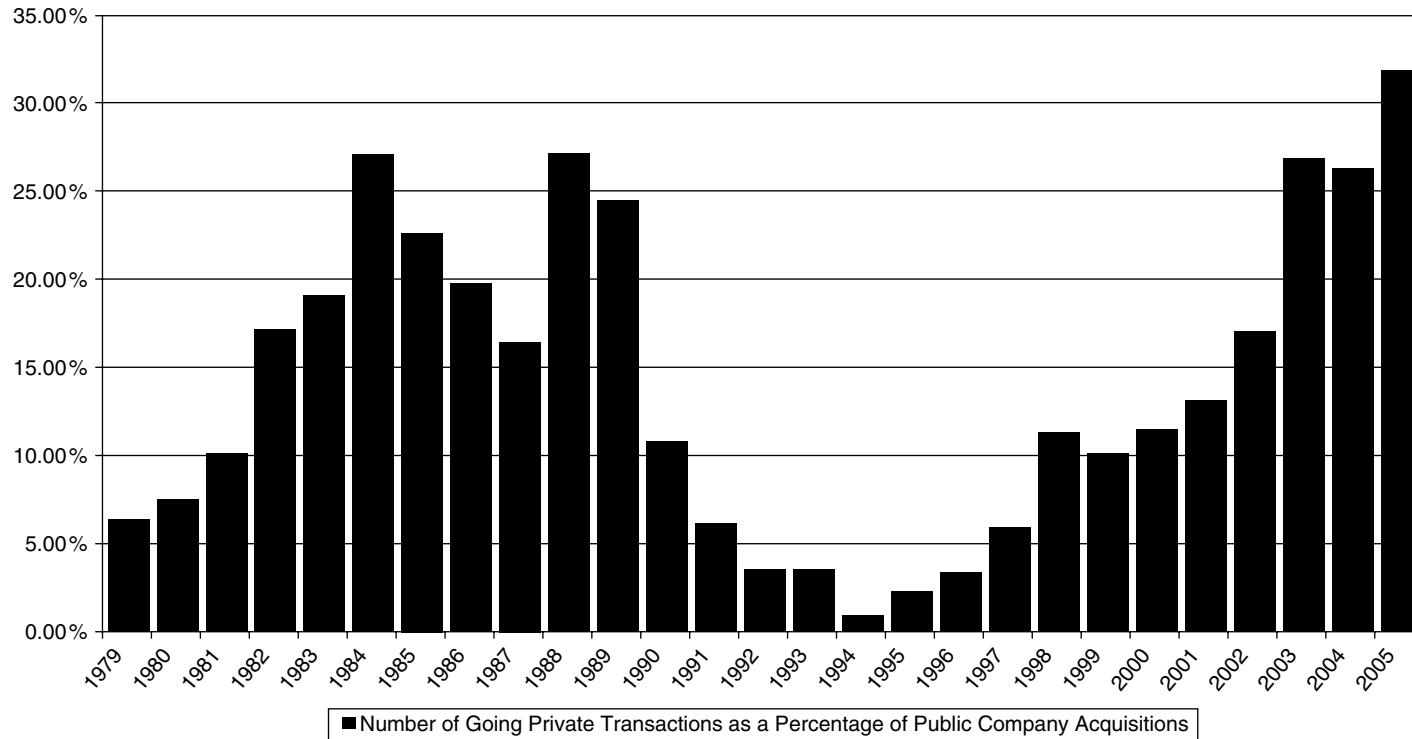


Figure 5.2 Incidence of going private

Source: Mergerstat

statutes passed constitutional inspection in 1987, when the Supreme Court decided *CTS Corp. v Dynamics Corp. of America*.¹³ Twenty states enacted such statutes in the years between the two rulings, with 14 more acting in the 6 months after *CTS* (Romano, 1988). Delaware, lagging, followed in 1988. Another antitakeover device, the poison pill, was invented by practitioners in the early 1980s and validated by the Delaware Supreme Court in 1985 in *Moran v Household International*.¹⁴ A poison pill poses a Hobson's choice to a hostile bidder—either it must negotiate with the target board and win its assent or it must mount an expensive (and often lengthy) proxy contest to take control of the board. A pill is available on short notice to any defending firm whose charter authorizes common stock in addition to that already issued. As a practical matter, all defending firms have such a charter. This means that all targets, whether or not possessing a pill when an offer is announced, can create one in sufficient time for the poison to do its job (Coates, 2000).

Many advance the view that these antitakeover measures choked off hostile takeovers (Comment and Schwert, 1995). Incidence in history is thought to support the case. The legislative antitakeover movement gathered steam between 1982 and 1988, with the burst of state legislation following the 1987 decision of *CTS* amounting to an external shock. Numbers of hostile offers started to decline in 1989. Causation is indeed implied.

Closer inspection of the history shows that the causal implication is spurious. At the time the hostile takeover waxed from 1985 to 1989 the poison pill was generally available to deter it. The proliferating state shark repellent statutes had little additional deterrent effect. As John Coates demonstrates, poison pills independently impose on the bidder the procedural burden added by the state statutes of the late 1980s (Coates, 2000). The statutes were drafted to chill the two-tier front-end-loaded tender offer—an offer for a simple majority of the stock to be followed by a merger for a lower consideration—by imposing a subsequent shareholder vote. But, given a defending target management wielding a pill, the hostile bidder must in any event take its bid to the shareholders in a proxy contest against management. In short, the costs of antitakeover barriers landed in full on bidders on November 19, 1985, the date of submission of the *Moran* opinion.

The history of the hostile takeover and of antitakeover regulation, then, is one of coincidence rather than suppression. From 1985 to 1989, the value on offer in the market for corporate control was sufficiently great to induce bids in the teeth of mature antitakeover technology. The drastic reduction in numbers that began in 1989 fully can be explained by reference to broader political and economic forces—a severe recession and concomitant credit crunch along with regulatory intervention in the credit markets (Comment and Schwert, 1995).

¹³ *CTS Corp. v Dynamics Corp. of Am.*, 481 U.S. 69 (1987).

¹⁴ *Moran v Household International*, 500 A.2d 1346 (Del. 1985).

Exogenous economic forces also explain the hostile tender offer's failure to reappear. The hostility reached its high water mark at a time when stock market prices were historically low as compared with asset values (Shleifer and Vishny, 2001). Figure 5.3 proxies for this by tracking a ratio that places the Standard & Poor 500 Average in the numerator and Nominal Gross Domestic Product in the denominator.

When the ratio is low, equities are cheap relative to the output of the overall economy. The chart shows that the 1980s held out the best opportunities for the purchase of going concern assets for cash during the half-century after 1950.

It follows that antitakeover regulation at most has a second-level deterrent effect—it reduces the volume of hostile bids by increasing costs. If the 1980s provide a guide, we will not see a new wave of hostile acquisitions until there is money on the table that can only be accessed by hostile bids. The 1990s saw a great deal of money on the table. But the money was removed from the table without resort to hostility. Voluntary management initiatives in pursuit of shareholder value and friendly mergers, with their higher success rate and lower costs, proved sufficient.

5.4 The reappearance of hostility

A new class of corporate raiders now mounts challenges to managers and business plans at publicly traded firms worldwide. Hedge funds make up the vast majority of the group, with the core group of activist players coming from an industry subgroup that invests in equities in the classic, value investor mode.

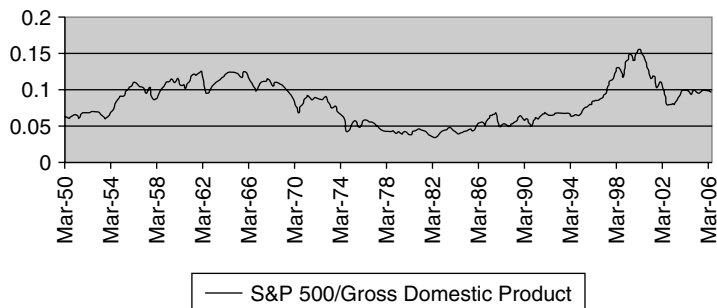


Figure 5.3 S&P 500 Gross Domestic Product

Source: Global Financial Data

The funds in this value-directed group maintain concentrated portfolios and often avoid the hedged or multistrategy approaches followed by other funds, with their managers tending to be former investment bankers or research analysts rather than quantitative experts. They do the research and know their targets well, proceeding very much in the mode of the private equity firms. Some of their managers even profess to be followers of Graham and Dodd, the mid-twentieth century financial writers whose work remains a fundamental text of value investment (Graham and Dodd, 1951). But their activist interventions break with the Graham and Dodd tradition. The leading value exponent, Warren Buffett, invests long term and stays patient, following the same cooperative strategy as the private equity investors (Lowenstein, 1995). The new activists lack this patience. They look for value but want it realized in the near or intermediate term. Their strategy is to tell managers how to realize the value and to challenge publicly those who resist their advice using the proxy contest as a threat.

The strategy has proved remarkably successful. The author has collected a database of 130 U.S. firms identified in the business press between January 1, 2002, and June 30, 2006, as a target of an “activist” hedge fund.¹⁵ The search’s objective is a representative sample of active and adversary hedge fund equity investment. In 108 of the cases, the hedge fund publicly engaged with the target, respecting the quality of its management, business plan, and governance practices. As these public inputs were uninvited, the hostile denomination applies. Table 5.1 sets out results respecting this set of targets.

Each case is assigned one outcome; for cases involving ongoing campaigns with multiple results over time, the figures reflect the most recent event in the case as of August 18, 2006. “Success” is defined capaciously to include any cognizable target concession. This includes minor concessions like investment

Table 5.1 Outcomes of hostile hedge fund engagement

Successful outcomes: 82%				
Settlement: board seat	Settlement: no board seat	Pressure: major concession	Pressure: minor concession	Proxy contest: board seat
21%	6%	24%	14%	17%
Other outcomes: 18%				
Proxy contest pending	Pressure fails: withdrawal	Proxy fails: withdrawal	Other failure	Outcome open
3%	2%	1%	2%	10%

¹⁵ The following search request was input into the Factiva and Lexis/Nexis databases: “hedge fund” and shareholder and activist.

banker engagement and governance overhauls. These cases comprise 14% of the sample. The activists usually do better, attaining board membership in 38% of the cases. The cases of major and minor concession encompass a range of outcomes. Cash payouts in the form of special dividends or share repurchases bring the target into these success categories in 25% of the cases. Mergers and acquisitions also mean success—the target has sold or liquidated in 21% of the cases and another 14% involve the sale or the sale or spinoff of a division.¹⁶ Within the group of successes, the table arranges the outcomes to highlight the cases' process characteristics, breaking out three categories—settlement, pressure, and full-dress proxy contest. A “settlement” implies an arrangement concluded as the result of negotiations between the activist and the target. These tend to accompany the initiation of a proxy fight. Concessions resulting from “pressure,” in contrast, do not stem from face to face agreement and often occur as the target's unilateral action, at least when viewed from outside. Together these cases make up 65% of the sample and 80% of the group of successes. The class of proxy contest victories makes up 17% of the sample and 20% of the successful group.

The activists use the threat of a proxy contest to get results. Only a few of the threatened contests ever ripen into a bona fide shareholder solicitation. Target managers tend to settle after running a preliminary vote count and getting bad news. Only a small number of contests in the sample have gone to the count. The activists have garnered board seats in 17 of these. Management has won a solicitation in 7 cases, 2 of them issue-based and 5 involving dissident board slates. Just looking at the contests for board seats, this means a 78% success rate. This compares with a 52% success rate derived by Ikenberry and Lakonishok (1993) for a sample of 97 board contests between 1968 and 1987. By historical standards, then, the hedge funds are doing well.

What matters in the present context, however, are two points of intersection between the new activism and the market for corporate control. In the first, the activist campaign includes a hostile offer to buy the target. In the second, a merger announced by the target triggers the activists' intervention.

5.4.1 Offers to purchase

A number of factors distinguish the governance interventions of hedge funds from those of private equity firms. Hedge funds buy small blocks, usually less than 10% of shares outstanding. They seek board membership, value enhancing restructuring, or sale of the target to a third party. Private equity investors also address governance and actively reshape business plans. But they do so behind closed doors over periods of years, after buying the company and taking it private. The amount of funds held for investment plays a role in this—the private

¹⁶ Companies may overlap in the results for sale, asset sale, and cash payout. The sale of a division often is coupled with a cash payout of the proceeds.

equity funds tend to be larger. So do differences in governing investment contracts. Contracts governing investment in hedge funds typically lock up investor capital for 6 months, although some now impose terms of 2 years or longer. Contracts governing private equity investment tend to lock up investments for 5 years, with some contracts going as far as 10 years (Kishner and Foster, 2005). These more liberal arrangements facilitate not only large, illiquid, and long-term equity positions, but patience. In contrast, the hedge funds' shorter durations, when coupled with the large, illiquid positions, invite aggression and impatience. Of course, nothing in present practice dictates the terms of the activists' future arrangements with their investors. If they obtain longer lockups, modified strategies may follow and hedge fund equity investment may more closely resemble private equity investment over time. Funds like ESL Partners and Cerberus Capital Management already have breached the divide, ESL with a control position in Sears Holdings, and Cerberus with control positions in a collection of companies.

Commentators on hedge fund activism take this as a basis for projecting an evolution toward hostile tender offers. The projection makes sense. As the distinction between hedge funds and private equity becomes less clear, we already see hedge funds enter into the bidding for companies going private. At the same time, the hedge funds do not share private equity's reputational interest in cooperative engagement. Put the two points together, and hedge fund activism finally ripens into a replay of the hostile takeover boom of the 1980s.

Although the projection makes structural sense, it finds little support in the sample. The activists have indeed made offers to purchase. Offers to purchase were made in 18 cases in the sample (MaxWorldWide, TCSI, Gyrodyne, Footstar, Mylan, GenCorp, Wells Financial, General Motors, MSC Software, Blair Corp., Circuit City, Beverly Enterprises Inc., Blockbuster Video, Cenveo Inc., PRG-Schultz, Acxiom, Whitehall Jewellers, and Houston Exploration). None of the offers has led to a merger. And, although the offers are "hostile," only three resulted in a filing of a formal SEC Form TO (General Motors, Acxiom, and Whitehall). Two of the three, Kirk Kerkorian's tender for General Motors (GM) stock and Value Act Capital's tender for Acxiom, should be put to one side. Kerkorian's GM offer, although not only initiated but closed, served only to increase the offerer's 3% ownership stake to 7.2%, not to secure control of the firm. Value Act's offer, now withdrawn after a settlement, was similar—it would have increased its stake from 11.7 to 19.9% of the stock and was conditioned on its slate being elected in an upcoming election. Whitehall was different. There the hedge fund eventually submitted a bid at an auction conducted by the target. The same thing happened in one other case (Beverly Enterprises). But in both cases the hedge fund just happened to have been beaten by a slightly higher offer (\$0.10 and \$0.30, respectively). Nor have the hedge fund offers on the whole been generous, with a median premium of 20%. In one case (Circuit City) the press commented that the offer was a transparent ploy to put the company in play so that someone else would take it over (Sorkin, 2005).

The same point seems appropriate in the other cases. The ploy succeeded in four (MaxWorldWide, TCSI, Beverly, and Whitehall). Significantly, it did not succeed in the other thirteen cases. An offer remains on the table in one of these (Houston Exploration). In the rest, the offer to purchase faded out as the activist engagement took its course.

What we have then is a variant on Schwert's (2000) description of the hostile tender offer as a negotiating move. The difference is that Schwert's offerers really sought to purchase the target. The hedge funds make the offer in an effort to get a third party to make a higher offer.

As yet, then, hedge fund activism shows no sign of reviving the hostile tender offer. The hedge funds may indeed move toward purchasing entire firms rather than blocks of stock. But, based on present evidence, they would do so by imitating the private equity firms and proceeding on a friendly basis.

5.4.2 Interventions respecting announced mergers

Mergers and acquisitions figure prominently as occasions for activist intervention. We have already seen that when a hedge fund engages, the target's sale looms large as an objective. There is another variation on this theme. Sometimes an announced merger triggers the intervention. This can occur against a firm in the process of acquiring another firm, with the objective of terminating the transaction. Intervention also can occur against a firm being acquired, with the objective of securing a higher price.

These interventions in friendly merger processes already have raised an important question concerning shareholder voting rights. This occurred when Carl Icahn attacked the Mylan Laboratories' acquisition of King Pharmaceuticals in 2004–2005. Icahn rallied Mylan shareholders to vote against the deal, while Richard C. Perry's hedge fund made a more conventional arbitrage play of investing in shares in the target and simultaneously shorting shares of the acquirer. Perry, wishing to protect the merger (and thus his investment) purchased Mylan stock in an amount matching his short position, thereby gaining control of 10% of the votes. Icahn called a foul on the ground that Perry's long/short position left him without an economic interest in Mylan. It followed, said Icahn, that Perry, despite his record ownership, should not have the privilege to vote the shares. Icahn sued, but the merger's cancellation mooted the matter.¹⁷ Icahn's challenge to Perry's votes raised an important question about the law of shareholder voting, a question well-investigated elsewhere (Hu and Black, 2006; Martin and Partnoy, 2005). The question here is broader: whether these interventions against managements' acquisition plans hold out a cognizable risk of perverse effects.

¹⁷ See *High River L.P. v Mylan Labs, Inc.*, 353 F. Supp. 3d 487 (M.D.Pa. 2005).

The sample

The database search brought up 25 cases, listed in Table 5.2, in which a merger announcement triggered activist intervention.

The table breaks the cases into two classes. In the first class, including nine of the targets, the activist stayed on for an extended engagement after the merger transaction's disposition. As to the second group, containing 16 cases,

Table 5.2 Hedge fund interventions in mergers

Merger intervention followed by governance engagement		Intervention	Outcome
Liquid Audio	2002	Buy side	Terminated (shareholder vote)
Mylan Laboratories	2004	Both sides	Terminated (adverse facts discovered)
The Stephan Company	2004	Sell side	Terminated (shareholder vote)
Computer Horizons Corp	2005	Buy side	Terminated (shareholder vote)
Spartan Stores	2005	Buy side	Terminated (pressure)
Sovereign Bancorp	2005	Buy side	Closed with concessions
Artesyn Technologies	2005	Sell side	Terminated (pressure)
InfoUSA	2006	Sell side	Terminated (pressure)
Mirant/NRG Energy	2006	Buy side	Terminated (pressure)
Merger intervention only			
Pharmacopeia/EOS Biotechnology	2002	Buy side	Terminated (pressure)
MONY/AXA	2003	Sell side	Closed with concessions
Texas Genco/NRG Energy	2004	Sell side	Closed
Hollywood Entertainment Inc.	2004	Sell side	Terminated (pressure)
IMS Health Inc./VNU	2005	Buy side	Terminated (pressure)
Transkaryotic/Shire PLC	2005	Sell side	Closed
MCI/Verizon	2005	Sell side	Closed with concessions
Molson/Coors	2005	Sell side	Closed with concessions
Inamed/Medicis	2005	Sell side	Terminated (higher offer)
Providian Financial/Washington Mutual	2005	Sell side	Closed
ShopKo Stores/Goldner Hawn	2005	Sell side	Terminated (higher offer)
Symantec/Veritas	2005	Buy side	Closed
Intellisync/Nokia	2005	Sell side	Closed
Chiron Corp.	2006	Sell side	Closing with concessions pending
Guidant/Boston Scientific	2006	Sell side	Closed (competitive bids)
Lexar Media/Micron	2006	Sell side	Closed with concessions

there is no evidence of further hedge fund engagement with the target.¹⁸ A taxonomic distinction is implied. The second group of cases involves shareholder intervention respecting a single transaction. Such sideline input from Wall Street has been a fact of life in the acquisitions market for 3 decades, generated by merger arbitrageurs in Perry's position of seeking to make sure the target gets sold at the maximum possible amount. Most of the 16 cases in the second group follow this long-standing motivational pattern. The cast of activist characters changes accordingly, with hedge funds like Perry Corporation and Elliott Associates showing up in addition to the value-oriented activist firms that pursue longer engagements with their targets. The time horizon changes also, with tighter focus on near-term gain.

A survey of the 25 listed transactions reconfirms the point that the activists influence results. Only 5 transactions in the group closed with their terms unaltered. Seven of the remaining 20 closed only after concessions, usually a price increase, with 13 having been terminated entirely. Note that the former result will be pursued by a fund with a long position in the merger target, while the latter result will be pursued by a fund with a long position in the buyer. Funds with such opposing interests have come into open conflict in only one case in addition to Mylan-King, however. In the rest, the funds show up on one side only, either as stockholders of the buyer seeking to terminate the deal (eight cases), or as stockholders of the selling firm seeking to get its terms improved (fifteen cases).

Out of 10 deals attacked on the buy side, only 1 deal closed untouched. Eight were terminated, and a 9th closed with the activist being conceded a board seat as a concession. Six of these 10 challenges fall in the first group of cases of extended engagement. Buy side intervention, then, tends to implicate a diagnosis of governance problems and a longer engagement even as it also can implicate a short-term stock price gain achieved through deal termination. Sell side intervention is more likely to focus only on the transaction, as the intervener looks for a short-term gain through a price increase.

The sell side challenges have a broader range of results. Four of the transactions closed unaltered; four closed after price concessions; and three were terminated in the wake of a higher offer from a third party. Five were terminated without a higher bid on the table, implicating the loss of a premium, albeit a premium deemed too low. Significantly, four of these terminations occurred in the first group, with activist pressure leading to a later sale in two of the four cases. In a third case, the activist now sits on the board of the unsold company. In the remaining two termination cases, an inside blockholder was attempting to take the firm private at an overly attractive price, leaving open an ongoing conflict with the public shareholders, including the hedge funds.

¹⁸ In one of these (Pharmacopeia/EOS Biotechnology), the objecting intervener was a long-term investor in the acquiring firm. There is no subsequent evidence of governance intervention, however.

Policy implication

The U.S. corporate law of mergers and acquisitions devotes itself to assuring that the selling shareholders get a fair price, deploying fiduciary duties and appraisal rights to that end. While investors may object to the price in a particular deal, in a world where premiums range between 20% and 50%, no one deems selling prices to amount to a policy problem. The problem lies on the opposite side—a fair selling price can mean an excessive purchase price. U.S. corporate law, however, is more relaxed about fairness to buy side shareholders. In the usual case, the board of directors' decision to purchase lies in business judgment territory, and shareholder appraisal rights do not obtain.¹⁹ At best, the dissatisfied purchasing shareholders have a vote,²⁰ and hence a collective action problem in imposing their view that the deal is bad.

Many purchases turn out to be just that. The merger premium appears in most cases to be so substantial as to arrogate the entire merger gain to the selling shareholders. Studies of announcement period price effects bear out this assertion with a stark allocational picture. While the selling firm's shares go up a consistent 16% during the three days surrounding announcement, the purchaser's shares go down—the average was -0.3% in the 1970s, -0.4% in the 1980s, and -1.0% in the 1990s (Andrade, Mitchell, and Stafford, 2001). Over a time window of several months, target shares average an increase of 23.8%, while buyer shares on average go down around 4%.²¹ The figures imply consistent losses to buy-side shareholders.

A reference to portfolio theory makes the results less disturbing. Most purchasing firm shareholders own their shares in diversified portfolios. They thus stand on both sides of the deal and so are indifferent to the division of gain as between the parties to the deal (Hansen and Lott, 1996). So long as the combined result for the two firms nets out positive, everything is fine. And such was the overall case until the late 1990s: From 1973 to 1998, the combined 3-day window result averaged a positive 1.8%; from 1980 to 1989, the average was

¹⁹ See Delaware General Corporation Law § 262(b)(1)(removing appraisal rights for shareholders of listed companies and shareholders not entitled to vote on the merger).

²⁰ And not in all cases. Delaware General Corporation Law §§251(c),(f) provides for a shareholder vote at the buyer unless the number of new buyer shares issued in the merger exceeds 20%. A buyer can get around the vote by organizing a subsidiary corporation to conduct the transaction. Stock exchange rules constrain the move, however. See New York Stock Exchange Listed Company Manual § 312.03 (2004) (requiring a vote in any case where the number of buyer shares increases in an amount equal to or greater than 20%).

²¹ The decline was -4.5% in the 1970s, -3.1% in the 1980s, and -3.9% in the 1990s (Andrade, Mitchell, and Stafford, 2001: 109–110). There is a literature that sorts for the characteristics of bidder firms with low abnormal returns. Moeller, Schlingemann, and Stulz (2005: 770–771) summarizes the results as follows: abnormal returns are lower for (1) low leverage firms, (2) low Tobin's Q firms, (3) firms with large cash holdings, (4) firms with low managerial ownership of shares, and (5) large capitalization firms. Lower abnormal returns also are associated with certain transactions, (1) public firm targets, (2) target opposition, (3) conglomerate results, (4) competitive bidding, and (5) stock consideration.

2.6%; and from 1990 to 1998 the figure was 1.4% (Andrade, Mitchell, and Stafford, 2001).

Unfortunately, a cluster of mergers in the late 1990s reversed the 1.8% long-term positive. Moeller, Schlingemann, and Stulz (2005) marshal some shocking 3-day announcement returns. They show that from 1980 to 1990, purchasing firms' shares lost an aggregate \$4 billion, and from 1990 to 1997 they gained \$24 billion. From 1998 to 2001, however, they lost \$240 billion, bringing down the 1990 to 2001 result to a \$216 billion buyer loss. The 1998 to 2001 numbers are so bad that they make for a negative combined result of \$134 billion for buyers and sellers in the period. The negative dominoes fall from there. Where in the 1980s combined returns were a positive \$12 billion, from 1991 to 2001 the combined loss was \$90 billion. That nets out to a \$78 billion loss for 1980 to 2001, stemming from 87 out of 4,136 deals in the authors' sample.²²

Herein lies a great potential for the activists to do some good, just by enhancing the chance of shareholder disruption of a friendly merger. The managers of a potential buyer now have to worry about attack on two fronts. Complaints by dissatisfied selling shareholders (and the fiduciary duties of the seller's managers) continue to increase the likelihood of renegotiation for a higher price or the appearance of a third party with a higher offer. But now the buyers' own shareholders may not only object to the transaction, their objection may imply a credible threat to the firms' business plan and the incumbency of its managers. Prudent managers accordingly will take more care in selecting, structuring, and pricing their transactions.

The question arises whether intimidated managers will be deterred from entering into beneficial combinations. This seems highly unlikely for three reasons. First, because deal pressure arises within industries, managers proactively look for acquisitions as means of self-defense. Second, the markets are full of intermediaries who add to deal pressure in order to generate fees. Third, the markets are also full of institutional investors looking for sell side premiums, the hedge funds prime among them. Note that the balance of pressure in the sample lies squarely on the selling side. Even when an activist intervenes to terminate a purchase, it often does so for the purpose of turning the buyer into a seller. One suspects that buy/sell standoffs, as in Mylan, will not occur very often. But, when they do, we should not presume them to be harmful.

5.5 Conclusion

Hostility lost its salient role in the U.S. merger market due to the recovery of stock market prices and constraints on the availability of debt capital. In the

²² The most prominent common feature among the purchasing firms involved was prior acquisition behavior. They are serial acquirers with high market valuations. In the past they had made value enhancing acquisitions. Moeller, Schlingemann, and Stulz suggest that the pattern of success caused an increase in the managers' zone of discretion. The managers then push the acquisition pattern too far and the market withdraws its support (*Ibid.* 760, 777).

changed environment, cooperation made better cost sense. Antitakeover regulation cannot be dismissed as irrelevant, for it raised the cost of hostility. But results yielded by studies of target characteristics and merger motivation come to bear to suggest that any negative consequences for economic welfare are modest. Absent a disciplinary merger with a verifiable positive profile, anti-takeover regulation is not a priority item on the corporate governance agenda. Meanwhile, hostility recently has returned. Now governance and the boardroom are the venues, rather than the market for corporate control. But there is a point of intersection. The activists interfere with the friendly market's operation, intervening on both sides of announced transactions. On the sell side, they augment standing pressure for higher premiums, joining an established cast of Wall Street players. On the buy side they interject a welcome note of resistance, forcing acquiring firms to take more care against overpaying. As yet, however, there is no sign of a revival of the hostile tender offer.

References

- Agrawal, A. and Jaffe, J. F. (2003a). Do takeover targets underperform? Evidence from operating and stock returns. *Journal of Financial and Quantitative Analysis* 38, 721–746.
- Agrawal, A. and Jaffe, J. F. (2003b). “Do Takeover Targets Underperform? Evidence from Operating and Stock Returns.” SSRN, working paper.
- Andrade, G., Mitchell, M., and Stafford, E. (2001). New evidence and perspectives on mergers. *Journal of Economic Perspectives* 15, 103–120.
- Bebchuk, L. A. (2002). “The Case against Board Veto in Corporate Takeovers.” NBER, working paper.
- Bebchuk, L. A. (2005a). The case for increasing shareholder power. *Harvard Law Review* 118, 833–913.
- Bebchuk, L. A. (2005b). “The Myth of the Shareholder Franchise.” SSRN, working paper.
- Becht, M., Bolton, P., and Roell, A. (2002). “Corporate Governance and Control.” European Corporate Governance Institute, Finance Working Paper Group, working paper.
- Bhagat, S. and Jefferis, Jr., R. H. (2002). “The Econometrics of Corporate Governance Studies.” MIT Press, Cambridge.
- Blair, M. M. (2004). Reforming corporate governance: What history can teach us. *Berkeley Business Law Journal* 1, 1–44.
- Brealy, R. A. and Myers, S. C. (1991). “Principles of Corporate Finance.” McGraw-Hill, New York, 4th ed.
- Brealy, R. A. and Myers, S. C. (1996). “Principles of Corporate Finance.” McGraw-Hill, New York, 5th ed.
- Coates, J. C. IV (1999). Measuring the domain of mediating hierarchy: How contestable are U.S. public corporations? *Journal of Corporation Law* 24, 837–868.

- Coates, J. C. IV (2000). Takeover defenses in the shadow of the pill: A critique of the scientific evidence. *Texas Law Review* 79, 271–382.
- Comment, R. and Schwert, G. W. (1995). Poison or placebo? Evidence on the deterrence and wealth effects of modern antitakeover measures. *Journal of Financial Economics* 39, 3–43.
- Franks, J. and Mayer, C. (1996). Hostile takeovers and the correction of managerial failure. *Journal of Financial Economics* 40, 163–181.
- Franks, J., Mayer, C., and Renneboog, L. (2001). Who disciplines management in poorly performing companies? *Journal of Financial Intermediation*, 209–248.
- Graham, B. and Dodd, D. L. (1951). “Security Analysis: Principles and Technique.” McGraw-Hill, New York, 3rd ed.
- Hansen, R. G. and Lott, J. (1996). Externalities and corporate objectives in a world with diversified shareholders/consumers. *Journal of Financial and Quantitative Analysis* 31, 43–68.
- Holmstrom, B. and Kaplan, S. (2001). Corporate governance and merger activity in the United States: Making sense of the 1980s and 1990s. *Journal of Economic Perspectives* 15(2), 121–144.
- Hu, H. and Black, B. (2006). The new vote buying: Empty voting and hidden morphable ownership. *Southern California Law Review* 79, 811–907.
- Ikenberry, D. and Lakonishok, J. (1993). Corporate governance through the proxy contest: Evidence and implications. *Journal of Business* 66, 405–435.
- Jensen, M. C. (1988). Takeovers: Their causes and consequences. *Journal of Economic Perspectives* 2(1), 21–48.
- Kini, O., Kracaw, W., and Mian, S. (1995). Corporate takeovers, firm performance and board composition. *Journal of Corporate Finance* 1, 383–412.
- Kini, O., Kracaw, W., and Mian, S. (2004). The nature of discipline by corporate takeovers. *Journal of Finance* 59, 1511–1552.
- Kishner, I. A. and Foster, K. M. (2005). The new masters of the buyout universe. *New York Law Journal*, November 7, 11.
- Lowenstein, R. (1995). “Buffett: The Making of an American Capitalist.” Random House, New York.
- Lyon, J. D., Barber, M., and Tsai, C. L. (1999). Improved methods for tests of long-run abnormal stock returns. *Journal of Finance* 54, 165–201.
- Martin, K. J. and McConnell, J. J. (1991). Corporate performance, corporate takeovers, and management turnover. *Journal of Finance* 46, 671–687.
- Martin, S. and Partnoy, F. (2005). “Encumbered Shares.” *University of Illinois Law Review*, 775–814.
- McGuckin, R. H. and Nguyen, S. V. (1995). On productivity and plant ownership change: New evidence from the longitudinal research database. *Rand Journal of Economics* 26, 257–276.
- Mitchell, M. and Lehn, K. (1990). Do bad bidders make good targets? *Journal of Political Economy* 98, 372–398.

- Mitchell, M. and Mulherin, J. H. (1996). The impact of industry shocks on takeover and restructuring activity. *Journal of Financial Economics* **41**, 193–229.
- Moeller, S. B., Schlingemann, F. P., and Stulz, R. M. (2005). Wealth destruction on a massive scale? A study of acquiring firm returns in the recent merger wave. *Journal of Finance* **60**, 757–782.
- Morck, R., Shleifer, A., and Vishny, R. (1989). Alternative mechanisms for corporate control. *American Economic Review* **79**, 842–852.
- Rau, P. R. and Vermaelen, T. (1998). Glamour, value and the post-acquisition performance of acquiring firms. *Journal of Financial Economics* **49**, 223–253.
- Romano, R. (1988). The future of hostile takeovers: Legislation and public opinion. *University of Cincinnati Law Review* **57**, 457–506.
- Romano, R. (1993). “The Genius of American Corporate Law.” American Enterprise Institute, Washington.
- Schwert, G. W. (2000). Hostility in takeovers: In the eyes of the beholder? *Journal of Finance* **55**, 2599–2640.
- Shearer, B. (2006). Revolt snaps into deal-killer mode. *Mergers and Acquisitions Journal*, Jan. 1.
- Shleifer, A. and Vishny, R. (2001). “Stock Market Driven Acquisitions. NBER, working paper.
- Sinha, R. (2004). The role of hostile takeovers in corporate governance. *Applied Financial Economics* **14**, 1291–1314.
- Smiley, R. (1976). Tender offers: Transaction costs and the theory of the firm. *Review of Economics and Statistics* **58**, 22–32.
- Song, M. H. and Walkling, R. A. (2005). “Anticipation, Acquisitions and Bidder Returns.” Dice Center, working paper.
- Sorkin, A. R. (2005). “They’re All Paying Customers to Wall Street.” *New York Times*, Dec. 11, 2005, 5.
- Stout, L. A. (2003). The shareholder as Ulysses: Some empirical evidence on why investors in public corporations tolerate board governance. *University of Pennsylvania Law Review* **152**, 667–712.

This page intentionally left blank

6 Corporate governance and acquisitions: acquirer wealth effects in the Netherlands

*Abe de Jong,¹ Marieke van der Poel,
and Michiel Wolfswinkel*

Abstract

We examine 865 acquisitions by Dutch industrial firms over the period 1993–2004. Theoretical work based on principal–agent problems predicts that managers of exchange-listed corporations may pursue acquisitions even when these do not add value for the shareholders. Corporate governance structures serve to constrain managers in their acquisition activity. In this chapter we measure the shareholder wealth effects of acquisitions and the factors that determine these wealth effects, including the governance characteristics of corporations. Firms in the Netherlands are interesting from the perspective of corporate governance, because the managerial board has a relatively strong position vis-à-vis shareholders. Several takeover defenses commonly used in the Netherlands not only limit shareholder influence during takeover battles, but also in absence of such fights. On the other hand, ownership is relatively concentrated, which may provide shareholders with the incentives and power to monitor the management. The average abnormal stock return following acquisition announcements is 1.1%, which is a significantly positive effect. There is only a significant negative impact of the so-called structured regime, a situation where several shareholder rights are delegated to the supervisory board. This result suggests that governance improves acquisition decisions.

6.1 Introduction

This chapter examines acquirer wealth effects around acquisition announcements by Dutch firms. In the Netherlands the market for corporate control is virtually absent. Dutch firms can use several types of defense mechanisms as a protection against hostile takeovers and as a restriction of shareholders' influence. As a result, shielded by

¹ Abe de Jong is the corresponding author: Department of Financial Management, Room T9-53, P.O. Box 1738, 3000 DR Rotterdam, RSM Erasmus University, The Netherlands. Phone: +31 10 408 1022, Fax: +31 10 408 9017, Email: ajong@rsm.nl. The opinions expressed in this article represent the authors' strictly personal views and opinions and cannot in any way be construed as statements or views of ENECO Energie NV.

defense mechanisms, Dutch managers can exercise more discretion in their corporate investment decisions than their counterparts in Anglo-Saxon countries.

Several studies examine acquirer wealth effects of U.S. firms during the days around their acquisition announcements. The evidence of these studies is mixed. Some studies find zero or positive shareholder returns around acquisition announcements (e.g., Lang, Stulz, and Walkling, 1991; Masulis, Wang, and Xie, 2006; Moeller, Schlingemann, and Stulz, 2004, 2005; Morck, Shleifer, and Vishny, 1990), whereas other studies find negative returns (e.g., Andrade, Mitchell, and Stafford, 2001; Franks, Harris, and Titman, 1991; Mulherin and Boone, 2000). When taking the change in dollar value into account, the results of Moeller, Schlingemann, and Stulz (2004, 2005) suggest that overall shareholders lose money. In the 1980s shareholders lost a total of \$7 billion, while in the period 1991–2001 the loss amounted to \$216 billion. Strikingly, in the 1998–2001 period dollar returns add up to a loss of \$240 billion, which is mainly the result of a small number of large losses by firms with high market valuations. The acquisition literature knows a few studies on shareholder wealth effects of European acquiring firms. The studies on European acquisitions find on average positive shareholder returns for acquiring firms (Goergen and Renneboog, 2004; Martynova and Renneboog, 2006).

Even though several studies find on average positive returns around acquisition announcements, the percentage of firms experiencing negative returns is still high. A widely proposed explanation for the negative shareholder returns is agency problems as a result of the separation between ownership and control (Berle and Means, 1932; Jensen and Meckling, 1976). Managers would rather make non-value maximizing acquisitions to build their empire than pay out excess cash to shareholders (Jensen, 1986). In other words, by pursuing their own objectives and thereby increasing their own utility rather than maximizing shareholders' wealth, managers invest beyond the optimal size. A possible consequence of this overinvestment problem is that managers overpay for targets that provide private benefits (Morck, Shleifer, and Vishny, 1990), such as entrenchment benefits (Shleifer and Vishny, 1989), which result in negative returns for the acquiring firm's shareholders. In a recent contribution to the agency literature Jensen (2005) argues that managers may be motivated to acquire by high stock prices. Agency costs of overvalued equity arise in case managers make poor acquisitions in order to aim to fulfill unrealistic expectations of the stock market.

Adequate corporate governance should diminish agency problems in acquisition decisions. One of the forces that discourages managers from empire building is the market for corporate control in the sense that firms making value-decreasing acquisitions are more likely to be acquired later (Mitchell and Lehn, 1990). However, takeover defenses decrease the probability of being taken over, which could lead to an insulation of managers from the discipline of the market for corporate control (Bebchuk, Coates, and Subramanian, 2002; Field and Karpoff, 2002). Previous studies find takeover defenses negatively influence firm value and long-run stock performance (Bebchuk, Cohen, and Ferrell, 2005; Gompers, Ishii, and Metrick, 2003). Specifically, Gompers, Ishii, and Metrick (2003) construct a

governance index, which is a score for the number of takeover defenses and other antishareholder provisions out of a set of 24 provisions. The authors find firms with weaker shareholder rights have a lower firm value, make more acquisitions, are less profitable and have lower sales growth. Bebchuk, Cohen, and Ferrell (2005) refine this study by investigating which provisions from the governance index are the main drivers that negatively influence firm value. Their study suggests that just six out of the twenty-four provisions play a key role in explaining firm value. The six provisions consist of four provisions that limit shareholder voting power—that is, staggered boards, limits to shareholder amendments of the bylaws, supermajority requirements for mergers, and supermajority requirements for charter amendments—and two provisions that prevent hostile takeovers—that is, poison pills and golden parachute arrangements. Although these studies contribute the negative relation to agency problems, they do not specify the reasons behind the negative impact. Masulis, Wang, and Xie (2006) go one step further and examine the impact of takeover defenses of U.S. firms on shareholder returns around acquisition announcements. They find that firms with more antitakeover defenses exhibit lower shareholder returns around acquisition announcements relative to firms with less defenses. These findings suggest that managers, who are insulated from the market for corporate control by incorporating takeover defenses, are more likely to make non-value maximizing acquisition decisions.

In this chapter, we describe the acquisition activity of Dutch industrial firms and the related wealth effects of the acquiring firms' shareholders for the period from 1993 until 2004. We are especially interested in the impact of corporate governance on shareholders' wealth changes following acquisition announcements by Dutch firms. As Dutch firms deploy several types of defense mechanisms (De Jong, DeJong, Mertens, and Wasley, 2005; De Jong, Kabir, Marra, and Röell, 2001; Kabir, Cantrijn, and Jeunink, 1997; Renneboog and Szilagyi, 2006), managers can exercise more discretion with their acquisition decisions. In particular, firms that reach a certain size are required to adopt the *structured regime*, as a result of which qualifying firms are obliged to set up a supervisory board. This supervisory board inherits many powers, which are otherwise held by shareholders. Apart from the structured regime, Dutch firms can introduce three types of securities that restrict shareholders' influence on company decisions and act as defense mechanism against hostile takeovers. First, *certificates* through which holders have the same rights as holders of common shares with the exception of voting rights. Second, Dutch firms can install the option to sell *preference shares* to friendly shareholders during takeover threats, which is equivalent to U.S. firms using poison pills as a takeover defense. Third, through *priority shares*, firms can provide friendly shareholders with special rights such as merger approval, new public offerings, nomination of board members, charter amendments, and company liquidation. Corhay and Tourani Rad (2000) also examine abnormal returns of acquisition announcements disclosed by Dutch firms, however, focus is exclusively on cross-border acquisitions. Besides, the authors do not relate corporate governance characteristics to an acquirer's returns. On the contrary, our study relates specific details of the corporate governance mechanisms of acquiring firms

with shareholders' wealth of these firms. We expect firms that are well-governed to make value-enhancing acquisition decisions. We also distinguish between deals in which shareholders experience large losses and deals without such large losses. Moeller, Schlingemann, and Stulz (2005) suggest that wealth-destructing deals are more likely to take place when managerial discretion plays a larger role. The authors find firms with high valuations to be more likely to make losses of more than \$1 billion when announcing an acquisition. However, they do not provide direct evidence of the impact of corporate governance on the likelihood of these deals. We investigate whether good corporate governance mechanisms prevent firms from performing wealth-destructing acquisitions.

Our findings suggest a minor influence of corporate governance on acquisition announcements in the Netherlands. On average, acquirer returns are 1.1% and the average increase in shareholders' wealth is €18 million. In explaining acquirer returns, we find just one governance variable to be statistically significant, i.e., the structured regime dummy. The regression coefficient suggests 1.0% lower acquirer returns following acquisition announcements of firms that operate under the structured regime as compared to firms that do not operate under such a regime. This is in line with the notion that shareholders have limited power over firm's decisions when these firms adopt a structured regime. We find the same striking result as Moeller, Schlingemann, and Stulz (2005) that during 2001 and 2002 average acquirer percentage returns are positive, whereas the total euro wealth effect for shareholders is negative. Consequently, we investigate which firms are more likely to make wealth-destructing deals. A binary logit analysis suggests that managers of firms that provide room for exercising discretion in their acquisition decisions are more likely to make deals in which shareholders lose more than €150 million. Specifically, a firm's Tobin's q , leverage, and firm size increase the probability of making large losses during acquisition announcements. A higher likelihood of making value-destructing acquisitions of firms with more leverage may seem counterintuitive; however, managers of Dutch firms avoid the disciplining role of debt, especially when they overinvest (De Jong, 2002). Therefore, shareholders of firms with high leverage can perceive acquisition announcements as highly risky, which may bring about a stronger negative response resulting in large loss deals. In line with our expectations, a smaller relative size of the executive board and firms that have priority shares are more likely to lead to value-destructing acquisitions. However, preference shares decreases the likelihood of value-destructing acquisitions.

The structure of this chapter is as follows. Section 6.2 describes the Dutch situation and previous findings of factors that influence shareholders' wealth effects. Subsequently, Section 6.3 discusses the research design. Section 6.4 describes the empirical results, and we end the chapter by providing a conclusion in Section 6.5.

6.2 Literature review

This section first provides a description of the Dutch setting. Subsequently, we briefly discuss previous studies on the factors that influence shareholder returns around acquisition announcements.

6.2.1 The Dutch situation

The basis of Dutch corporate law is the shareholder-controlled firm with a management board and supervisory board. Shareholders' rights consist of electing members of the management board and supervisory board, and formally approving dividend policy and the annual accounts. Shareholders are also allowed to vote on major decisions, such as mergers and acquisitions. However, firms that are incorporated within the Netherlands are able to severely restrict the power of shareholders in four ways.²

Firms with a book value of shareholders' equity of at least € 11.4 million, with more than 100 persons employed within the Netherlands and the legal obligation to set up a works council, are required to adopt the structured regime. These firms are obliged to set up a supervisory board that takes over several powers from shareholders, including the authority over major decisions, the election of the management and supervisory board, and the establishment and approval of annual accounts. It is important to note that shareholders retain their right to vote on mergers and acquisitions. Multinationals with more than half of their employees abroad are exempted from the requirement of adopting a structured regime. However, they can operate under this regime on a voluntary basis, which is applied by most multinationals.

Apart from the structured regime, firms can implement three types of securities that restrict shareholders' influence on company decisions and act as takeover defenses. First, Dutch firms can set up a trust office that holds the firm's shares and issues certificates to the investors. Although certificate holders retain their dividend rights, they can freely trade their certificates and attend the general meeting of shareholders. However, they cannot vote. The trust office takes over all voting rights and is normally friendly to the incumbent managers. In practice, certificates enable managers to pursue their own objectives and provide a defense against firms that are willing to acquire the firm. Second, when firms experience a takeover threat, they can sell preference shares to friendly shareholders or a trust office. The main purpose of preference shares is to change the balance of power between shareholders as preference shares carry full voting rights, even though they may not be fully paid up. The shareholders have to pay 25% of the nominal value up front, and the maximum amount of preference shares that can be issued is 50% or 100% of the current outstanding nominal capital. To be able to issue preference shares without shareholders' consent, firms set up a trust office with an option on these shares. Third, Dutch firms may have priority shares that carry special rights, such as merger approval, new public offerings, nomination of board members, charter amendments and company liquidation, to friendly shareholders as takeover defense. As shareholders' power with firms is severely restricted and Dutch firms widely implement these takeover defenses, the provisions of Euronext Amsterdam since 1989 allow firms to only use two types out of the latter three takeover defenses.

² De Jong, Kabir, Marra, and Röell (2001) provide an extensive description about the ownership and control of listed firms in the Netherlands.

The use of these takeover defenses has implications for firm value. Consistent with previous research on takeover defenses, De Jong, DeJong, Mertens, and Wasley (2005) find all four takeover defense mechanisms to be negatively related to firm performance, measured by Tobin's q . A possible reason for the lower Tobin's q is the minor influence shareholders can exert on firms' decisions. De Jong, Mertens, and Roosenboom (2004) provide evidence that the use of certificates, priority shares, and the adoption of a structured regime decreases the probability that shareholders vote against proposals during general meetings of shareholders. On the other hand, their results show a positive relation between the use of preference shares and the probability of votes against proposals. Renneboog and Szilagyi (2006) also show that shareholders of Dutch firms have a weak position, as they find that firms adopting the structured regime and firms that use preference shares relax their dividend policy.

Other noticeable governance characteristics of Dutch firms include ownership structure, cross-listings in the United States and United Kingdom, and the low disciplining impact of leverage. First, the ownership structure of Dutch firms is relatively concentrated (De Jong, Kabir, Marra, and Röell, 2001; Kabir, Cantrijn, and Jeunink, 1997), while the voting rights in Dutch firms are more concentrated than ownership rights. This unequal distribution is due to the takeover mechanisms in which blocks of shares are controlled by trust offices (De Jong, Kabir, Marra, and Röell, 2001). Furthermore, Dutch firms with a less concentrated ownership structure are more likely to adopt takeover defenses (Kabir, Cantrijn, and Jeunink, 1997). Many Dutch firms have a cross-listing in the United States, the United Kingdom, or both. In our sample, this holds for 32% of the firms. By means of a cross-listing in one of these two countries, firms can bond themselves in terms of legal liability exposure and reputation (Coffee Jr., 1999, 2002). In other words, a cross-listing in the United States or United Kingdom leaves less room for discretionary behavior (De Jong, Mertens, and Van der Poel, 2006). Leverage is another device to discipline managers to make value-maximizing decisions (Jensen, 1986). However, De Jong (2002) finds that this does not apply for managers of Dutch firms. The author provides evidence that for case managers who are most likely to overinvest, they avoid the disciplining role of debt.

6.2.2 Acquirer wealth effects around acquisition announcements

As previously mentioned, studies on the shareholder wealth effects of acquiring firms directly around acquisition announcements provide mixed results. These wealth effects depend on firm and deal specific characteristics.

According to Jensen (1986), managers would rather make non-value maximizing acquisitions than pay out excess cash to shareholders. In line with this overinvestment hypothesis, Lang, Stulz, and Walkling (1989) and Servaes (1991) show that acquisitions by firms with a low Tobin's q negatively influence shareholders' wealth. Besides, as firms with a low Tobin's q are not likely to have positive net present value projects, the probability that managers of these firms make non-value maximizing acquisitions increases when having enough free cash flow

(Jensen, 1986). Lang, Stulz, and Walkling (1991) provide empirical evidence that is consistent with this theory. Bidders with a high Tobin's q increase shareholders' wealth when acquiring low q targets (Lang, Stulz, and Walkling, 1989; Servaes, 1991). These studies interpret high q firms as well-managed firms that acquire poorly managed firms (i.e., low q firms).

A recent theory by Jensen (2005) is based on observed acquisition behavior of highly valued firms (i.e., high q firms). In these firms agency problems due to overvalued equity bring about more managerial discretion, increasing the probability of bad acquisitions when firms have run out of good ones. Jensen's argument is that in case the stock market attaches unrealistic high stock prices to firms, managers will under normal business practice not be able to deliver the performance implied by the pricing. This leads to "managerial heroin," that is, using the overvalued equity to make long run value-destroying acquisitions.

According to financial economic theory, the disciplining role of leverage has a positive impact on acquirer returns (Maloney, McCormick, and Mitchell, 1993). Debt serves as a monitoring device, providing less leeway for managers in making acquisition decisions (Jensen, 1986). Hence, leverage increases the probability of value-enhancing acquisitions. Moeller, Schlingemann, and Stulz (2004) find that firm size is negatively associated with shareholder returns of acquisition announcements. The authors relate the size effect with the difference of deal (e.g., equity/cash payment, private/public target) and firm characteristics (e.g., Tobin's q and leverage) between small and large firms.

In terms of deal characteristics, previous studies find that U.S. firms that fully finance their acquisitions with cash experience higher abnormal returns than equity-financed deals (e.g., Franks, Harris, and Titman, 1991; Moeller, Schlingemann and Stulz, 2004; Servaes, 1991). Acquiring firms finance with equity to force target shareholders to share the risk that the price for the target was too high (Hansen, 1987). An alternative explanation is that the acquiring firms are overvalued and aim to decrease their overvaluation by acquiring less overvalued targets with cheap equity (Shleifer and Vishny, 2003). However, Goergen and Renneboog (2004) show opposite results for European firms. Acquirer returns of European firms that pay with equity are higher than that of European firms that pay with cash. The returns for both payment methods are significantly positive. A possible explanation for this opposite result is that European firms acquire private firms more often, which is in line with U.S. evidence that equity payments with the acquisition of private firms yield positive abnormal returns, whereas equity payments with the acquisition of public firms yield negative abnormal returns (Chang, 1998; Moeller, Schlingemann, and Stulz, 2004). Overall, firms experience a positive shareholders' reaction in case they announce an acquisition of a private firm and a negative shareholders' reaction in case of a public firm in both the United States and Europe (Martynova and Renneboog, 2006; Moeller, Schlingemann, and Stulz, 2004).

More diversified firms trade at a discount, due to, among others, inefficient investment and cross-subsidization (Berger and Ofek, 1995; Rajan, Servaes, and Zingales, 2000; Scharfstein and Stein, 2000). As a result, diversifying acquisi-

tions negatively contributes to shareholders' wealth. This negative impact applies to U.S. firms (Morck, Shleifer, and Vishny, 1990), European firms (Martynova and Renneboog, 2006) and, more specifically, to Dutch firms (Corhay and Tourani Rad, 2000). Global diversification seems to have a similar impact on acquisitions as industrial diversification. In particular, the excess value of more globally diversified firms is smaller than less globally diversified firms (Denis, Denis, and Yost, 2002). Besides, cross-border acquisitions provide lower abnormal returns than domestic acquisitions in the United States (Moeller and Schlingemann, 2005). The impact of cross-border deals by European firms provides mixed results. Consistent with results for U.S. firms, Martynova and Renneboog (2006) find larger acquirer returns for domestic acquisition announcements relative to cross-border announcements for a sample of 2,419 European acquisitions. However, Goergen and Renneboog (2004) examine the returns of 228 acquisitions with a value of at least \$100 million and find the opposite result. The latter results are mainly driven by U.K. acquirers. In contrast to Continental Europe, the United Kingdom knows a highly active market for corporate control and has a high degree of shareholder protection (La Porta, Lopez-de-Silanes, Shleifer, and Vishny, 1998). Corhay and Tourani Rad (2000) examine cross-border acquisitions by Dutch firms and find small average positive abnormal returns for acquisitions in Western Europe (1.44% for 11 days around the announcement) and the United States (0.25% for 5 days after the announcement and 4.83% for 91 days around the announcement), but no significant abnormal returns for acquisitions in Eastern Europe.

6.3 Research design

This section first discusses the data selection procedure, followed by a description of variables that we use for the analysis. Finally, we will describe our empirical models.

6.3.1 Dataset

Our data collection starts with all Dutch exchange-listed firms over the period 1993–2004. We focus on industrial firms, i.e., we exclude financial and service companies. In total, we study the acquisition announcements of 90 firms. For each firm we search the electronic version of the Dutch financial daily, *Het Financieele Dagblad*. We retrieve all newspaper articles with the company names in the title or the body of the text and manually identify articles with the initial announcements of acquisitions. In total, we include 865 acquisition announcements by 64 firms.

For the 64 firms (in 312 firm years) we collect financial and corporate governance characteristics from several sources. We obtain stock and index returns from Datastream. Financial data are obtained from the REACH database (Review

and Analysis of Companies in Holland by Bureau Van Dijk) and *Handboek Nederlandse Beursfondsen*. Board and ownership data are taken from the *Handboek Nederlandse Beursfondsen*, *Jaarboek Nederlandse Ondernemingen* and yearly overviews of WMZ notifications in *Het Financieele Dagblad*.³ Takeover defenses and cross-listings are taken from the *Effectengids*, a yearly guide with all exchange-listed securities in Amsterdam. The information on the application of the structured regime is obtained from the Monitoring Report 1997 and firm's annual reports. In order for a firm-year to be included we require that data are available for all items.

6.3.2 Variables definition

This section defines the firm and deal variables that we use in our empirical analysis. The Tobin's q is the market value of the firm divided by the replacement value of the assets as calculated in De Jong, DeJong, Mertens, and Wasley (2005). In the Netherlands, firms base the value of their assets either on their replacement value or on historical costs. In case of the replacement value, no change was necessary. In case of historical costs, we adjust this value toward its replacement value. We measure free cash flow similar to Lehn and Poulsen (1989), i.e., operating income before depreciation minus total income taxes plus deferred taxes from the previous year to the current year minus gross interest expense on debt minus dividends paid divided by book value of total assets. The return on assets is calculated as the firm's operating profits standardized by the book value of total assets. Leverage is total debt divided by the book value of total assets, and firm size is the natural log of a firm's book value of total assets. The relative size of the board is the number of executive board members divided by the total number of board members (i.e., both executive and supervisory board members). The percentage of block shareholdings is the percentage of shares held in a block outside the firm. A blockholding is defined as a stake of at least 5%. Insider ownership is the percentage of blockholdings by insiders, supervisory, and executive board members. We define a dummy that takes on the value of one for firms with a cross-listing in the United States or the United Kingdom, and zero otherwise. To control for takeover defenses, we define four dummy variables that take on the value of one if the firm has preference shares, if the firm has priority shares, if the firm has certificates and if the firm operates under the restricted regime. To examine the overall impact of takeover defenses, we also define a takeover defense index, which aggregates all four takeover defense dummies.

³ The 1996 Act on Disclosure of Holdings in Listed Companies provides that any person who directly or indirectly acquires or disposes of an interest in the capital and/or the voting right of public limited liability companies incorporated under Dutch law with an official listing on a stock exchange must give a written notice of such acquisition or disposal, if as a result of such acquisition or disposal the percentage of capital interest or voting rights held by such person falls within another percentage range held by such person prior to the acquisition or disposal. The relevant percentage ranges referred to in the Disclosure of Holdings Act are 0% to 5%; 5% to 10%; 10% to 25%; 25% to 50%; 50% to 66%; and over 66%.

In terms of the deal characteristics, we construct a dummy for deals in which firms use equity in their payments. Note that mixed payments (i.e., both cash and equity) are also included in this dummy. Furthermore, we define a dummy for observations in which we know that the target is listed. Acquisitions are classified as diversifying and focus shifting, based on the description of the announcement in the newspaper. The relative size of the acquisition is calculated twofold. If firms disclose the transaction value, we calculate the relative size as the transaction value divided by the market capitalization of the acquirer. However, if the transaction value is not available, the relative size is the ratio of target sales to acquirer sales.

6.3.3 Market reaction model

We measure the acquirer's cumulative abnormal returns (CAR) around acquisition announcements using the abnormal returns generated by a market model as described by MacKinlay (1997). Our estimation window runs from day -120 to day -20 , relative to the announcement day. We aggregate the abnormal returns over a period of 5 days, starting 2 days prior to the acquisition announcement until 2 days after the acquisition announcement. Apart from the percentage returns, we also calculate the euro wealth effects by multiplying the 5 days CAR by the beginning of the year's market value of the acquirer's equity.

Next, we investigate the determinants of the aggregated acquirer returns by means of an ordinary least squares (OLS) regression in which we explain the 5 days CAR by the acquirer's Tobin's q , free cash flows, return on assets, leverage, size, a dummy for equity payment, a dummy for listed target, a dummy for diversifying acquisition, a dummy for domestic target, a dummy for European target, a dummy for U.S. target, relative size of the acquisition, relative size of the executive board, block shareholders, insider ownership, a dummy for cross-listing U.S./U.K., a dummy for priority shares, a dummy for preference shares, a dummy for certificates, and a dummy for restricted regime. The model incorporates year-fixed effects and industry-fixed effects, based on five major industry groups according to two-digit Standard Industrial Classification (SIC) industry codes. All regression p -values are based on White's heteroskedasticity-corrected standard errors.

6.3.4 Wealth-destructing deals model

We classify acquisitions as wealth destructing if shareholders lose more than € 150 million during the acquisition announcement. To investigate what type of firms make wealth-destructing acquisition announcements, we estimate the following binary logit regression, in which we explain whether the deal is wealth destructing by the acquirer's Tobin's q , free cash flows, return on assets, leverage, $\ln(\text{size})$, a dummy for equity payment, a dummy for listed target, a dummy for diversifying acquisition, a dummy for domestic target, a dummy for European target, a dummy for U.S. target, relative size of the acquisition, relative size of the executive board, block shareholders, insider ownership, a dummy for cross-listing U.S./U.K., a dummy for priority shares, a dummy for preference shares, a dummy for certificates, and a dummy for restricted regime. The model incorporates year-fixed effects

and industry-fixed effects, based on five major industry groups according to two-digit SIC industry codes. All regression p -values are based on Huber/White's heteroskedasticity-corrected standard errors.

6.4 Results

This section first provides a description of the sample. Statistics of firm and deal variables and the features of shareholders' wealth change around acquisition announcements will be discussed. Subsequently, we examine the factors that influence shareholders' wealth change and conclude with an analysis of deals with which shareholders lose more than € 150 million.

6.4.1 Sample description

As previously mentioned, our dataset consists of 312 firm years in which 64 firms announce 865 acquisitions. Table 6.1 panel A shows more detailed information about the characteristics of these firm years.

Our sample represents the larger industrial firms within the Netherlands, with an average market capitalization of € 3.08 billion. They show good performance, as the average return on assets is 33.6% and the average Tobin's q is 1.548. However, the return on assets exhibits a large variation across the sample as its standard deviation is relatively high. The mean free cash flow is positive, indicating that firms are able to spend internal funds on additional investments. With an average of 27.9%, the leverage of Dutch firms is low as compared to U.S. firms. In terms of corporate governance, the board consists for 63.8% of executives. Specifically, the median number of executive board members is six, whereas the median number of supervisory board members is just three. The data on blockholders confirm the concentrated ownership structure within the Netherlands. The largest outside blockholder owns on average 17% of the firm. Taking into account all blockholders, the average ownership is 29.1%. Although the median percentage insider ownership is zero, the average is 5.8%. Furthermore, 31.7% of the sample firms have a cross-listing in the United States and/or in the United Kingdom, suggesting that managers of these firms exercise less discretion in their decisions (De Jong, Mertens, and Van der Poel, 2006). Takeover defense mechanisms in the Netherlands severely restrict shareholders' power within the firm. Consistent with previous studies about the Dutch governance situation, the results indicate that Dutch firms widely implement takeover defenses in terms of priority shares (43.3%), preferred shares (67.3%), certificates (37.2%), and the adoption of the structured regime (67.9%). Aggregating all takeover defenses within a firm, the median Dutch firm adopts two out of the four mechanisms.

Panel B of Table 6.1 provides the deal characteristics of our sample. Firms release the transaction value of their deals only 152 out of the 865 times. These 152 deals show an average transaction value of € 521 million. The median is only one-sixth of the average value, which implies that the dataset includes some very large deals. Besides, the transaction value varies considerably as the

Table 6.1 Descriptive statistics of acquirer and deal characteristics

The table presents the means, medians, standard deviations, and the number of observations of firm and deal variables. The market capitalization is the beginning of the year market value of equity. The return on assets is calculated as operating profits standardized by book value of total assets. We measure the Tobin's q as the ratio of a firm's market value to replacement value of assets as calculated in De Jong, DeJong, Mertens, and Wasley (2005). We calculate free cash flow as in Lehn and Poulsen (1989). Leverage is total debt divided by book value of total assets. The relative size of the board is the number of executive board members divided by total number of board members. The takeover index is the aggregate value of all four takeover defense dummies (i.e., priority shares, preference shares, certificates, and structured regime). The transaction value is the amount paid for the target.

Panel A: Acquirer characteristics at a firm year level

	All deals			
	Mean	Median	St. dev.	N
<i>Financial characteristics</i>				
Market capitalization (€ thousands)	3,081,620	593,857	7,776,843	312
Return on assets	0.336	0.108	3.737	312
Tobin's q	1.548	1.344	0.769	312
Free cash flow/total assets	0.032	0.034	0.035	312
Leverage	0.279	0.245	0.188	312
<i>Governance characteristics</i>				
Number of supervisory board members	3.510	3.000	1.645	312
Number of executive board members	6.048	6.000	2.205	312
Relative size of executive board	0.638	0.636	0.108	312
Percentage largest outside blockholder	0.170	0.090	0.182	312
Total percentage outside blockholders	0.291	0.225	0.237	312
Total percentage inside blockholders	0.058	0.000	0.141	312
Dummy cross listing U.S. and/or U.K.	0.317	0.000	0.466	312
Takeover defense index	2.157	2.000	1.007	312
Dummy priority shares	0.433	0.000	0.496	312
Dummy preference shares	0.673	1.000	0.470	312
Dummy certificates	0.372	0.000	0.484	312
Dummy structured regime	0.679	1.000	0.467	312

Panel B: Deal characteristics at a deal level

	All deals			
	Mean	Median	St. dev.	N
Transaction value (€ thousands)	520,761	90,756	1,201,059	152
Transaction value/market capitalization	0.136	0.031	0.255	152
Sales target/sales acquirer	0.094	0.015	0.291	555
Dummy listed target	0.072	0.000	0.259	865

(Continued)

Table 6.1 (Continued)

Panel B: Deal characteristics at a deal level—Cont'd

	All deals			
	Mean	Median	St. dev.	N
Dummy diversifying acquisition	0.205	0.000	0.404	865
Dummy focus shifting acquisition	0.049	0.000	0.215	865
Dummy payment in cash and equity	0.036	0.000	0.186	865
Dummy payment in equity	0.059	0.000	0.236	865
Dummy payment in cash	0.191	0.000	0.393	865
Dummy domestic acquisition	0.240	0.000	0.428	865
Dummy European acquisition (excluding NL)	0.445	0.000	0.497	865
Dummy U.S. acquisition	0.192	0.000	0.394	865

standard deviation is relatively high. This also applies to the transaction value relative to the acquiring firm's market capitalization and the ratio of target to acquirer sales. The results also show that Dutch firms acquire public firms in 7.2% of all acquisitions. Compared to the sample of European firms in Martynova and Renneboog (2006), in which 36.8% of all acquisitions concern listed targets, this percentage is rather low. Furthermore, firms announce a diversifying deal in 20.5% of the sample and a shift in focus in 4.9% of the sample. The high percentage of diversifying acquisition announcements is remarkable, as previous studies find diversifying acquisitions to be value-decreasing (Corhay and Tourani Rad, 2000; Martynova and Renneboog, 2006; Morck, Shleifer, and Vishny, 1990). Firms finance their target with a combination of cash and equity in 3.6% of our sample. In 5.9% of the acquisitions, firms announce to pay with equity. Note that this percentage also includes the mixed payments. The low percentage may be caused by the low amount of listed target firms. In 19.1% of the acquisitions, firms announce to finance their deal with cash. In all other cases, firms do not disclose how they finance their target. In line with Corhay and Tourani Rad (2000), Dutch firms know a strong international orientation. They make domestic acquisitions only in 24% of all sample deals, whereas in 44.5% of the deals the target comes from another European country, and in 19.2% of the deals the target is located in the United States.⁴

To get an impression of the shareholders' wealth effects around acquisition announcements, Table 6.2 provides statistics of the percentage abnormal returns (panel A) and the euro wealth transfers (panel B) for different event windows.

Panel A of the table shows significantly positive abnormal returns around acquisition announcements for four out of the six event periods, indicating that acquisitions in the Netherlands on average enhance shareholder wealth. During

⁴ Most of the takeover activity is concentrated in Europe and the United States. For example, only 4.1% of the deals concern Asian targets, 1.2% are acquisitions of African firms, and 2.7% concern non-U.S. companies from the American continents.

Table 6.2 Acquirer returns around acquisition announcements
for different event windows

This table presents the descriptive statistics of the percentage abnormal returns and the wealth transfer in millions of euros for different event windows. The acquisition announcement day is day zero. Abnormal returns are calculated by using the market model as described in MacKinlay (1997), with the estimation window running from day -120 to day -20. We aggregate the abnormal returns for the different event windows. The euro wealth transfer is the cumulative abnormal returns for the event window times the acquirer's market capitalization at the beginning of the fiscal year. The table shows *, **, and *** for values that are significantly different from zero at a 10%, 5%, and 1% level, respectively.

Panel A: Descriptives of the market reaction to acquisition announcements for different event windows

	Event window					
	[-20, 20]	[-10, 10]	[-5, 5]	[-2, 2]	[-20, -3]	[3, 20]
Mean	1.30% ^{***}	0.96% ^{***}	1.13% ^{***}	1.07% ^{***}	0.08%	0.15%
Minimum	-55.76%	-68.33%	-36.09%	-22.48%	-66.47%	-39.07%
25%-tile	-6.16%	-3.97%	-2.63%	-1.45%	-4.31%	-3.85%
Median	1.00%	0.45%	0.54%	0.61%	-0.16%	-0.15%
75%-tile	7.29%	5.40%	4.43%	3.31%	4.37%	4.16%
Maximum	68.22%	71.17%	40.39%	39.27%	32.57%	50.23%
Standard deviation	12.42%	9.04%	6.78%	4.95%	7.86%	7.69%
N	865	865	865	865	865	865

Panel B: Descriptives of the wealth transfer in € millions around acquisition announcements for different event windows

	Event window					
	[-20, 20]	[-10, 10]	[-5, 5]	[-2, 2]	[-20, -3]	[3, 20]
Mean	23.04	1.89	6.57	17.89 [*]	-28.70	33.84
Minimum	-9,040.49	-6,377.08	-5,144.17	-2,726.24	-6,545.32	-3,646.44
25%-tile	-66.75	-55.36	-41.87	-20.13	-51.37	-54.05
Median	3.05	1.49	1.49	2.22	-0.37	-0.42
75%-tile	87.75	52.87	51.62	37.06	53.80	47.92
Maximum	16,146.15	9,302.80	3,717.78	1,790.41	7,199.73	11,871.74
Standard deviation	1,033.73	665.18	482.74	294.73	673.89	839.78
N	865	865	865	865	865	865

the 5 days around the acquisition announcement, shareholders experience a significant increase of 1.07% in their returns. The share price does not experience a significant change from 20 days until 3 days prior to the acquisition announcement and 3 days until 20 days after the announcement, suggesting that the information about the acquisition is discounted into the market price immediately around the release of the information.

Panel B provides the abnormal euro returns around acquisition announcements. Shareholders experience an average significant increase in their wealth of € 17.89 million during the 5 days around an acquisition announcement. Wealth changes in the other event windows are not significantly different from zero. Note that the standard deviation of the euro returns are extremely large, suggesting both large gains and losses for shareholders of acquiring firms. The extreme values provide support for this suggestion. For instance, the minimum value for the 5 days window indicates a loss of about € 2.7 billion and the maximum value indicates a gain of about € 1.8 billion. The extreme values of the other event windows are even larger.

As Table 6.2 suggests that most of the announcement returns occur during the 5 days around the acquisition announcement, Figure 6.1 provides the average development of the share price over the 40 days around the announcement and Figure 6.2 shows the distribution of the cumulative abnormal returns over the 5 days event window.

Figure 6.1 shows a slight price run-up prior to the acquisition announcement, which does not differ significantly from zero. The sharp increase in average abnormal returns starts at 2 days prior to the announcement day and lasts for about 5 days. Afterwards, the cumulative abnormal returns remain relatively stable around the 1.2%. Figure 6.2 shows that the distribution of the cumulative abnormal returns appears to be normally distributed. Besides, acquisition announcements are more often value increasing than value decreasing. The results further show that the distribution of abnormal returns is somewhat skewed toward positive returns.

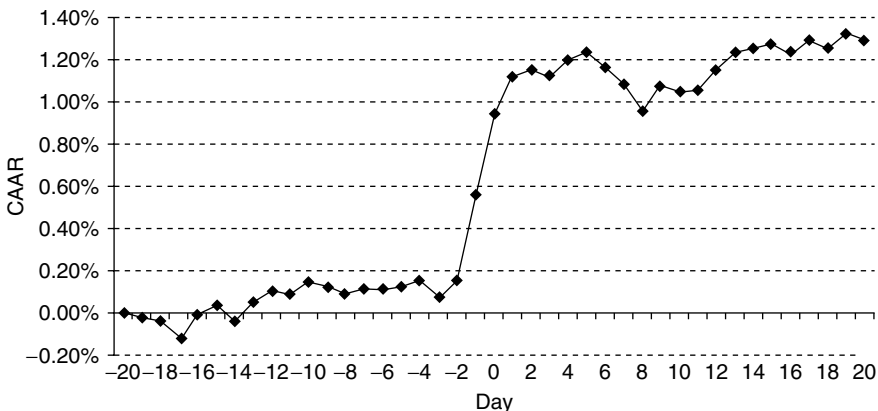


Figure 6.1 The Development of abnormal returns around acquisition announcements

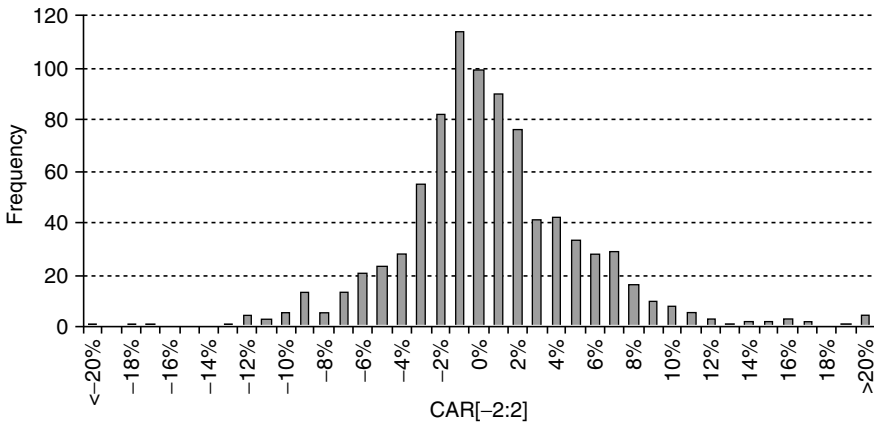


Figure 6.2 The distribution of abnormal returns

Table 6.3 Stated motives for acquisitions and the related abnormal returns

This table presents the frequency of acquirers' motives for the acquisition as disclosed in their acquisition announcements. Cost reduction consists of economies of scale, synergy, efficiency, and access to low-wage labor. The table also provides the average cumulative abnormal returns over 5 days surrounding the acquisition announcements per stated motive. The table shows *, **, and *** for CAR values that are significantly different from zero at a 10%, 5%, and 1% level, respectively.

Stated motives for acquisitions	Number	Percentage	CAR
Cost reduction	60	7%	1.32%*
Geographic expansion	150	17%	1.19%***
Broadening product line	61	7%	0.93%
Increasing market share	321	37%	1.21%***
Diversification/vertical integration	22	3%	1.56%*
Other motive	19	2%	0.86%
No motive	232	27%	0.74%**
Total	865	100%	1.07%***

When disclosing a planned acquisition, firms usually provide reasons why they take over another firm. As the motivation behind acquisitions is important information for the market, Table 6.3 lists the stated motivations, the frequency of these motivations and the related acquirer returns.

We categorize the motives into seven groups; (1) cost reduction, (2) geographic expansion, (3) broadening the firm's product line, (4) increasing the firm's market share, (5) diversification, (6) another motive, which does not belong to the first five groups, and (7) no motive provided. The most common motives are an increase in market share, which occurs in 37% of all announcements, and geographic expansion

that occurs in 17% of all announcements. Both motives yield significantly positive abnormal returns (1.21% and 1.19%, respectively), indicating that these types of acquisitions are value enhancing for shareholders. The acquisitions in which firms can reduce their costs in the form of economies of scale or access to low-wage labor also provides positive abnormal returns (1.32%). A remarkable result is that shareholders respond positively to diversifying reasons, while previous studies find diversifying acquisitions to be negatively related with the market reaction. The abnormal returns are 1.56%, which is the highest percentage compared to all other reasons. Note that in 3% of all acquisition announcements, firms state that the prime motive to acquire a firm is to diversify, whereas 20.5% of all acquisitions are diversifying acquisitions. Furthermore, firms do not provide a motive for their acquisition in 27% of the samples, yet the abnormal returns are significantly positive. The data do not show a significant response to firms that aim to broaden their product line or give another motive. The main conclusion from Table 6.3 is that the stated motive does seem to explain the acquirer's wealth change, as shareholders respond significantly to some of the stated motives and not to others.

The market response and total wealth effects around acquisitions depend on the period in which the acquisition takes place (Harford, 2005; Moeller, Schlingemann, and Stulz, 2005). In particular, the abnormal returns are higher at the beginning of merger waves than later during the merger wave. Table 6.4 presents the percentage abnormal returns and the euro wealth effects per year. A more visual overview can be drawn from Figure 6.3.

Table 6.4 The characteristics of shareholders' wealth effects per year

The table shows descriptives of the cumulative abnormal returns over 5 days surrounding acquisition announcements and the related euro wealth effects per year. The euro wealth effects are the cumulative abnormal returns for the event window times the acquirer's market capitalization at the beginning of the fiscal year. The table shows *, **, and *** for values that are significantly different from zero at a 10%, 5%, and 1% level, respectively.

Year	n	CAR [-2,2]			Wealth effects in € millions		
		Mean	Median	% Positive	Total	Mean	Median
1993	61	1.42%***	1.03%	69%	1,075.61	17.63***	2.03
1994	83	-0.05%	-0.26%	41%	-1,190.58	-14.34	-2.55
1995	97	0.00%	-0.32%	42%	-1,602.75	-16.52	-2.06
1996	86	1.09%***	0.73%	59%	749.88	8.72	2.21
1997	89	1.66%***	0.78%	57%	2,820.43	31.69	1.54
1998	102	0.85%	0.72%	64%	839.57	8.23	3.68
1999	116	2.20%***	1.93%	61%	7,756.35	66.87*	5.91
2000	83	1.10%*	1.19%	59%	4,103.12	49.44	11.84
2001	44	1.31%*	1.79%	66%	-660.20	-15.00	4.58
2002	44	0.80%	0.56%	52%	-4.66	-0.11	5.45
2003	27	1.22%	2.34%	59%	468.61	17.36	9.75
2004	33	1.31%***	1.47%	73%	1,123.02	34.03	3.73
ALL	865	1.07%	0.61%	57%	15,478.40	17.89	2.22

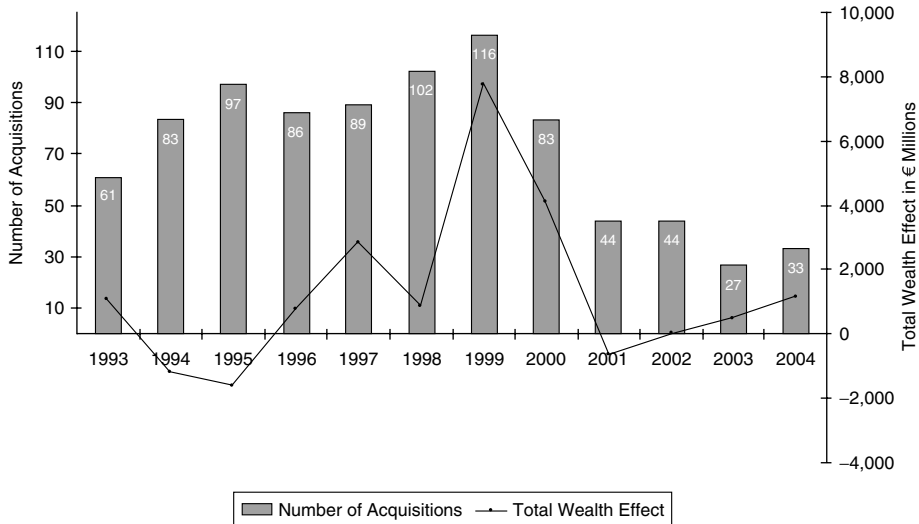


Figure 6.3 The number of acquisition announcements and the total wealth effects per year

The results indicate that during the first half of the 1990s, several value-decreasing acquisitions take place. Though not statistically significant, the years 1994 and 1995 show zero and small negative abnormal returns and large negative wealth effects for the shareholders. During these years, the least amount of positive reactions to acquisition announcements occur. Afterwards, shareholders experience an increase in their wealth, with 1999 as most successful year. In that year, the total wealth gain due to acquisition announcements is € 7.7 billion and the average abnormal return is 2.2%. The economic downturn started halfway through 2000. The consequences of this downturn appear in 2001, which shows a decrease in the number of acquisitions. The total wealth losses are € 660.2 million and € 4.7 million in the year after. Strikingly, the average abnormal returns are positive during these years. These results suggest that, consistent with Moeller, Schlingemann, and Stulz (2004, 2005), the negative wealth effects are a result of a few extremely large losses. Moeller, Schlingemann, and Stulz (2005) argue that managers of highly valued firms can exercise more discretion and hence, are more likely to make value-destroying acquisitions. Firm size can also drive the results (Moeller, Schlingemann, and Stulz, 2004). Acquisitions by small firms are generally value enhancing, but the euro gains are small as well. On the contrary, larger firms make larger acquisitions that can result in large euro losses. Both effects together can result in positive returns and negative wealth effects at the same time. In Section 6.4.3, we examine the value-destructing deals in more detail. Finally, in the last 2 years of our sample the number of acquisitions is still low, yet the acquisition announcements that take place do yield positive abnormal returns.

6.4.2 Explaining wealth effects

So far, we discussed the characteristics and abnormal returns of our sample of acquisition announcements by means of a univariate analysis. This section discusses the factors that influence shareholders' wealth around an acquisition announcement. Table 6.5 shows the results of four ordinary least squares regressions with the 5 days abnormal returns as the dependent variable.

Consistent with Moeller, Schlingemann, and Stulz (2004), the first regression indicates that larger firms are more likely to make value-reducing acquisitions. Furthermore, firms that finance their deal with equity experience 2.2% higher

Table 6.5 Regression analysis of acquirer return around acquisition announcements

The table provides the results of ordinary least squares regressions that explain the abnormal returns during 5 days around acquisition announcements. All variables in this table are defined in Table 6.1. All regressions include year and industry dummies. *P*-values are documented in parentheses and based on White's heteroskedasticity corrected standard errors. The table shows *, **, and *** for values that are significantly different from zero at a 10%, 5%, and 1% level, respectively.

	(1) Coefficient	(2) Coefficient	(3) Coefficient	(4) Coefficient
Tobin's <i>q</i>	-0.001 (0.611)	-0.004 (0.172)	0.000 (0.895)	0.000 (0.890)
Free cash flow/ total assets	-0.011 (0.915)	0.144 (0.209)	-0.023 (0.822)	-0.003 (0.973)
Return on assets	0.000 (0.779)	0.000 (0.378)	0.000 (0.835)	0.000 (0.841)
Leverage	-0.004 (0.762)	0.003 (0.833)	-0.003 (0.805)	0.002 (0.863)
In (size)	-0.006*** (0.000)	-0.003** (0.021)	-0.006*** (0.002)	-0.005*** (0.006)
Dummy equity payment	0.022** (0.044)	(0.000) (0.964)	0.023** (0.035)	0.023** (0.033)
Dummy listed target	0.002 (0.826)	-0.010 (0.186)	0.000 (0.977)	0.000 (0.975)
Dummy diversifying	-0.005 (0.229)	-0.003 (0.536)	-0.005 (0.269)	-0.005 (0.228)
Dummy domestic target	-0.002 (0.752)	0.000 (0.962)	0.001 (0.839)	0.001 (0.807)
Dummy European target, but not Dutch	-0.008 (0.101)	-0.003 (0.584)	-0.006 (0.216)	-0.006 (0.211)
Dummy U.S. target	-0.001 (0.822)	0.004 (0.562)	0.001 (0.930)	0.001 (0.931)

(Continued)

Table 6.5 (Continued)

	(1) Coefficient	(2) Coefficient	(3) Coefficient	(4) Coefficient
Relative size of acquisition		0.058*** (0.000)		
Relative size of the board			0.013 (0.468)	0.017 (0.362)
Block shareholders			0.003 (0.730)	0.003 (0.703)
Insider ownership			-0.011 (0.526)	-0.008 (0.656)
Dummy cross-listing U.S. or U.K.			-0.001 (0.767)	-0.003 (0.486)
Takeover defense index			-0.004* (0.060)	
Dummy priority shares				-0.005 (0.241)
Dummy preference shares				0.001 (0.910)
Dummy certificates				-0.001 (0.779)
Dummy structured regime				-0.010* (0.086)
Number of observations	865	644	865	865
Adjusted R-squared	5.11%	12.03%	4.66%	4.99%

*, significant at 10%; **, significant at 5%; ***, significant at 1%

abnormal returns than firms that do not use equity as payment. Although this result is not in line with previous research on U.S. firms, Goergen and Renneboog (2004) find similar results for European firms. A possible explanation for the positive relation is the high amount of private targets that get acquired. The results further show that the target's country of origin does not influence shareholders' wealth. None of the country dummies is significant. Firm and deal characteristics that do not influence acquirer returns are the firm's Tobin's q , free cash flow, return on assets, leverage, whether the target is listed, and whether the deal is diversifying.

The size of the target relative to the acquirer firm size is an indication for the impact of the deal for the acquiring firm. Unfortunately, few firms disclose the price they pay for the target (152 out of 865), and we do not know the target sales of all deals (555). To examine the impact of the deal size, we construct the variable "relative size of acquisition," in which we set the value to the relative price paid, calculated as price paid for the target divided by the market value of the acquirer firm's equity. If this value is not available, we take the ratio of target sales to acquirer sales. Regression 2 of Table 6.5 includes the relative size of the acquisition. We find the relative size to be positively related with acquirer returns, suggesting that larger acquisitions are more likely to be firm value enhancing. Another effect of including

this relative size is that the equity payment dummy loses its significance, which may be a result of the smaller sample size. However, when running Regression 1 with the same observations as Regression 2 (results are not tabulated), the equity payment dummy remains significant, implying that the dummy is an artifact of the relative size of an acquisition. Firms that acquire relatively large targets are more likely not to have enough cash available, increasing the probability to pay with equity. A comparison between the *R*-squared of Regression 1 (with 644 observations) and Regression 2 implies a significant increase in explanatory power ($p = 0.000$).

To examine the impact of corporate governance on shareholders' wealth around acquisition announcements, Regression 3 includes the variables' relative size of the board, percentage of block shareholders, percentage of insider ownership, a dummy for being cross-listed in the United States or United Kingdom, and the takeover defense index. We expect a better governance structure within a firm to bring about less discretion for managers, resulting in higher abnormal returns. The results suggest a marginal impact of corporate governance on a firm's decisions as only the coefficient for takeover defense index is significant. In line with Masulis, Wang, and Xie (2006) and in line with our expectations, the coefficient is negative. *Ceteris paribus*, for each implemented takeover defense mechanism, shareholders' wealth decreases 0.4%. To investigate which of the takeover defense mechanisms drives the negative effect, we include the four defense dummies in Regression 4. The restricted regime dummy appears to mainly drive the takeover defense effect. In particular, the abnormal returns around acquisition announcements are 1.0% lower for firms that have adopted a structured regime as compared to firms that have not adopted such a regime. Comparing the 1.0% with the average of 1.07% abnormal returns for the whole sample, the impact of a structured regime is high.

6.4.3 Which firms make wealth-destructing deals?

As previously mentioned, our results suggest that a small number of acquisitions drive down the total shareholders' wealth around acquisition announcements. In this section, we investigate whether firm and deal characteristics differ for wealth-destructing deals versus non-wealth destructing deals. In particular, we expect these wealth-destructing deals to occur in firms where managers are able to exercise discretion and make acquisitions that maximize their own utility. Corporate governance should prevent managers from making large loss deals. Moeller, Schlingemann, and Stulz (2005) examine wealth-destructing deals with a loss of at least \$1 billion disclosed by U.S. firms. We focus on deals with losses of more than €150 million, because our sample exclusively consists of Dutch firms that are on average smaller than U.S. firms and we aim to construct a sample that is large enough to draw robust conclusions.⁵ From our sample of 865 acquisition announcements, 80 acquisitions announced by nine firms are wealth destructing. The total wealth destruction of these 80 acquisition announcements is €38 billion. Table 6.6 presents descriptives and mean comparisons of the sample with and without these wealth-destructing deals.

⁵ Our sample includes eight deals with shareholders' losses of more than €1 billion.

Table 6.6 Differences between wealth-destructing deals and non-wealth-destructing deals

This table presents the means, medians, standard deviations, and the number of observations of firm years with wealth-destructing deals and firm years without wealth-destructing deals in panel A. The last two columns show the mean difference and the p -value of the mean difference between the two types of firm years. Panel B provides these statistics for wealth-destructing deals and non-wealth-destructing deals. A deal is classified as wealth destructing when the negative wealth effect is more than € 150 million. All variables in this table are defined in Table 6.1. The table shows *, **, and *** for mean differences that are significantly different from zero at a 10%, 5%, and 1% level, respectively.

Panel A: Acquirer characteristics at a firm year level

	Excl. firm yrs. with wealth-destructing deals				Firm yrs. with wealth-destructing deals				Difference	
	Mean (1)	Median	St. dev.	N	Mean (2)	Median	St. dev.	N	(1)-(2)	p -value
<i>Financial characteristics</i>										
Market capitalization										
(€ thousands)	1,542,605	423,689	6,037,257	266	11,981,138	8,434,009	10,410,379	46	-10,438,533	0.000
Leverage	0.274	0.247	0.187	266	0.310	0.239	0.195	46	-0.036	0.248
Tobin's q	1.459	1.302	0.664	266	2.067	1.805	1.081	46	-0.609	0.000
Free cash flow/total assets										
	0.031	0.034	0.036	266	0.039	0.037	0.032	46	-0.007	0.171
Return on assets	0.197	0.107	3.795	266	1.142	0.114	3.300	46	-0.945	0.113
<i>Governance characteristics</i>										
Number of supervisory board members										
	3.271	3.000	1.588	266	4.891	5.000	1.251	46	-1.621	0.000

Number of executive board members	5.801	6.000	2.171	266	7.478	7.000	1.847	46	-1.678	0.000
Relative size of executive board	0.644	0.667	0.114	266	0.604	0.600	0.059	46	0.041	0.018
Percentage largest outside blockholder	0.171	0.100	0.182	266	0.163	0.090	0.184	46	0.008	0.789
Total percentage outside blockholders	0.305	0.240	0.242	266	0.207	0.150	0.185	46	0.098	0.009
Total percentage inside blockholders	0.066	0.000	0.148	266	0.011	0.000	0.074	46	0.055	0.014
Dummy cross-listing U.S. and/or U.K.	0.244	0.000	0.431	266	0.739	1.000	0.444	46	-0.495	0.000
Takeover defense index	2.211	2.000	1.014	266	1.848	2.000	0.918	46	0.363	0.018
Dummy priority shares	0.395	0.000	0.490	266	0.652	1.000	0.482	46	-0.257	0.001
Dummy preference shares	0.688	1.000	0.464	266	0.587	1.000	0.498	46	0.101	0.179
Dummy certificates	0.398	0.000	0.491	266	0.217	0.000	0.417	46	0.181	0.019
Dummy structured regime	0.729	1.000	0.445	266	0.391	0.000	0.493	46	0.338	0.000

Panel B: Deal characteristics at a deal level

Transaction value (€ thousands)	469	70	1,232	130	824	363	968	22	-354	0.138
---------------------------------	-----	----	-------	-----	-----	-----	-----	----	------	-------

(Continued)

Table 6.6 (Continued)

	Excl. firm yrs. with wealth- destructing deals				Firm yrs. with wealth- destructing deals				Difference	
	Mean (1)	Median	St. dev.	N	Mean (2)	Median	St. dev.	N	(1)-(2)	<i>p</i> -value
Transaction value/ market capitalization	0.148	0.037	0.271	130	0.068	0.028	0.099	22	0.080	0.176
Sales target/sales acquirer	0.099	0.017	0.300	513	0.038	0.004	0.119	42	0.061	0.008
Dummy listed target	0.064	0.000	0.244	785	0.150	0.000	0.359	80	-0.086	0.004
Dummy diversifying acquisition	0.201	0.000	0.401	785	0.238	0.000	0.428	80	-0.036	0.470
Dummy focus shifting acquisition	0.048	0.000	0.215	785	0.050	0.000	0.219	80	-0.002	0.951
Dummy payment in equity	0.064	0.000	0.244	785	0.013	0.000	0.112	80	0.051	0.064
Dummy payment in cash	0.196	0.000	0.397	785	0.138	0.000	0.347	80	0.059	0.204
Dummy payment in cash and equity	0.039	0.000	0.195	785	0.000	0.000	0.000	80	0.039	0.070
Dummy domestic acquisition	0.246	0.000	0.431	785	0.188	0.000	0.393	80	0.058	0.245
Dummy European acquisition (excluding NL)	0.452	0.000	0.498	355	0.375	0.000	0.487	80	0.077	0.186
Dummy U.S. acquisition	0.181	0.000	0.385	142	0.300	0.000	0.461	80	-0.119	0.010

Panel A provides the firm characteristics. Consistent with Moeller, Schlingemann, and Stulz (2005), firms that make value-destroying acquisitions are larger (market capitalization of € 12.0 billion vs € 1.5 billion) and have a higher Tobin's q (2.067 vs 1.459). The higher Tobin's q is in line with the arguments that a high valuation of firms increases the likelihood of managers to act in their own interest (Jensen, 2005; Moeller, Schlingemann, and Stulz, 2005). According to Jensen (1986), managers in firms with excess free cash flows are more likely to make value-reducing acquisitions. However, this theory does not apply to wealth-destructing acquisitions, as firm years in which wealth-destructing acquisitions occur do not have significantly more free cash flows. Governance characteristics also provide some significant results. Although both the supervisory board and the executive board are larger in firms with wealth-destructing deals, the relative size of the executive board is smaller (60.4% vs 64.4%). The smaller relative number of executives in the board implies better monitoring and therefore a lower probability to make large losses. Moreover, the percentage of outside blockholders that are other monitoring agents is lower within firm years with wealth-destructing deals (20.7% vs 30.5%). Insider ownership should increase the incentives of managers to act to maximize firm value and hence not to make large losses around acquisition announcements. Insider ownership of 1.1% for firm years with wealth-destructing acquisitions and of 6.6% for firm years without such deals is evidence that is consistent with this line of reasoning. A remarkable result is that firms making wealth-destructing deals are more often cross-listed in the United States and/or the United Kingdom (73.9% vs 24.4%). A cross-listing is among others a bonding mechanism for managers to act value maximizing (Coffee Jr., 1999, 2002), however, the results suggest the opposite. An alternative explanation comes from the fact that Dutch firms with a cross-listing in the United States and/or United Kingdom are typically larger. The significant difference may be an artifact of firm size. Another surprising result is the lower amount of takeover defense mechanisms in firm years with value-destructing deals (1.8 vs 2.2). Distinguishing between the different takeover defense mechanisms, 21.7% of all firm years with wealth-destructing acquisitions have certificates, 39.1% have adopted the structured regime, 58.7% have preference shares, and 65.2% have priority shares. For firm years without the wealth-destructing deals, these percentages are 39.8%, 72.9%, 68.8%, and 39.5%, respectively. Therefore, only the relatively high application of priority shares for firm years with wealth-destructing deals as compared to firms without such deals meets our expectations.

Panel B provides the differences in deal characteristics between wealth-destructing deals and non-wealth destructing deals. As wealth-destructing deals have a large impact on the euro value of firms, we expect the transaction value for these deals to be larger as well. The table shows a higher transaction value for value-destructing deals, yet the difference is not statistically significant. This also applies for the transaction value standardized by the market value of equity of the acquirer. Unexpectedly, the ratio of target sales to acquirer sales, which is also

a proxy for the size of the deal, is smaller for value-destroying deals (3.8% vs 9.9%). Moeller, Schlingemann, and Stulz (2005) suggest that the absolute change of returns around acquisition announcements reflects both the net present value of the acquisition itself and the information that is revealed about the firm by announcing an acquisition. The large loss deals may be a reflection of the information about the firm beyond the acquisition announcement. Furthermore, targets of value-destructing deals are more often listed (15% vs 6.4%) and located in the United States (30% vs 18.1%). In contrast to Moeller, Schlingemann, and Stulz (2005), we find less equity payments in wealth-destructing deals. In particular, 1.3% of the wealth-destructing deals are financed with equity, whereas this is 6.4% for non-wealth destructing deals (this is 0% vs 3.9% for mixed payment methods).

Now that we know the characteristics of firms announcing wealth-destructing deals and the characteristics of such a deal itself, we aim to predict the likelihood that a wealth-destructing acquisition occurs. In a logit regression with exclusively a dummy for the firm being in its highest valuation year, Moeller, Schlingemann, and Stulz (2005) find that firms make wealth-destructing deals when their valuation is high. This result is consistent with the arguments of Jensen (2005), who reasons that a high valuation of firms increases the likelihood of managers to act in their own interest. Apart from the Tobin's q , we include additional firm, governance, and deal variables in the regression in which the dependent variable takes on the value of one if the deal is value destructing and zero otherwise. We are particularly interested in whether good corporate governance structures provide more protection for shareholders (Table 6.7).

With a McFadden R -squared of 35.68%, the model can reasonably predict the likelihood that firms make value-destructing acquisitions. The significantly positive Tobin's q is in line with the theory that managers of highly valued firms are more likely to make value-decreasing decisions. Leverage shows a significantly positive coefficient, suggesting that firms with more leverage are more likely to make value-decreasing acquisitions in spite of the fact that leverage acts as a monitoring device (Jensen, 1986). As De Jong (2002) argues that Dutch managers are not disciplined by leverage, shareholders can perceive acquisition announcements of firms with high leverage as highly risky and hence respond negatively to the announcement. Furthermore, larger firms are also more likely to make wealth-destructing deals. This result is consistent with Moeller, Schlingemann, and Stulz (2004), who find a size effect in explaining acquirer returns around acquisition announcements. As larger firms make larger deals, they are also more likely to make larger losses. The governance variables suggest that the relative size of the board, priority shares, and preference shares influence the likelihood of a wealth-destructing deal. In line with our expectations, a larger proportion of executives on the board give the executives more possibilities to exercise discretion, increasing the probability to make value-destroying acquisitions. Furthermore, firms with priority shares, providing friendly shareholders with special rights such as merger approval, are better

Table 6.7 Regression analysis explaining the likelihood of a wealth-destructing acquisition announcement

The table provides the results of a binary logit regression that explains the likelihood of an acquisition announcement to be wealth destructing. A deal is classified as wealth destructing when the negative wealth effect is more than € 150 million. All variables in this table are defined in Table 6.1. The regression includes year and industry dummies. P-values are documented in parentheses and based on Huber/White's heteroskedasticity corrected standard errors. The table shows *, **, and *** for values that are significantly different from zero at a 10%, 5%, and 1% level, respectively.

	Coefficient (<i>p</i> -value)
Tobin's <i>q</i>	0.995*** (0.000)
Free cash flow/total assets	4.451 (0.634)
Return on assets	0.059 (0.393)
Leverage	3.696*** (0.005)
In (size)	1.509*** (0.000)
Dummy equity payment	-1.105 (0.298)
Dummy listed target	0.472 (0.279)
Dummy diversifying	0.455 (0.194)
Dummy European target, but not Dutch	0.339 (0.452)
Dummy domestic target	0.841 (0.131)
Dummy U.S. target	0.329 (0.521)
Relative size of the board	-3.981* (0.079)
Block shareholders	0.720 (0.553)
Insider ownership	0.986 (0.744)
Dummy cross-listing U.S. or U.K.	0.700 (0.215)
Dummy priority shares	0.995* (0.056)
Dummy preference shares	-0.899* (0.072)

(Continued)

Table 6.7 (Continued)

	Coefficient (<i>p</i> -value)
Dummy certificates	0.193 (0.715)
Dummy structured regime	-0.163 (0.774)
Number of observations	865
McFadden <i>R</i> -squared	35.68%

*, significant at 10%; **, significant at 5%; ***, significant at 1%

protected against takeover defenses and therefore more likely to make wealth-destructing deals. On the other hand, preference shares, another takeover defense mechanism, negatively influence the probability of wealth-destructing acquisitions. The other governance variables—i.e., block shareholders, insider ownership, being cross-listed in the United States or United Kingdom, certificates, and structured regime—do not show a significant impact. Free cash flows, return on assets, and none of the deal characteristics influence the probability of value-destructing deals either. In sum, the significant coefficients of firms' Tobin's *q*, leverage, and size imply that managers exercise discretion in their acquisition decisions resulting in a higher probability of making wealth-destructing acquisitions. Corporate governance does have an effect on acquirer wealth gains in acquisitions; however, the results suggest a rather minor effect.

6.5 Conclusion

This chapter provides an extensive description of the acquisition market within the Netherlands for the period starting in 1993 until 2004. We investigate the change in shareholders' wealth during the days around acquisition announcements and the impact of a firm's governance structure on shareholders' wealth change. From an international perspective, the Netherlands provides an interesting setting, as the market for corporate control is virtually absent. Dutch firms can implement four types of defense mechanisms—priority shares, preference shares, certificates, adoption of structured regime—that severely restrict shareholders' power. Limited shareholder power leaves much room for managers to exercise discretion in their acquisition decisions. We examine shareholders' wealth change in terms of the percentage abnormal returns and the absolute euro change.

We investigate a sample of 865 acquisitions in the period 1993–2004 and find that, even though shareholders have limited power, their average wealth increases around acquisition announcements. We also find that an adequate corporate governance structure has a minor influence on acquisition announce-

ments. In explaining acquirer returns, only one governance factor provides significant results. Specifically, firms that adopt the structured regime have lower acquirer returns, which is in line with managers exercising discretion when shareholders' power is low.

In addition to returns expressed as the corrected percentage stock price change, we also measure the changes in the market values of the firm's equity in euros. We find the same striking result as Moeller, Schlingemann, and Stulz (2005) that during 2001 and 2002 average acquirer returns are positive, whereas the total euro wealth effect for shareholders is negative. In order to shed light on this counterintuitive finding, we examine which firms are more likely to announce deals that result in a wealth loss of more than €150 million. Our results indicate that high q firms, firms with high leverage, and larger firms are more likely to make value-destructing acquisitions. The finding that high q firms are dominantly present among the group of wealth-destructing companies is in line with Jensen's (2005) prediction of agency problems resulting from overvalued equity. The positive impact of leverage on the likelihood of managers to announce value-destructing deals is in line with the results of De Jong (2002), who finds Dutch managers to avoid the disciplining role of leverage, especially when they overinvest. Once more, the results on explaining the likelihood of wealth destructing deals suggest a minor impact of corporate governance. A smaller relative amount of executive board members and firms that do not have priority shares decrease the likelihood of value-destructing acquisitions.

References

- Andrade, G., Mitchell, M. L., and Stafford, E. (2001). New evidence and perspectives on mergers. *Journal of Economic Perspectives* 15, 103–120.
- Bebchuk, L., Coates, J. C., and Subramanian, G. (2002). The powerful anti-takeover force of staggered boards: Theory, evidence, and policy. *Stanford Law Review* 54, 887–951.
- Bebchuk, L., Cohen, A., and Ferrell, A. (2005). "What Matters in Corporate Governance?" Harvard Law School, Boston, unpublished working paper.
- Berger, P. G. and Ofek, E. (1995). Diversification's effect on firm value. *Journal of Financial Economics* 37, 39–65.
- Berle, A. A. J. and Means, G. C. (1932). "The Modern Corporation and Private Property." Macmillan, New York.
- Chang, S. (1998). Takeovers of privately held targets, methods of payment, and bidder returns. *The Journal of Finance* 53, 773–784.
- Coffee Jr., J. C. (1999). The future as history: The prospects for global convergence in corporate governance and its implications. *Northwestern University Law Review* 93, 641–708.
- Coffee Jr., J. C. (2002). Racing towards the top? The impact of cross-listings and stock market competition on international corporate governance. *Columbia Law Review* 102, 1757–1831.

- Corhay, A. and Tourani Rad, A. (2000). International acquisitions and shareholder wealth: Evidence from the Netherlands. *International Review of Financial Analysis* 9, 163–174.
- De Jong, A. (2002). The disciplining role of leverage in Dutch firms. *European Finance Review* 6, 31–62.
- De Jong, A., DeJong, D. V., Mertens, G. M. H., and Wasley, C. E. (2005). The role of self-regulation in corporate governance: Evidence and implications from The Netherlands. *Journal of Corporate Finance* 11, 473–503.
- De Jong, A., Kabir, R., Marra, T., and Röell, A. (2001). Ownership and control in the Netherlands. In “The Control of Corporate Europe,” F. Barca and M. Becht (eds.). Oxford University Press, New York.
- De Jong, A., Mertens, G. M. H., and Roosenboom, P. (2004). “Shareholders’ Voting at General Meetings: Evidence from the Netherlands.” RSM Erasmus University, Rotterdam, unpublished working paper.
- De Jong, A., Mertens, G. M. H., and Van der Poel, M. (2006). “The Impact of Managerial Discretion on Management Earnings Forecasts.” RSM Erasmus University, Rotterdam, unpublished working paper.
- Denis, D. J., Denis, D. K., and Yost, K. (2002). Global diversification, industrial diversification, and firm value. *The Journal of Finance* 57, 1951–1979.
- Field, L. C. and Karpoff, J. M. (2002). Takeover defenses of IPO firms. *The Journal of Finance* 57, 1857–1889.
- Franks, J., Harris, R., and Titman, S. (1991). The postmerger share-price performance of acquiring firms. *Journal of Financial Economics* 29, 81–96.
- Goergen, M. and Renneboog, L. (2004). Shareholder wealth effects of European domestic and cross-border takeover bids. *European Financial Management* 10, 9–45.
- Gompers, P. A., Ishii, J. L., and Metrick, A. (2003). Corporate governance and equity prices. *Quarterly Journal of Economics* 118, 107–155.
- Hansen, R. G. (1987). A theory for the choice of exchange medium in mergers and acquisitions. *The Journal of Business* 60, 75–95.
- Harford, J. (2005). What drives merger waves? *Journal of Financial Economics* 77, 529–560.
- Jensen, M. C. (1986). Agency costs of free cash flow, corporate finance, and takeovers. *The American Economic Review* 76, 323–329.
- Jensen, M. C. (2005). Agency costs of overvalued equity. *Financial Management* 34, 5–19.
- Jensen, M. C. and Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency cost and ownership structure. *Journal of Financial Economics* 3, 305–360.
- Kabir, R., Catrijn, D., and Jeunink, A. (1997). Takeover defenses, ownership structure and stock returns in the Netherlands: An empirical analysis. *Strategic Management Journal* 18, 97–109.
- Lang, L. H. P., Stulz, R. M., and Walkling, R. A. (1989). Managerial performance, Tobin’s q , and the gains from successful tender offers. *Journal of Financial Economics* 24, 137–154.

- Lang, L. H. P., Stulz, R. M., and Walkling, R. A. (1991). A test of the free cash flow hypothesis. *Journal of Financial Economics* 29, 315–335.
- La Porta, R., Lopez-de-Silanes, F., Shleifer, A., and Vishny, R. W. (1998). Law and finance. *Journal of Political Economy* 106, 1113–1155.
- Lehn, K., and Poulsen, A. (1989). Free cash flow and stockholder gains in going private transactions. *The Journal of Finance* 44, 771–787.
- MacKinlay, A. G. (1997). Event studies in economics and finance. *Journal of Economic Literature* 35, 13–39.
- Maloney, M. T., McCormick, R. E., and Mitchell, M. L. (1993). Managerial decision making and capital structure. *The Journal of Business* 66, 189–217.
- Martynova, M. and Renneboog, L. (2006). Mergers and acquisitions in Europe. In “Advances in Corporate Finance and Asset Pricing,” L. Renneboog (ed.). Elsevier, Amsterdam.
- Masulis, R. W., Wang, C., and Xie, F. (2006). “Corporate Governance and Acquirer Returns.” Vanderbilt University, Nashville, unpublished working paper.
- Mitchell, M. L. and Lehn, K. (1990). Do bad bidders become good targets? *The Journal of Political Economy* 98, 372–398.
- Moeller, S. B. and Schlingemann, F. P. (2005). Global diversification and bidder gains: A comparison between cross-border and domestic acquisitions. *Journal of Banking & Finance* 29, 533–564.
- Moeller, S. B., Schlingemann, F. P., and Stulz, R. M. (2004). Firm size and the gains from acquisitions. *Journal of Financial Economics* 73, 201–228.
- Moeller, S. B., Schlingemann, F. P., and Stulz, R. M. (2005). Wealth destruction on a massive scale? A study of acquiring-firm returns in the recent merger wave. *The Journal of Finance* 60, 757–782.
- Morck, R., Shleifer, A., and Vishny, R. W. (1990). Do managerial objectives drive bad acquisitions? *The Journal of Finance* 45, 31–48.
- Mulherin, H. J. and Boone, A. L. (2000). Comparing acquisitions and divestitures. *Journal of Corporate Finance* 6, 117–139.
- Rajan, R., Servaes, H., and Zingales, L. (2000). The cost of diversity: The diversification discount and inefficient investment. *The Journal of Finance* 55, 35–80.
- Renneboog, L. and Szilagyi, P. G. (2006). “How Relevant Is Dividend Policy under Low Shareholder Protection?” Tilburg University, Tilburg, unpublished working paper.
- Scharfstein, D. S. and Stein, J. C. (2000). The dark side of internal capital markets: Divisional rent-seeking in inefficient investment. *The Journal of Finance* 55, 2537–2564.
- Servaes, H. (1991). Tobin’s q and the gains from takeovers. *The Journal of Finance* 46, 409–419.
- Shleifer, A. and Vishny, R. W. (1989). Management entrenchment: The case of manager-specific investments. *Journal of Financial Economics* 25, 123–139.
- Shleifer, A. and Vishny, R. W. (2003). Stock market driven acquisitions. *Journal of Financial Economics* 70, 295–311.

This page intentionally left blank

7 European Union takeover regulation and the one-share one-vote controversy

Arman Khachaturyan and Joseph A. McCahery

Abstract

The European Commission is presently considering a rule mandating that all publicly listed companies adopt a one-share one-vote capital structure. The prospect of requiring European Union (EU) firms to convert to a single capital structure has drawn much attention. What explains the fact that the EU wishes to introduce a system of shareholder democracy, which all member states have, in effect, systematically rejected? Even though pyramidal holdings may further facilitate expropriation of private benefits of control, as compared to the *status quo*, the decomposition of the one-share one-vote rule can: (1) further advance heterogeneity of preferences of shareholders; (2) create incentives for voting arbitrage in different contexts, which; (3) encourages the approval of value-reducing transactions.

7.1 Introduction

For a number of years, European Commission (EC) policymakers have sought to establish a new democracy in the European Union (EU), namely corporate democracy. As a result, corporate Europe has been overwhelmed by a hefty dose of inconsistency stemming from the EC's Communication on Enhancing Corporate Governance in the EU of May 21, 2003 (Communication from the Commission to the Council and the European Parliament, 2003). The commission has sought to introduce a new model of corporate policy: (1) to strengthen the rights of shareholders; (2) to enhance third-party protection; and (3) to foster efficiency and competitiveness of business. Although the development of a new model is not unimportant, academics have questioned whether the new reform agenda creates sufficient incentives for managers to create a value-enhancing corporate governance regime in the EU. In particular, key corporate governance experts and advocates of all stripes have challenged the need to establish shareholder democracy and enforce one-share one-vote across the board in the EU. Whereas political marketability of one-share one-vote has dominated the agenda of EC policymakers, only modest efforts have devoted to promote the value-enhancing measures found in the new reform model of the EU.

This chapter draws insights from a wider finance, economics, and legal scholarship, arguing that one-share one-vote is simply one corporate decision rule among many others, and not necessarily the best one. In fact, we examine why the optimality conditions are highly contestable, and, depending on circumstances and nature of corporate actions, the reasons that one-share one-vote may actually be value decreasing. Moreover, proposals for one-share one-vote are likely to induce changes that will further disenfranchise minority shareholders in the EU. Thus, any attempt to justify one-share one-vote as protecting the interests of minority shareholders is both misperceived and misguided. To evaluate the merits of one-share one-vote, we must look to the available empirical evidence.

The rest of this chapter is organized as follows. Section 7.2 briefly reviews the concept of shareholder democracy by examining the role it plays in the U.S. and EU systems of governance, with particular reference to the recently enacted Takeover Directive. Section 7.3 examines the economics of corporate voting. Section 7.4 assesses the optimality of one-share one-vote in the context of complete contracting, incomplete contracting, takeovers, ownership pyramids, and derivative instruments. It also discusses those justifications and empirical studies that support one-share one-vote as a preferred vehicle of shareholder democracy in the EU. Section 7.5 concludes by observing that the current economic evidence is not strongly supportive of the theoretical arguments for revamping shareholder empowerment along the lines of permitting one-share one-vote. As a practical matter, if it seems likely that the EU will adopt a mandatory one-share one-vote rule for publicly listed companies, we recommend legislative arrangements that permit member states to opt out of the directive. Furthermore, if companies or shareholders find it in their interest, at least at the initial public offering (IPO) stage, to adopt a dual-class share structure, similarly, we argue that there should be a measure that allows them to opt into this system of control.

7.2 Shareholder democracy

Shareholder democracy has been traditionally associated with shareholder representation, empowerment aimed at boosting shareholder activism, and managerial accountability. The U.S. debate on shareholder democracy has been conventionally dominated by shareholder empowerment aimed at bolstering shareholder activism and management accountability. The concept of shareholder democracy has been further shaped by the Supreme Court of Delaware, which enunciated two seminal standards of review, namely the *Blasius* standard and the *Unocal* standard. Under the *Blasius* standard, the court stated that “the shareholder franchise is the ideological underpinning upon which the legitimacy of the directorial power rests.”¹ Under the *Unocal* standard, the court redefined

¹ See *Blasius Industries vs Atlas Corp.*, 564, A.2d 651, 659 (Delaware 1988).

the fiduciary duties of board members in the context of hostile takeovers by recognizing that: “Because of the omnipresent specter that a board may be acting primarily in its own interests, rather than those of the corporation and its shareholders...,” a board of directors may attempt to thwart a takeover bid for self-interested reasons in order to protect or entrench themselves instead of fairly assessing pros and cons of a bid.² Hence, a board’s response should be “reasonable” and “proportionate,” and any defensive measure taken should be necessarily in the best interests of the company’s shareholders. Consequently, to the extent that a board’s response is disproportionate to the threat posed, and defensive measures taken create a “preclusive or coercive” effect upon shareholders, shareholders should decide whether the board can effectively continue exercising its fiduciary duties. Hence, in the context of hostile takeovers, shareholder democracy in the United States becomes tantamount to the ability of shareholders to replace the board.

7.2.1 Shareholder democracy in the EU

The first such concept of shareholder democracy in the EU was introduced by the controversial recommendations of the High Level Company Law Experts on takeover regulation in the EU in 2002 (High Level Group of Company Law Experts, 2002). It was stated that shareholders are the owners of the company, and they should make the ultimate decision to sell the company or not. Unreservedly, it was implied that shareholder democracy will be achieved through the principle of proportionality between the risk-bearing capital (non-voting stock) and decision making on the one hand, and the breakthrough rule on the other (by imposing one share one vote).

The High Level Group of Experts proposed a novel idea called the breakthrough rule, which was designed to eliminate a wide variety of prebid defenses that are viewed as significant impediments to the emergence of a well-functioning cross-border takeover market. It endorsed the view that a bidder should be permitted, upon the acquisition of 75% of cash flow rights (or any relevant threshold not higher than 75% set forth by the member states), to convene a general meeting of shareholders at short notice and impose one-share one-vote. Thus, any mechanisms or structures that deviate from the principles of shareholder decision making and proportionality between risk-bearing and control will be “broken through.” Upon reaching the required threshold, the bidder would be permitted to: (1) amend the articles of association and other constitutional documents; (2) remove any prebid takeover defenses approved by shareholders; (3) remove voting caps and differential voting rights; (4) remove provisions denying voting rights; (5) remove voting rights on non-risk bearing capital; (6) appoint, suspend, and dismiss the board members other than those appointed by third parties; (7) determine the composition of the board; (8) remove any

²See *Unocal Corp. vs Mesa Petroleum Co.*, 493 A.2d 946 (Del. 1985).

staggered and/or fixed period provisions; and (9) override special control rights attached to golden shares where applicable. Given the importance of creating a level playing field for takeovers in the EU, the High Level Group envisaged that the breakthrough rule would apply both when a tender offer is made and after the offer has been completed.

There were no doubt major political complications and problems with the breakthrough rule. Analysis of the proposal revealed a number of technical shortcomings as well. First, the breakthrough rule violated the primacy of shareholder decision making.³ In the context of a sale of control, the breakthrough rule leads to the acquisition of control by affecting a change in a corporate charter rather than acquiring the relevant threshold of control. Shareholders would be free to tender their shares, irrespective of previous contractual commitments, to the most attractive offer.

Second, consider the problem of inconsistency between the breakthrough rule and the mandatory bid rule (Berglöf and Burkart, 2003). The direct effect of the breakthrough rule is to transform a bid for a company with a concentrated ownership structure into a dispersed bid. Thus, for example, if the incumbent controlling shareholders have access to sufficient funds to launch a counter bid, the bidder will in turn be forced to bid at least as much as the incumbent shareholder. The maximum bid of the incumbent shareholder will include the sum total of his private benefits and the stock market valuation of the target firm. But, if the incumbent is financially constrained, the bidder will not offer more than the public value of the target firm after the completion of the takeover. As a result, the bidder's dominant strategy will be to use the breakthrough rule as a means of acquiring control, even if the incumbent management is in principle willing to enter into negotiations. In absence of a veto, controlling shareholders will lose their hold-up device needed to extract

³There are two fundamental self-contradicting principles on which the recommendations are based. The first is that shareholders are the owners of the company and any decision to sell or not to sell the company belongs to them. Hence, managers should be banned from taking any takeover defense measures (the board neutrality rule). The second principle is that there should be proportionality between risk-bearing capital and control in connection to the prebid structures and mechanisms of the target company so that the bidder can break through the barriers for exercising control in the target company and exert control in proportion to his holdings (the breakthrough rule). The concept of the risk-bearing capital has been previously unknown to economics, although the economic logic would associate it with cash flow rights. The High Level Group of Experts proposed that upon the acquisition of 75% of risk-bearing capital the bidder can break through any mechanisms and structures that deviate from the one-share one-vote. Hence, in the context takeover the claimants of residual cash flow rights acquire residual voting rights based on the argument that the former bears the ultimate effect of their decisions, whereas holders of control rights part with some of their control rights. Paradoxically, in the takeover context this would mean that in the pursuit of the promotion of shareholder democracy in the EU (1) ownership rights are shifted from the real owners to the nonowners; and (2) the decision to sell or not sell the company is not in the hands of the owners but in the hands of the nonowners.

a payment by holding up a transaction. Under the circumstances, the application of the breakthrough rule would likely lead to the unwinding of major blockholding positions in Europe. However, a number of commentators have predicted that in response to this rule, firms would adopt more complex ownership structures, such as pyramids and cross-shareholding arrangements (Bebchuk and Hart, 2002). The shift in firms' capital structures as a consequence of the rule could give rise to monitoring and liquidity problems. To this extent, the appeal of the breakthrough rule is undermined by both shareholder primacy and efficiency considerations.⁴

Despite the preceding criticisms of the High Level Group's recommendations on takeover regulation, EU lawmakers eventually approved the Thirteenth Directive of the European Union on Takeover Regulation. The directive includes measures on the mandatory bid, board neutrality, and the breakthrough rule (Council Directive 2004/25, 2004 O.J. (L. 142/12) 12–23 (EC)). However, given the history of EC company law, it should not be surprising that the adoption of the directive turned on the presence of an optional board neutrality and breakthrough rule. Accordingly, the directive allows, through Art. 12, member states to opt out of the board neutrality (Art. 9) and the breakthrough rules (Art. 11), with the practical effect that their firms will be regulated by national level takeover rules.

Recently, the idea of shareholder democracy has surfaced once again in the EU. The political currents swirling around one-share one-vote are similar to the highly interested firms and political interests that favored the introduction of the breakthrough rule. Some commentators (Mülbert, 2006) point out that the one-share one-vote rule is a logical extension of the breakthrough rule provided for in Art. 11 of the Takeover Directive. Yet, to the extent that the breakthrough rule will have little economic impact, it is perhaps not surprising that political forces have turned their interest to the adoption of measures that will induce a form of "democratic representation" at the level of the firm. For these groups, the one-share one-vote rule is the instrument of choice. That being said, the next section will briefly discuss whether there is a sufficient economic basis for this pattern of regulatory intervention and whether the probable distortions and regulatory costs caused by this measure are justified.

⁴Bebchuk and Hart (2002) claim that instead of promoting economic efficiency, the breakthrough rule will push companies to substitute dual-class capitalization by other structures of control such as pyramids. These structures can further exacerbate problems related to monitoring, incentives, and liquidity. McCahery and Renneboog (2003) argue that costs of the breakthrough rule exceed its benefits. Furthermore, the board neutrality and breakthrough rules are neither necessary nor sufficient conditions for ensuring the level playing field. Each rule should be assessed on its own merits and efficiency implications. Coates (2003) argues that the breakthrough rule will produce few benefits and therefore cannot be considered an advance, politically or economically, on the status quo.

7.3 Economics of ownership and corporate voting: a brief overview

Why do property rights matter? The economic theory of ownership structure unequivocally states that ownership matters.⁵ Not only does ownership matter but also its distribution and exercise do insofar as it is generally argued that the degree of distribution of ownership is an equilibrium response to the company's operating conditions (Demsetz, 1983; Demsetz and Lehn, 1983), and, hence, they affect the performance of the company and its value (Grossman and Hart, 1986; Grullon and Kanatas, 2001; Hertznel and Smith, 1993; Jensen and Warner, 2000; Smith, 1986; Wruck, 1989). Moreover, it is also argued that managerial performance and managerial incentives depend on the degree of concentration of ownership and their stake of ownership in the firm (Jensen, 1986; Jensen and Meckling, 1976).

Against this background, corporate voting mechanisms become critical in the context of exercising ownership over a wide range of corporate affairs. One-share one-vote is a corporate voting mechanism that makes control exactly proportionate or equiproportional to capital invested by tying cash flow rights with voting rights to these shares. It is based on the assumption that shares have (i) economic ownership (cash flow rights) and voting power (voting rights), and (ii) cash flow rights should be exactly proportionate to voting rights since shareholders are interested in higher share value, and, hence, will equally vote to promote that interest to maximize the value of the company (Black and Kraakman, 1996; Easterbrook and Fischel, 1983; Easterbrook and Fischel, 1991).

Moreover, one-share one-vote is also generally designed as a legal counterbalance to managerial power in accordance with the central concept of modern corporation, namely the separation of ownership and control (Berle and Means, 1932). Since minority shareholder-owners inherently suffer from collective action problems to monitor manager-shareholders in dispersed ownership structures (e.g., the United States), the argument goes, one-share one-vote is one of the instruments to reduce the divergence between the interests of managers and shareholders and discipline wayward managers through the threat of replacement.⁶

In the United States, one-share one-vote was introduced by the New York Stock Exchange in 1926 and subsequently abandoned in 1986 (Seligman, 1986). In the EU, one-share one-vote is already a rule in some member states. The Deminor study, which examines 300 FTSE-Eurofirst 300, highlights that:

⁵Jensen and Smith (1984) extend the basic framework of Modigliani and Miller (1958) to include variables such as taxes, bankruptcy costs, and agency costs. They argue that the mix of financial claims (including debt and equity) affects the value of the firm since any changes in the mix change the firm's total cash flows; Mayers and Smith (1986); Masulis (1987).

⁶Black and Kraakman (1996) suggest that "The case for the one-share one-vote rule turns primarily on its ability... to preserve the market for corporate control as a check on bad management," see Jensen and Warner (2000).

- 65% of all companies analyzed applied one-share one-vote. Deviations occur in most markets but are widespread in France, Netherlands, and Sweden (see Figure 7.1 for more details).
- There is a variety of exceptions to one-share one-vote. Multiple voting rights are used by 20% of analyzed companies and are widely used in France, Sweden, and the Netherlands (see Figure 7.2 for more details on multiple voting rights and Figure 7.3 for all types of deviations by the frequency of each type of deviation) (Deminor, 2005).

The desirability of one-share one-vote turns on whether the rule can influence shareholder value and whether it will work as intended to enhance shareholder empowerment. In the next section, we address these questions in turn.

7.4 Is one-share one-vote optimal?

The link between one-share one-vote and shareholder welfare is a critical one, since to the extent one-share one-vote can be an optimal economic arrangement in terms of best promoting shareholder value predetermines whether one-share one-vote can be a right policy instrument for EU intervention in the pursuit of shareholder democracy in the EU. The efficiency implications of one-share one-vote have been broadly discussed in the law, finance, and economic literature. There are conflicting views as whether deviations from one-share one-vote increase or reduce corporate value (Jarrel and Poulsen, 1988; Partch, 1987).

Is one-share one-vote the best policy instrument to achieve shareholder democracy in the EU? To answer this question, the following subsections examine

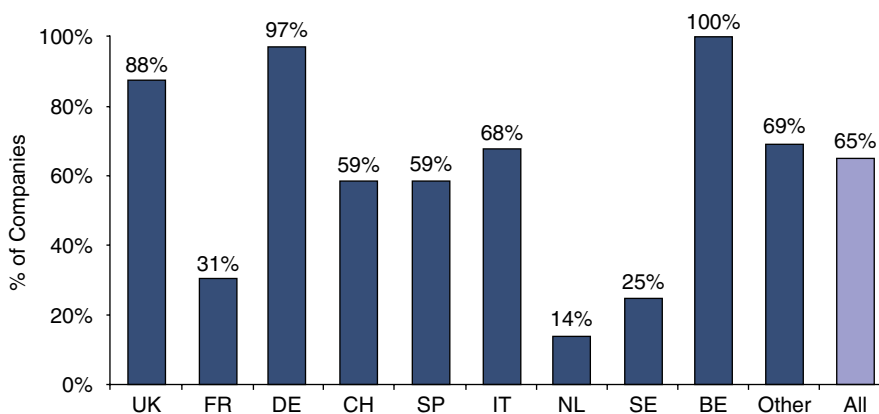


Figure 7.1 Companies applying the one-share one-vote principle in the EU

Source: Application of the one-share one-vote principle in Europe, March 2005,

<http://deminor.org/articles.do?id=3479>

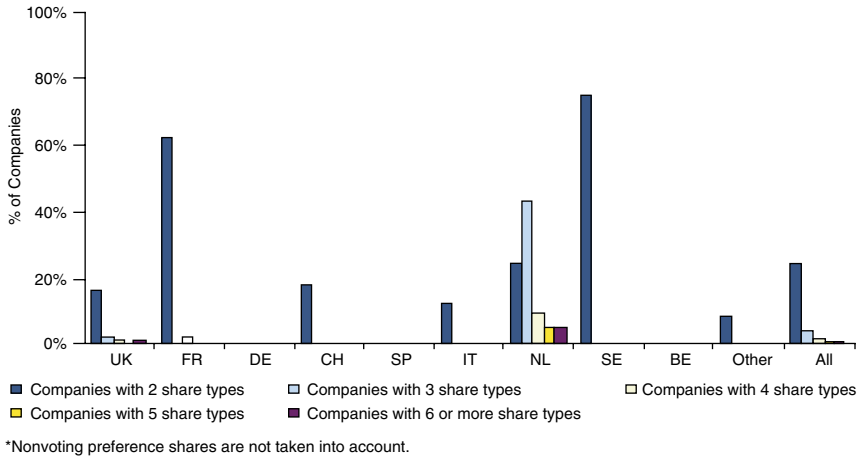


Figure 7.2 Number of share types in European companies
 Source: Application of the one-share one-vote principle in Europe, March 2005,
<http://deminor.org/articles.do?id=3479>

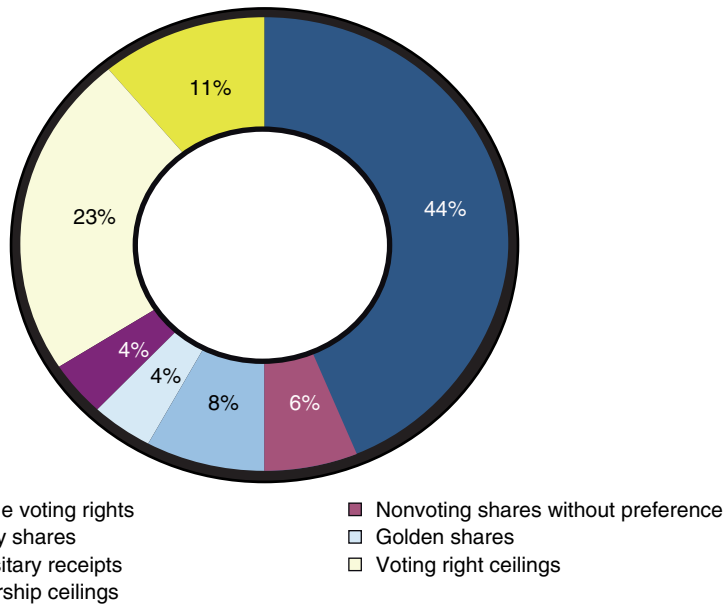


Figure 7.3 Exceptions to the one-share one-vote principle in the EU by frequency of each type of exception
 Source: Application of the one-share one-vote principle in Europe, March 2005,
<http://deminor.org/articles.do?id=3479>

and present an in-depth analysis of one-share one-vote in the context of complete contracts, incomplete contracts, takeovers, pyramidal holdings, and derivative instruments.

7.4.1 One-share one-vote and complete contracts

Corporate voting structures in general and one-share one-vote in particular are irrelevant in the world of complete contracting, costless enforcement, and homogenous shareholders. To begin, if all contracts are complete, then the corporate players are capable of: (1) fully foreseeing all the future contingencies; and (2) stating the course of actions with respect to each contingency, and (3) writing comprehensive contracts at zero cost (Coase, 1937). Moreover, if the knowledge of the states of nature is common among shareholders, i.e., the states are dependent upon observable and verifiable variables, then third parties can easily observe and enforce contracts. Applying this general view means that there are no principle-agent problems of moral hazard and/or adverse selection. Indeed, *ex ante* complete contracting leaves no room for *ex post* residual decision making, opportunism and divergent/heterogeneous preferences. Accordingly, all shareholders have identical tastes or preferences. Costless enforceability of contracts eliminates incentive and coordination problems, and hence, invalidates the very necessity of ownership in general and one-share one-vote in particular. The initial distribution of ownership and one-share one-vote do not matter in this context since resources will eventually end up at their highest value use and economic efficiency will be maximized.⁷

7.4.2 One-share one-vote and incomplete contracts

As soon as the assumption of contractual completeness is abandoned, the incomplete contracting paradigm implies that shareholders are rational maximizers of their welfare but only boundedly so. Moreover, there are agency costs of contracting, monitoring, and opportunism that give a rise to divergent incentives. Hence, incomplete contracts validate the necessity of ownership. Not only does ownership become relevant in this context but also its distribution. If ownership and its distribution matter, then instruments of exercising ownership in general and one-share one-vote do as well. The issue then becomes how one-share one-vote influences shareholder value. To develop this point, there might be two alternative explanations in the incomplete contracting paradigm: (1) transaction costs; and (2) concentration of ownership. Note that both are driven by heterogeneous preferences.

⁷This implies three types of efficiency: productive, allocative, and distributive efficiency. Productive efficiency refers to the costs of goods and services produced in the economy. Allocative efficiency refers to the allocation of resources to the production of the goods and services consistent with the societal preferences. Distributive efficiency refers to the efficiency by which the output and services produced are delivered to the society at given disposable incomes and market prices.

7.4.3 *Transaction costs*

In the transaction cost paradigm, the optimality of one-share one-vote can be explored based on the relationships between the nature of investment, the degree of its specificity (redeployability/liquidity), and the cost of finance (Demsetz, 1983; Hart, 1995; Hart and Moore, 1990). It can be generally argued in this framework that since different modes of finance have different costs, the level of asset specificity determines preferences for different modes/preferences of finance. Moreover, the degree of specificity of investment determines different incentives and divergent preferences, and hence, undermines the very basis of one-share one-vote, namely that of “similar if not identical shareholders” (Easterbrook and Fischel, 1983).

Low-asset-specific investments can be easily financed by debt (lower transaction costs), while high-asset-specific investments ought to be financed by equity (lower transaction costs). Naturally, this logic is very simple. As the degree of asset specificity of the investment increases, the degree of its liquidity shrinks and the transaction cost of its monitoring increases. As the liquidity shrinks, the value of pre-emptive rights decreases so the cost of debt finance increases. Thus, higher (lower) costs of debt finance induce the firm to choose lower (higher) cost equity finance for investment projects. More importantly, ownership and *ex post* residual decision making should be allocated in such a way that information asymmetries and high agency cost of monitoring (postcontractual costs) could be minimized. This can be achieved through extending adequate incentives to the party, making the most specific relationship-specific investment through conferring controlling residual voting power to this party.

In this context, one-share one-vote implies that high and low agency cost shareholders, or alternatively shareholders with divergent preferences, get the same *ex post* decision making power (voting rights). This increases information asymmetries, agency costs of monitoring, and reduces the incentives of the high agency cost factor(s), thus inducing further costs on the company and its value. Hence, one-share one-vote becomes a suboptimal voting mechanism in the world of incomplete contracts and heterogeneous shareholders as defined by the degree of specificity of their investments.

The above analysis implies that economic optimality would suggest that, in order to maximize shareholder value, there should be complete separation between voting rights and cash flow rights. As a result, the party that makes the most particular relationship-specific investment should have the full non-fragmented menu of residual *ex post* decision-making power in the company.

7.4.4 *Ownership concentration*

Another influential view in economic literature that can shape the optimality debate of one-share one-vote is the degree of concentration of ownership. Since one-share one-vote is an instrument of distribution and exercise of power

within the corporation, the efficiency implications vary with a degree of concentration of ownership.

It is well-known that the degree of ownership concentration varies across the world's advanced economies. There are different ownership structures on both sides of the Atlantic, with the most important difference being the presence of controlling shareholders in the EU. Recent empirical literature on comparative systems reveals that the high degree of ownership concentration in Continental Europe is striking; in French, German, Austrian, Belgian, and Italian companies, a single shareholder (or a shareholder group) usually owns an absolute majority of shares. This stands in sharp contrast with the United States and the United Kingdom, where the largest shareholder owns an average stake of respectively 22.8% and 14%. Whereas a coalition of the three largest shareholdings gives a cumulative share stake of more than 60% in Continental Europe (up to a supermajority of 75% in France and Austria), a similar coalition can vote a mere 30% of the shares in Anglo-American countries.

Besides the striking difference between ownership concentration in the EU and the United States, the main categories of owners and the instruments of ownership vary significantly as well. The main shareholders are classified as: (1) institutions (banks, insurance companies, investment and pension funds); (2) individuals (excluding directors) and their families; (3) directors and their families and trusts; (4) industrial, commercial, and holding companies; and (5) the federal or regional governments. Individuals and families account for about 15 to 25% of the large share stakes of listed companies in Continental Europe.⁸ The differences in ownership structures have important implications with respect to corporate governance. Also, unlike the United States, ownership in Continental Europe has been highly concentrated through such instruments as pyramidal holdings, ownership cascades, disproportionate class of shares, voting trusts, and voting caps (see Table 7.1, 7.2, and 7.3 for more details) (Bennedsen and Nielsen, 2002; Faccio and Lang, 2002).

In turn, corporate voting instruments have evolved historically as a result of different preferences for control and liquidity as well as the wider set institutions of ownership and historic market structures. Dispersed ownership structures inherently suffer from a problem in the economic literature that is generally known as a "free rider problem." The essence of the problem is that in dispersed ownership structures, there will generally be lack of monitoring since costs and benefits of monitoring will be shared disproportionately: Costs of monitoring will be incurred by an individual shareholder willing to do so, while the rest of the shareholders and stockholders will only benefit from any such monitoring without any contribution. The lack of monitoring will further exacerbate the conflict of interest between minority shareholders and the board by effectively

⁸The high number of family ownership in Italy and Austria is influenced by the fact that the sample consists of both listed and nonlisted companies. Still, a majority of the listed Italian companies is family controlled.

Table 7.1 Instruments of separation of ownership and control in the EU

	Sample	Controlling owner (%)	Pyramid ownership (%)	Cross ownership (%)	Owning family (%)
AT	88	81.82	20.78	1.14	80
BE	104	71.15	25.00	0.00	80
FIN	92	41.30	7.46	0.00	69.23
FR	522	64.75	15.67	0.00	62.20
DE	631	59.90	22.89	2.69	61.46
ER	26	42.31	9.09	0.00	77.78
ES	465	44.30	16.00	0.22	62.50
IT	181	58.76	20.27	1.13	70.00
NO	98	38.78	33.90	2.04	66.67
PT	68	60.29	10.91	0.00	50
SW	149	48.32	15.91	0.67	73.47
UK	721	43.00	21.13	0.00	75.85

Source: Faccio, M. and Lang, L. (2002). "The Ultimate Ownership of Western European Companies." *Journal of Financial Economics* 65(3), 365.

Table 7.2 Differentiated voting rights in Europe

Country	Number of companies	Proportion of companies with differentiated voting rights (%)
Sweden	334	0.55
Italy	208	0.41
Finland	129	0.36
Denmark	210	0.33
U.K.	1953	0.24
Ireland	69	0.23
Austria	99	0.23
Germany	704	0.18
France	607	0.03
Spain	632	0.00
Portugal	87	0.00
Belgium	130	0.00

Source: Bennedsen and Nielsen (2002). "The Impact of a Breakthrough Rule on European Firms." Discussion Paper 02-10, Centre for Economic and Business Research, Copenhagen.

allowing managers to benefit from diverting corporate resources through related party transactions (see, e.g., Gilson and Gordon, 2003), undertaking projects targeted to their needs and ends (see, e.g., Demsetz and Lehn, 1983), pursuing visionary projects (see, e.g., Jensen, 1993), or enhancing their human capital (see, e.g., Shleifer and Vishny, 1989). Hence, in the context of dispersed

Table 7.3 Stock market performance: the EU vs the U.S.*

	US	Europe
From 1982	1222%	1145%
From 1987	436%	426%
From 1992	164%	113%
From 1997	28%	13%
From 2001	-32%	-34%

* From January 1 of the given year through end of December 2002.

** *Source*: Holmstrom, B. and Kaplan, S. (2003).

“The State of U.S. Corporate Governance: What Is Right and What’s Wrong?” NBER WP 9613.

ownership structures, one-share one-vote is designed as an instrument in the wider set of the core and supporting institutions of corporate governance to mitigate agency costs of monitoring and incentives between minority shareholders and managers, for example, to reinforce shareholder primacy through monitoring and disciplining corporate boards.

While concentrated ownership structures effectively overcome the free rider problem between small shareholders and managers by giving controlling shareholders the power and benefits of control, they introduce yet another type of agency problem, i.e., between controlling and noncontrolling shareholders. Through different instruments of exercising control, like those employed in the EU, controlling shareholders can effectively curb managerial power. Thus, by promoting their own interest through general oversight, majority shareholders also promote that of the minority. Still, ownership cascades, pyramids, voting trusts, for example, allow controlling shareholders to unilaterally and disproportionately benefit from their holdings through related party transactions, control premia, and freeze-out transactions to the detriment of noncontrolling shareholders (see, e.g., McCahery and Renneboog, 2003).

The latter has two important ramifications for the optimality of one-share one-vote. First is that the degree of concentration of ownership determines different incentives and divergent preferences, and hence, undermines the very basis of efficiency of one-share one-vote, namely that of “similar if not identical shareholders” (Easterbrook and Fischel, 1983). Second, in the context of controlling structures in general and in the EU in particular, the one-share one-vote rule is designed to discipline self-interested managers and is not a suitable policy instrument since in the EU the nature and magnitude of agency problems is not between minority shareholders and wayward managers, but between minority and majority shareholders. Hence, it would be a more viable and efficient step forward if EC policymakers could introduce measures that could effectively constrain the private benefits of control by controlling shareholders and ensuring equal treatment of all shareholders.

In any event, a proper disclosure regime for such transactions is a key to limit the amount of control benefits accrued by controlling shareholders. The importance of transparency—in the form of corporate reporting including financial statements—is central to this process. In the EU, the transparency system is channeled through the periodic publications of the company’s financial disclosures and audited annual reports. The Fourth Directive contains detailed requirements for the preparation of balance sheets, profit and loss statements, and annual reports. While the standard of reporting must be “true and fair,” certain member states remain far from the international standard and may also lack effective mechanisms to deal with market credibility issues. A key problem appears to be differences between member states in terms of disclosure intensity and liability exposure of gatekeepers, which is necessary to ensure effective corporate reporting.

7.4.5 Transparency and disclosure

An important aspect of corporate reporting is the disclosure of related party transactions. The *IAS 24 Related Party Disclosures*, e.g., already defines how a transfer of resources, services, or obligations between related parties should be disclosed, regardless of whether a price is charged. The nature of related party transactions and information about outstanding balances should be disclosed to allow for an understanding of their potential effects (IAS 24). Such disclosures should include the amount of the transactions, the amount of outstanding balances, provisions for doubtful debts related to the amount of outstanding balances, provisions for doubtful debts related to the amount of outstanding balances, and expense recognized during the period in respect of bad or doubtful debts from related parties. Moreover, the IAS 24.16 mandates disclosure of management compensation, and, hence, constrains the ability of majority shareholders to compensate themselves as, e.g., board members of the company.⁹ Furthermore, the IAS 1.96 (97) requires the company to present a statement of changes in equity as a separate component of the financial statements, which further makes equity change transactions more transparent, and, hence, reduces the need for extensive legislative intervention in this area.¹⁰

In addition to the rules on the disclosure of related party transactions described above, we find that shareholders would prefer to have more restrictions on special purpose entities (SPEs). Typically, SPEs are employed by financial intermediaries and companies to facilitate arm’s-length financial transfers.

⁹International Accounting Standards (IAS) 24.16 mandates disclosure of key management personnel compensation in total and for each of the following categories: (1) short-term employee benefits; (2) postemployment benefits; (3) other long-term benefits; (4) termination benefits; and (5) equity compensation benefits. Key management personnel are those persons having authority and responsibility for planning, directing, and controlling the activities of the entity, directly or indirectly, including all directors (whether executive or otherwise).

Nevertheless, and significantly, the evidence indicates that SPEs are used extensively by controlling shareholders to divert private benefits of control. In the case of Parmalat, for example, former CEO Fausto Tonna used an array of off-balance sheet arrangements in pursuit of this scheme to artificially inflate assets on the group's consolidated balance sheet and preserve its access to external funding, particularly in the United States. In this case, the preferred method to divert private benefits was to transfer assets, falsely, from Parmalat to an SPE in exchange for consideration, which the SPEs would raise from loans from Parmalat. Subsequently, management at Parmalat would remove the asset from its own books and then record the loan as an asset. Since these off-balance sheet arrangements played a central role in the Parmalat fraud and accounting scandal, the EC has attempted to improve disclosure by proposing an amendment to the Seventh Directive, mandating that companies must disclose all off-balance sheet arrangements that have a material impact on the company. Arguably, the new SPE rules are likely to improve the source of information to investors. Thus, it would seem that the complex and obscure transactions designed by Parmalat's executive and professional advisors ensured that investors would have little accurate and timely information to assess the company's performance. It follows that to the extent the new EU rules are likely to have an impact on companies, it should be clear that such measures will create difficulties for groups of companies, such as Parmalat, that have been able to successfully prevent disclosure of these type of conflicts (Department of Trade and Industry, 2005).

Against this background, the EU may be able to improve its transparency regime by reinforcing accounting standards that might be further complemented by the introduction of rigorous standards of judicial review of self-dealing transactions between the controlling shareholder and the company to determine the entire fairness of such transactions (Gilson and Gordon, 2003). Furthermore, the economic evidence suggests that another effective way to constrain controlling shareholder opportunism is to strengthen the independence of the board and the role of nonexecutive and supervisory directors in key areas of conflicts of interest (Black, Jang, and Kim, 2003). Overall, decisions in the areas of executive remuneration and audit supervision should be made exclusively by

¹⁰ IAS 1.96 requires firms to show (1) profit or loss for the period; (2) each item of income and expense for the period that is recognized directly in equity, and the total of those items; (3) total income and expense for the period (calculated as the sum of (1) and (2)), showing separately the total amounts attributable to equity holders of the parent and to minority interest; and (4) for each component of equity, the effects of changes in accounting policies and corrections of errors. Moreover, according to the IAS 1.97 the following amounts may be additionally presented in IAS 1.96 or they may be presented in the notes: (1) capital transactions with owners; (2) the balance of accumulated profits at the beginning and at the end of the period, and the movements for the period; and (3) a reconciliation between the carrying amount of each class of equity capital, share premium, and each reserve at the beginning and at the end of the period, disclosing each movement.

nonexecutive directors, a majority of whom are independent. Recently, the EU has adopted a set of nonbinding minimum standards for independence and requires enhanced identification of conflicts of interest (European Commission, 2004). Crucially, because of the diversity of legal systems in the EU, the commission did not recommend a precise number of independent supervisory members on the board. Moreover, the EC proposed that audit members be composed exclusively of nonexecutive or supervisory directors, a majority of which are independent. We believe that the EU, to the extent that it has undertaken steps to establish rules that are more appropriate with the diversity of governance regimes in Europe, has put in place a set of useful measures that are likely to enhance better internal governance in a controlling shareholder system of governance.

7.4.6 One-share one-vote and takeovers

The implications of voting mechanisms in general have been widely analyzed in the context of proxy contests for corporate control (Bebchuk and Hart, 2001; Edelman and Randall, 2003; Gilson and Schwartz, 2001). In particular, a rigorous analytical framework of the optimality conditions of one-share one-vote in the takeover context has been developed by the pioneering works of Grossman and Hart (1988), and Harris and Raviv (1988). Despite the fact that the proposed settings differ in certain respects,¹¹ the authors' general conclusion is that the distribution of voting rights affects the value of the firm and under qualifying conditions (almost never), one-share one-vote is Pareto optimal.¹²

Based on the concepts of private and public benefits of control that accrue to the board and shareholders respectively, Grossman and Hart (1988) argue that one-share one-vote maximizes the value of the firm as compared to dual-class capitalization, since dual-class capitalization coupled with the following qualifying conditions might allow for control to be transferred to a potentially inefficient bidder who enjoys private benefits of control: (1) shareholders have the same preferences, (2) control is concentrated through a dual-class structure with 50:50 split between the voting and nonvoting shares having equal cash flow rights, (3) the incumbent management does not enjoy private benefits, (4) there is only one party in the control contest obtaining significant private benefits; and (5) the bidder bids only for the voting stock, while the holders of nonvoting stock incur the costs of inefficient management without benefiting from any control premium.

¹¹ Grossman and Hart (1988) concentrate on the maximization of the economic value and assume that the subjective probability of a small shareholder being pivotal in the takeover context is zero. Harris and Raviv (1988) in contrast also analyze maximization of the social value and assume that small shareholders can be pivotal in the takeover context.

¹² The criterion associated with the name of Vilfredo Pareto. The underlying premise of the Pareto criterion is the individual welfare. It says that a group is better off if (a) every individual is better off, or (b) at least one member of the group is better off without anyone else being worse off.

Under these qualifying assumptions, however, one-share one-vote would eliminate the possibility of inefficient management taking control. Any bidder should acquire all the outstanding shares of the company at a share price trading under the incumbent management. Hence, one-share one-vote outperforms any dual-class structure by maximizing the public (economic) value of the firm.¹³

The second seminal contribution made by Harris and Raviv (1988) presents a tradeoff between social and economic optimalities and argue that this tradeoff determines the optimality of one-share one-vote. Social optimality is achieved when the sum of the private and public benefits is maximized. One-share one-vote in combination with the simple majority rule becomes socially optimal because it is capable of replacing wayward management. The party capable of running the company more efficiently gets the control. However, social optimality generally is achieved to the detriment of economic optimality. The authors show that any dual-class structure with a full separation of voting rights and cash flow rights maximizes the public value of the firm. Nevertheless, while economic efficiency endows shareholders with more benefits, it does not necessarily ensure the victory of the best management team. Consequently, efficiency might suffer as a result of one-share one-vote.

Under qualifying conditions, not having such a voting rule leads to inefficient acquisitions from the nonvoting shareholders' perspective—in a Grossman and Hart type setting, but as the magnitude of the inefficiency essentially turns on whether private benefits for bidders are very large, one wonders how relevant is such an assumption. The assumption of only one party in the control contest is not realistic. As the number of contestants increase, concentrated voting power allows for “squeezing out” higher public benefits from private benefits. The party in the control contest that can enjoy the highest control benefits is also the one that can run the company more efficiently (see also the transaction cost and incomplete contracts arguments). This also makes the holders of nonvoting stock better off.

Moreover, the fundamental presumption of shareholders being homogeneous value-maximizers is indefensible. The literature has long emphasized the role of the elements of behavioral and cognitive psychology in price performance and price behavior over time, and, hence, heterogeneity of preferences of corporate players (Choi and Pritchard, 2003; Kahneman and Mark, 1988). They are not identical insofar as their preferences are concerned since they have limited nonidentical cognitive capacities to store, process, and interpret information (Simon, 1955). Different corporate players also have different perceptions or biases of the market and its trends. They use behavioral and judgmental elements such as: (1) biases of motivated reasoning; (2) biases of self-confidence;

¹³ A point should be made here that any rational bidder will incorporate foreseen costs associated with the one-share one-vote rule into his bid price, which might imply that the public value of the firm is not necessarily maximized under one-share one-vote rule in this context.

and (3) biases of flawed statistics to find out and discover valuable information in the face of informational incompleteness (Choi and Pritchard, 2003; Tversky and Kahneman, 1974). Consequently, the way corporate players make judgments on stock performance and the way in which they determine and express their respective preferences, e.g., define the way they are different from each other in their preferences reflects upon stock returns and volatility (Goldstein and Hogarth, 1977).

Against this background, the existence of value-increasing deviations from the one-share one-vote is further supported by a number of economic models and empirical studies. In this context, Shleifer and Vishny (1989, 1997) and Hirshleifer (1992) claim that deviations from one-share one-vote are necessary to extract the highest value from the bidder. Zingales (1994, 1995) and Gromb (1997) further argue that dual-class capitalizations with complete separation between voting and nonvoting stock increases the efficiency of the bid. Burkart *et al.* (1998) additionally contend that deviations from one-share one-vote might be desirable to mitigate post-takeover agency problems absent the mandatory bid rule.

Jensen and Warner (2000) advance the nonoptimality debate of one-share one-vote by concluding that deviations can create more shareholder wealth since they allow for capturing more benefits of control from the successful bidder. Coates (2001) further claims that it is largely misleading to believe that one-share one-vote promotes takeovers while any dual class is a takeover defense. Even if dual-class shares can be seen as a takeover defense, Bebchuk *et al.* (2002) conclude that takeover defenses in general have little or no impact on the bid outcome.

Martin and Partnoy (2004) further undermine the feasibility of one-share one-vote in the context of takeovers, arguing that voting arbitrage can effectively make one-share one-vote a suboptimal corporate voting mechanism and demote shareholder value. Arbitrageurs, the argument goes, can destroy the shareholder value in the takeover context, if their net holding position of shares as defined by the difference between pure holdings and the short positions is negative. The destruction can take two forms. First, shareholders with a net negative position can block value-enhancing takeovers to profit from their short positions. Second, the same shareholders can vote for suboptimal tender offers. In both cases, the more shareholder value is destroyed, the more profits these shareholders make. The upshot is that one-share one-vote cannot be a value-enhancing corporate voting mechanism in the EU insofar as the takeover market is concerned. Paradoxically, it can promote self-interested incentives and value-destroying takeovers, or even worse, a takeover defense.

7.4.7 One-share one-vote and pyramids

One-share one-vote has also very important implications insofar as liquidity and control are concerned. Coffee (1991) first highlighted the tradeoff between liquidity and control in the context of institutional shareholder voting by arguing that an active liquid market induces less active monitoring.

Becht (1999) argues that the imposition of legal rules/voting mechanisms aimed at strengthening minority rights can indeed have negative effects on corporate performance insofar as they can reduce monitoring incentives and shrink liquidity. Worse yet, one-share one-vote in particular can result in minority shareholder abuse since the rule will promote the adoption of pyramidal structures.

Pyramidal holdings are designed as hierarchically intermediated chains of affiliated companies through a top-down chain of control as a vehicle to achieve a desired degree of tradeoff between liquidity and control (Aghion, Bolton, and Tirole, 2004; Becht, 1999; Coffee, 1991; Wolfenzon, 1999). Through such structures the ultimate owner(s) retain most of the voting power of the chain and mostly externalize financial, risk-bearing, or liquidity costs. It gives an opportunity or default options to the ultimate owner(s) to diversify risks and allocate resources across a portfolio of companies and contracts while ensuring necessary voting control is retained over the chain. Moreover, for a given value of the company, it is cheaper to establish and manage a pyramidal holding instead of a group of horizontally structured companies, since the latter requires significantly higher equity investment, lower leverage, and, hence, higher costs of management *vis-à-vis* pyramidal holdings.

Though some authors document that pyramidal holdings can create value through internal capital markets, it is also submitted that such structures allow for maximum extraction of private benefits by the ultimate owners (Billet and Mauer, 1999; Stein, 1997; Williamson, 1975). Moreover, as compared to negative impact that dual-class capitalization has on liquidity and incentives, pyramidal holdings have much larger negative impact on these variables. Shleifer and Vishny (1997) argue that "...large owners gain nearly full control of the company and are wealthy enough to prefer to use firms, to generate private benefits of control that are not shared by minority shareholders...." La Porta *et al.* (2002) further posit that weak minority protection rules induce expropriation of outside shareholders, which is an increasing function of the controlling shareholders owning less cash flow rights.

Against this background, even if one-share one-vote is mandated in the EU, instead of meeting its political objectives, it might indeed affect minority rights and lead to minority abuse because it will be substituted by an even less minority investor-friendly mechanism: pyramidal holdings. From a policy perspective, it might sound prescriptive to ban pyramidal holdings. Nevertheless, it might be an insurmountable task since this would be almost tantamount to prohibiting industrial groups, most of which take the form of pyramidal holdings in the EU (Ferrarini, 2005). Thus, even if the regulator somehow manages to ban pyramidal structures, derivative instruments will effectively allow parties to achieve the same economic effect of separation of cash flow rights from voting rights of the same shares, but at much higher costs. This issue is discussed in the next section.

7.4.8 Decomposition of one-share one-vote

Political, legal, and economic scholarship has long dealt with the issue of vote-trading in the political markets and equilibrium conditions (Buchanan and Tullock, 1962; Pelzman, 1990; Schwartz, 1977; Stigler, 1972). Vote-trading and political logrolling have long been part and parcel of political dynamics in many advanced democracies (see, e.g., Bernholz, 1973). Moreover, the public and social choice scholarship has extensively concentrated on the political bargains and vote-trading outcomes as well as stability and optimality properties (Karlan, 1999).

There is an important analogy that can be drawn from the choice of decision and legal rules in the political market to the choice of decision and legal rules in the corporate market. Borrowing from Karlan (1999), it can be argued that on the one hand, shareholders' rights to vote and voting rules have powerful expressive individual and collective choice functions insofar as they reveal individual and collective choices. On the other hand, if an individual, rational, value-maximizing shareholder thinks of his/her votes as simply something to be auctioned to the highest bidder, he/she is likely to see the sole purpose of the corporate governance process as maximization of short-term self-interest.

In this light, corporate vote-trading and corporate logrolling were advanced by the development of capital markets and derivative instruments that introduced many exchange mechanisms in the market for corporate votes and vote-trading conducive to different preferences in terms of control. These techniques allow for *de facto* decomposition of one-share one-vote. These instruments endow with the *de facto* ability, in consonance with all legal requirements, to possess more or less voting rights as compared to cash flow rights of those shares depending on the need and the nature of a derivative transaction.

There are many derivative techniques such as stock lending, equity swaps, direct and indirect hedges, and the like that enable corporate actors to retain formal control while outsourcing some or most of the cash flow rights (Bettis, Bizjak, and Lemmon, 2001). Stock lending allows for separating cash flow rights from voting power so that the borrower ends up with enough voting power to push through desired decisions during a general meeting of shareholders while the lender retains cash flow rights in exchange for some fee. This is a relatively easy technique in the United States, where stocks amounting to 99% of market capitalization can be lent and borrowed (D'Avolio, 2001).

Another technique to decompose one-share one-vote is to use collars in which corporate insiders hedge by taking put and call positions simultaneously to limit their possible risk through fixing the downside and upside. Any such operation effectively decomposes one-share one-vote by allowing the retention of voting rights while reducing cash flow exposure. Bettis, Bizjak, and Lemmon (2001) argue that in the United States, senior executives of listed companies use collars for 36% of their holdings, which allows outsourcing of 25% of their cash flow exposure.

Shareholders can also combine pure shareholdings with a short position shareholding to decompose one-share one-vote. Martin and Partnoy (2004)

argue that this combination makes such shareholders at best indifferent to the shareholder value (when the net cash flow position is zero as a result of holding exactly the same number of shares and a short position in that share) and at worst interested in the destruction of shareholder value (when the net cash flow position is positive as a result of holding more shares in the short position as compared to traditional holding).

Hu and Black (2006a, 2006b) further analyze taxonomy and implications of security derivatives that allow for decoupling cash flow rights from voting rights attached to the same share. They conclude that such separation is indeed value destroying, and worse yet, as compared to dual-class recapitalization, it does not require a shareholder vote.

The possibility and opportunity for corporate vote trading and *de facto* decomposition of one-share one-vote changes both shareholder preferences and the reflection of the intensity in the corporate decision-making process. In this context, one-share one-vote simply becomes a starting point or an initial entitlement in the market for corporate votes. The decomposition of one-share one-vote emerges as the exchange mechanism through which individual shareholders express or reveal the relative strength and intensity of their preferences or alternatively, shareholders acquire more votes on issues that are more valuable to them in exchange for weak preferences on other issues. Any such vote-trading would occur until the marginal benefit of acquiring one more vote on a given issue is equal to the marginal cost.

Against this background, an unequivocal answer that corporate finance provides is that even if one-share one-vote is a mandatory rule, this does not preclude application of different derivative techniques to decompose and *de facto* separate cash flow rights from voting rights attached to the same share. Moreover, any such decomposition may distort incentives and advance destruction of shareholder value instead of promoting it. This may be further exacerbated by the fact decomposition does not require any kind of formal shareholder vote. Hence, from a policy perspective, any such imposition can be viewed as unwarranted and perhaps even misguided.

7.5 Conclusion and policy implications

In terms of one-share one-vote, EC policymakers have yet to meet their burden of proof that one-share one-vote will rebuild investor confidence and foster business competitiveness and efficiency across the EU. Instead, the ubiquitous characteristic of EU lawmaking, namely mandatory harmonization, has overshadowed the economic rationale for intervention. Before acting, the EU should meet the burden of proving that member states are not able to implement this measure as efficiently as it could be implemented at EU level, and should prove that one-share one-vote is proportional to the objective pursued. Nor have EU lawmakers yet shown what true shareholder democracy is and why policy objectives toward it cannot be achieved by other means.

Corporate governance in the EU has a number of features including traditionally concentrated ownership structures, multiple classes of votes, and complex mechanisms of retaining control and balancing liquidity of shares. While seeming to make the case for one-share one-vote, EC policymakers have not yet demonstrated why value-maximizing shareholders and managers, in pursuit of increasing capacity to raise capital, have not always adopted the governance technology of one-share one-vote. Nor have they explained clearly why, given the pressure and scope of global operations, governance rules and voting technologies differ across the EU.

The conclusion this chapter draws from the law, economics, and finance literature is that one-share one-vote is neither a sufficient nor a necessary condition for shareholder democracy in general and shareholder empowerment in the EU in particular. Despite the fact that one-share one-vote is more politically attractive, it is suboptimal in terms of its economic efficiency in different contexts. The most striking fact to note is that even in traditional one-share one-vote contexts like the United States, the advance of capital markets and corporate derivative securities effectively allows for decomposition of one-share one-vote. Paradoxically, any such decomposition can distort incentives and lead to the destruction of shareholder value. As a result there is a risk that in trying to promote shareholder wealth EU policymakers might instead promote the destruction. In the end, an EU approach to shareholder democracy threatens to be both unwarranted and misleading.

Sixty years of U.S. corporate history provides a clear example for EC policymakers. The growing recognition of the fact that a “long-standing commitment to encourage high standards of corporate democracy” as reflected by individual standards of “corporate responsibility, integrity and accountability to shareholders” as an ideological underpinning of one-share one-vote is no longer attractive. The question is whether EC policymakers are inclined to introduce one-share one-vote and wait hopefully for another 60 years to see results. Against this background, this chapter argues that policymakers should seek to establish representative rather than popular democracy. If the goal is to increase shareholder participation and managerial accountability, a nagging question arises: What is next?

Such policy changes should not be pursued without regard to national and historic conditions of member states. Even if the EU hypothetically manages to disperse ownership in the EU, which in light of the Takeover Directive seems a very difficult task, one-share one-vote is clearly not a value-enhancing mechanism in itself. At worst, it is associated with deadweight social losses by impeding certain value-increasing ownership instruments.

There are, however, a number of alternatives for EC policymakers. The first alternative would be to refrain from taking any action at the EU level because one-share one-vote is not likely to foster economic efficiency and could produce adverse results. The second alternative would be to reinforce the role of nonexecutive directors in the area of potential conflicts of interest between majority and minority shareholders. To accomplish this, disclosure rules must be

rigorously reinforced and doctrinal constraints placed on controlling shareholders' extraction of private benefits by establishing standards of review governing conflicted transactions. Finally, the third alternative would be for the commission to create a flexible regulatory tool, giving member states the option to select voting and ownership arrangements that meet their needs. Accordingly, a procedural rule, if adopted, could resolve the fundamental issue of one-share one-vote by giving shareholders the choice whether to adopt a one-size-fits-all rule or choose the status quo. In light of the exemptions from the breakthrough rule of the EU Takeover Directive, this approach is consistent with the body of the EU law (Hertig and McCahery, 2003). A self-regulatory approach can be further complemented by rigorous harmonized transparency and disclosure requirements. If companies make their voting and economic ownership structures publicly available at the IPO stage and later through periodic disclosures to allow investors to make informed decisions, there is no reason to believe that constraining investors' and issuers' choices by law is necessary (Choi and Guzman, 2001). It might be beneficial to require disclosure of long and short positions.

References

- Aghion, P., Bolton, P., and Tirole, J. (2004). Exit options in corporate finance, liquidity vs. incentives. *Review of Finance* 8 (3) 327–353.
- Barca, F. and Becht, M. (2001). "The Control of Corporate Europe." Oxford University Press, Oxford.
- Bebchuk, L., Coates, J., and Subramian, G. (2002). The powerful anti-takeover force of staggered boards: theory, evidence, and policy," *Stanford Law Review* 54, 885–917.
- Bebchuk, L. and Hart, O. (2001). "Takeover Bids vs. Proxy Fights in Contests for Corporate Control." Harvard John M. Olin Discussion Paper Series 336.
- Bebchuk, L. and Hart, O. (2002). A threat to dual-class shares. *Financial Times*, 31 May.
- Becht, M. (1999). European corporate governance: trading liquidity against control. *European Economic Review* 43, 1071–1083.
- Bennedsen, M. and Nielsen, K. (2002). "The Impact of the Breakthrough Rule on European Firms." Copenhagen School of Economics, working paper.
- Berglöf, E. and Burkart, M. (2003). European takeover regulation. *Economic Policy* 36, 173–213.
- Berle, A. and Means, G. (1932). "The Modern Corporation and Private Property." Macmillan, New York.
- Bernholz, P. (1973). Logrolling, arrow paradox and cyclical majorities. *Public Choice* 15, 87–95.
- Bettis, J., Bizjak, J., and Lemmon, M. (2001). Managerial ownership, incentive contracting, and the use of zero-cost collars and equity swaps by corporate insiders. *Journal of Financial and Quantitative Analysis* 36, 3–43.

- Billet, M. T. and Mauer, D. (1999). "Cross Subsidies, External Financing Constraints, and the Contribution of Internal Capital Market to Firm Value." University of Iowa, working paper.
- Black, B. S., Jang, H., and Kim, W. (2003). "Does Corporate Governance Predict Firms' Market Value? Evidence from Korea." Stanford Law and Economics, working paper No. 237/2003.
- Black, B. S. and Kraakman, R. (1996). A self-reinforcing model of corporate law. *Harvard Law Review* 109, 1911–1982.
- Buchanan, J. and Tullock, G. (1962). "The Calculus of Consent, Logical Foundations of Constitutional Democracy." University of Michigan Press, Ann Arbor.
- Burkart, M., Gromb, D., and Panunzi, F. (1998). Large shareholders, monitoring and the value of the firm. *Quarterly Journal of Economics* 112, 693–728.
- Choi, S. and Guzman, A. (2001). Choice and federal intervention in corporate law. *Virginia Law Review* 87, 961–992.
- Choi, S. and Pritchard, A. (2003). Behavioral economics and the SEC. *Stanford Law Review* 56, 1–75.
- Coase, R. (1937). The nature of the firm. *Economica* 4, 386–405.
- Coates, J. C. (2001). Explaining variations in takeover defenses: blame the lawyers. *California Law Review* 89, 1301–1422.
- Coates, J. C. (2003). Ownership, takeovers and EU law: How contestable should EU corporations be? In "Reforming Company and Takeover Law in Europe" (G. Ferrarini, K. J. Hopt, J. Winter, and E. Wymeersch, eds.). Oxford University Press, Oxford.
- Coffee, J. (1991). Liquidity versus control: The institutional investor as corporate monitor. *Columbia Law Review* 91, 1277–1368.
- Communication from the Commission to the Council and the European Parliament (2003). "Modernising Company Law and Enhancing Corporate Governance in the European Union—a Plan to Move Forward." Brussels, 21.5.2003 COM (2003) 284.
- Council Directive 2004/25, 2004 O.J. (L. 142/12) 12-23 (EC). Available at <http://europa.eu.int/eur-lex>.
- D'Avolio, G. (2001). "The Market for Borrowing Stock." Harvard University Press, Cambridge, MA.
- Deminor (2005). "Application of the One Share–One Vote Principle in Europe." Deminor, Brussels. Available at: <http://deminor.org/articles.do?id=3479>.
- Demsetz, H. (1983). The structure of ownership and the theory of the firm. *Journal of Law and Economics* 26, 375–390.
- Demsetz, H. and Lehn, K. (1983). The structure of corporate ownership: Causes and consequences. *Journal of Political Economy* 93, 1155–1177.
- Department of Trade and Industry (U.K.) (2005). "European Company Law and Corporate Governance, Directive Proposals on Company Reporting, Capital Maintenance and Transfer of the Registered Office of a Company, A Consultative Document." DTI, London.

- Easterbrook, F. and Fischel, D. (1983). Voting in corporate law. *Journal of Law and Economics* 26, 395–427.
- Easterbrook, F. and Fischel, D. (1991). “The Economic Structure of Corporate Law.” Harvard University Press, Cambridge, MA.
- Edelman, P. and Randall, T. (2003). Voting models, corporate elections and takeover bids. Working paper, available at: <http://ssrn.com/abstract=429160>
- European Commission (2004). “Recommendation on the Role of (Independent) Nonexecutive or Supervisory Directors and on the Committees of the (Supervisory) Board.” Available at: http://europa.eu.int/comm/internal_market/company/docs/independence/2004-recommendation_en.pdf.
- Faccio, M. and Lang, L. (2002). The ultimate ownership of western European companies. *Journal of Financial Economics* 65(3), 365–395.
- Ferrarini, G. (2005). “Share Ownership, Takeover Law and the Contestability of Corporate Control.” ECGI working paper in law, available at: <http://papers.ssrn.com/abstract=265429>.
- Gilson, R. and Gordon, J. (2003). Controlling controlling shareholders. *University of Pennsylvania Law Review* 152(2), 785–843.
- Gilson, R. and Schwartz, A. (2001). Sales and elections as methods of transferring corporate control. *Theoretical Inquiries in Law* 2(2), 783–814.
- Goldstein, W. and Hogarth, R. (1977). “Research on Judgment and Decision Making.” Cambridge University Press, Cambridge.
- Gromb, D. (1997). “Is One-Share-One-Vote Optimal?” MIT discussion paper.
- Grossman, S. and Hart, O. (1986). The costs and benefits of ownership: A theory of vertical integration. *Journal of Political Economy* 94(4) 691–719.
- Grossman, S. and Hart, O. (1988). One-share-one-vote and the market for corporate control. *Journal of Financial Economics* 20, 175–202.
- Grullon, G. and Kanatas, G. (2001). “Managerial Incentives, Capital Structure, and Firm Value: Evidence from Dual-Class Stock.” Rice University, working paper.
- Harris, M. and Raviv, A. (1988). Corporate governance: Voting rights and majority rules. *Journal of Financial Economics* 20, 203–235.
- Hart, O. (1995). “Firms, Contracts and Financial Structure.” Oxford University Press, Oxford.
- Hart, O. and Moore, J. (1990). Property rights and the nature of the firm. *Journal of Political Economy* 98(6), 1119–1158.
- Hertig, G. and McCahery, J. A. (2003). Company and takeover law in Europe: Misguided harmonization efforts or regulatory competition? *European Business Organization Law Review* 4, 179–211.
- Hertzel, M. and Smith, R. (1993). Market discounts and shareholders gains for placing equity privately. *Journal of Finance* 48, 459–485.
- High Level Group of Company Law Experts (2002). “Report of the High Level Group of Company Law Experts on Issues Related to Takeover Bids, EC, Brussels.” The Commission of the European Communities, Brussels.
- Hirshleifer, D. (1992). Takeovers. In “The New Palgrave Dictionary of Money and Finance” (P. Newman, M. Milgate, and J. Eatwell, eds.). MacMillan, New York.

- Hu, H. and Black, B. S. (2006a). "Empty Voting and Hidden Ownership: Taxonomy, Implications, and Reforms." University of Texas Law School, working paper. Available at: <http://ssrn.com/abstract=887183>.
- Hu, H. and Black, B. S. (2006b). "Hedge Funds, Insiders, and Decoupling of Economic and Voting Ownership in Public Companies." University of Texas Law School, working paper. Available at: <http://ssrn.com/abstract=874098>.
- Jarrel, G. and Poulsen, A. (1988). Dual-class recapitalizations as antitakeover mechanisms: The recent evidence. *Journal of Financial Economics* 20, 129–152.
- Jensen, M. (1986). Agency costs of free cash flow, corporate finance, and takeovers. *American Economic Review* 76, 323–329.
- Jensen, M. (1993). The modern industrial revolution, exit, and the failure of internal control systems. *Journal of Finance* 48(3), 831–880.
- Jensen, M. and Meckling, W. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics* 3, 305–360.
- Jensen, M. and Smith, C. (1984). "The Modern Theory of Corporate Finance." McGraw-Hill Inc., New York.
- Jensen, M. and Warner, M. (2000). "The Distribution of Power Among Corporate Managers, Shareholders, and Directors." Working paper, available at: <http://papers.ssrn.com/abstract=173459>.
- Kahneman, D. and Mark, R. (1988). Aspects of investor psychology. *Journal of Portfolio Management* 24, 52–65.
- Karlan, P. (1999). Symposium commentary: Politics by other means. *Virginia Law Review* 85, 1697–1724.
- La Porta, R., Florencio, A., Shleifer, A., and Vishny, R. (2002). Investor protection and corporate valuation. *Journal of Finance* 57, 1147–1170.
- Martin, S. and Partnoy, F. (2004). "Encumbered Shares." Working paper, available at: papers.ssrn.com/abstract=621323.
- Masulis, R. (1987). Changes in ownership structure: Conversions of mutual savings and loans to stock charter. *Journal of Financial Economics* 18, 3–29.
- Mayers, D. and Smith, Jr., C. (1986). Ownership structure and control: The mutualization of stock life insurance companies. *Journal of Financial Economics* 16, 73–98.
- McCahery, J. and Renneboog, L. (2003). "The Economics of Takeover Regulation in the EU." Centre for European Policy Studies Research Report in Finance and Banking, Brussels.
- Modigliani, F. and Miller, M. (1958). The cost of capital, corporation finance and the theory of investment. *American Economic Review* 48, 261–297.
- Mülbart, P. O. (2006). Is there a case for "one share one vote"? In "One Share One Vote" (G. Mather ed.). European Policy Forum, London.
- Partch, M. (1987). The creation of a class of limited voting common stock and shareholder wealth. *Journal of Financial Economics* 18, 313–339.
- Pelzman, S. (1990). How efficient is the voting market? *Journal of Law and Economics* 33, 27–43.

- Schwartz, T. (1977). Collective choice, separation of issues and vote trading. *American Political Science Review* 71, 999–1010.
- Seligman, J. (1986). Equal protection in shareholder voting rights: The one-share-one-vote controversy. *George Washington Law Review* 54, 687–724.
- Shleifer, A. and Vishny, R. (1989). Management entrenchment: The case of manager-specific investments. *Journal of Financial Economics* 25(1), 123–139.
- Shleifer, A. and Vishny, R. (1997). A survey of corporate governance. *Journal of Finance* 52, 737–783.
- Simon, H. (1955). A behavioral model of rational choice. *Quarterly Journal of Economics* 69, 99–118.
- Smith, C. (1986). Investment banking and the capital acquisition process. *Journal of Financial Economics* 15, 31–60.
- Stein, J. C. (1997). Internal capital markets and the competition for corporate resources. *Journal of Finance* 52, 111–133.
- Stigler, G. (1972). The law and economics of public policy: A plea to the scholars. *Journal of Legal Studies* 1, 1–12.
- Tversky, A. and Kahneman, D. (1974). Judgment under uncertainty: Heuristics and biases. *Science* 185, 1124–1131.
- Williamson, O. (1975). “Markets and Hierarchies: Analysis and Antitrust Implications.” The Free Press, New York.
- Wolfenzon, D. (1999). “A Theory of Pyramidal Ownership.” University of Michigan Business School, working paper.
- Wruck, K. (1989). Equity ownership concentration and firm value: Evidence from private equity financings. *Journal of Financial Economics* 23, 3–28.
- Zingales, L. (1994). The value of the voting right: A study of the Milan stock exchange experiment. *Review of Financial Studies* 7(1), 125–148.
- Zingales, L. (1995). What determines the value of corporate votes? *Quarterly Journal of Economics* 110, 1047–1073.

This page intentionally left blank

8 Opportunities in the merger and acquisition aftermarket: squeezing out and selling out

Christoph Van der Elst and Lientje Van den Steen

Abstract

The European Takeover Directive shifted the interest of European politicians and academics to some particular features in takeover procedures, like the break-through rule, reciprocity, and squeeze-out and sellout rights. This chapter examines the legal framework of the squeeze-out right and the sellout right. First, an economically efficient flexible framework can be in conflict with the constitutional protection of private property. Next, the mandatory rules for the squeeze-out and sellout rights in the European Takeover Directive and in five European Member States—Germany, United Kingdom, France, Belgium, and the Netherlands—are examined. The harmonization efforts of the European Union are, if any, not successful. It can be expected that corporate mobility will compel legislators to offer an effective and efficient squeeze-out and sellout system.

8.1 Introduction

Several studies have documented the cyclical pattern of mergers and acquisitions. In the twentieth century five waves have been observed: the early 1900s, the 1920s, the 1960s, the 1980s, and the 1990s (Renneboog and Martynova, 2006). A sixth wave may have started since 2003 (Renneboog and Martynova, 2005). The new deal volume surpasses any level ever reached (Table 8.1). During the first half of 2006 the deal value of the announced mergers and acquisitions exceeded the deal value of 2002 and 2003. Especially in Europe merger activity soared significantly. The deal value in the first half of 2006 exceeded \$700 billion in Europe, even more than in the United States. The increase of the deal value is not caused by an increase in the number of deals. The number of deals soared approximately 15%. Hence the individual deal value increased. One phenomenon that explains this development is private equity funds that have the funds to acquire all but the very largest companies. Another reason is a number of large international mergers and acquisitions: the successful takeover of Arcelor by Mittal, the planned merger of Suez and Gaz de France and the tender offer of E.ON for Endesa account for more than 15% of the European deal volume in the first half of 2006.

Table 8.1 Announced target mergers and acquisitions by nations

Deals	2002	2003	2004	2005	6/2006
World	26,271	28,652	31,467	32,568	16,921
U.S.	7026	8837	8550	9045	4901
Canada	1599	1135	1445	1493	784
Europe	9458	9954	8994	8952	5204
France	880	774	1027	1054	588
Germany	1228	1200	1283	1308	656
U.K.	2391	2714	2442	2291	1155
Value \$M	2002	2003	2004	2005	6/2006
World	1,207,246	1,379,542	1,953,347	2,703,275	1,843,236
U.S.	439,494	570,008	848,703	1,131,292	702,156
Canada	46,647	34,891	58,128	107,418	93,501
Europe	481,552	504,917	721,758	1,012,623	718,325
France	80,662	56,589	125,290	109,526	111,239
Germany	54,789	54,806	63,877	111,169	60,819
U.K.	147,052	128,227	254,648	294,367	128,018

Source: Thomson Financial.

Economic, managerial, and legal literature on mergers and acquisitions is overwhelming. The economic literature focuses on the efficiency of mergers and takeovers and in particular its role to discipline the management, (the allocation of) the control premiums, the influence on consumers and employees, valuation and the cost of capital, antitakeover measures, and more recently the common European business groups, pyramids, and dual-class shares. The interest of the management literature goes to the tactics of the game and postdeal integration of personnel, structures, systems, and cultures. The legal literature studies can be subdivided in the business law approach, which tackles issues like due diligence, representations, and warranties, and legal particularities of the takeover and merger process, like legal obstacles, mandatory offers, antitakeover measures, etc.

New legal rules, and in particular the European Takeover Directive, have shifted the interest of study to some particular features like the breakthrough rule and the political issue of reciprocity. Among the topics that, at least in Europe, did not receive the same amount of study are squeeze-out and sellout rights.

The squeeze-out right is the (conditional) right of a majority shareholder to force the minority to surrender their financial instruments to the majority shareholder, who as a result acquires 100% ownership of the corporation. The sellout right is the right of a minority (shareholder) to compel the majority shareholder to purchase the shares from the minority.

Table 8.2 Delistings and squeeze-out procedures in Germany between 2002 and 2005

	2002	2003	2004	2005
Delisting with squeeze-out	88.6%	80.8%	70.8%	67.6%
Other delistings	11.4%	19.2%	29.2%	32.4%
Number of delistings	70	52	24	34

Own calculations based on Aktienführer 2006.

Due to the importance to fully integrate the companies involved in the transaction and to take into account the rights of minority shareholders, squeeze-out rights and sellout rights must be considered important postdeal integration tools.

In countries where the squeeze-out procedure has been introduced, it is frequently used (Table 8.2). It indicates that a regulatory system is efficient for the majority shareholder. In Germany the majority of the delistings go hand in hand with a squeeze-out. During the first year that the squeeze-out procedure was introduced, almost 90% of all delistings followed a squeeze-out procedure. The following years the number of delistings drastically decreased together with the number of delistings where the majority shareholder froze the minorities out. By 2005 only two thirds of the delistings belonged to that kind. A number of majority shareholders awaited the regulatory change to start the procedure. This explains the high relative number in 2002. It is, however, less clear why the relative number continued to decrease after 2002. It could be that due to the retake of the stock market in 2002 a number of large shareholders rediscovered the advantages of a listing.

The anecdotal evidence for the sellout procedure is less convincing. In France both squeeze-out and sellout procedures are available. Squeeze-out procedures are far more often initiated than sellout procedures. Viandier (1999) has only found 11 sellout procedures over a period of 10 years from 1989 to 1999, whereas the number of squeeze-outs exceeded 120 over a 3-year period from 1996 to 1999.

The remaining part of the chapter is structured as follows. Section 8.2 discusses the rationale for a squeeze-out and sellout procedure. The economics of the takeover game and position of the squeeze-out right and sellout right are examined. The advantages of the procedures are discussed. Section 8.3 briefly analyzes the protection of private property vis-à-vis the squeeze-out procedure. Section 8.4 compares the procedures in different countries and highlights the differences. Section 8.5 concludes.

8.2 Rationale for the squeeze-out right and the sellout right

The analysis of the rationale for a squeeze-out and a sellout regulation starts with the question of whether any government intervention for this type of rule

is desirable or necessary. The contractual view of the corporation opposes regulation if the market economy achieves the efficient outcome without intervention. If it is in the interest of the firm, the corporate constituents will provide it. If it is in the interest of the firm to protect the position of the majority shareholders—the squeeze-out rule—or the minority shareholder—the sellout rule—it can be left to the discretion of the corporate constituents to determine the efficient rules in the statutes of the firm. A corporate charter clause compelling a shareholder to start an acquisition bid is, at least in some jurisdictions, considered valid. A number of large Swedish corporations had such a type of clause before the mandatory bid rule was introduced (Nieuwe Weme, 2004). In other countries the legal doctrine disagrees whether these types of corporate charter clauses are valid. Different arguments plead against this kind of clause: It is not possible to compel a shareholder to contribute against its will anything above and beyond the contribution requirement, the performance is not in the interest of the company, it is not possible to oblige the shareholder to acquire the shares of other shareholders, and it is in conflict with the independence of the shareholder (Van Olffen, 2000). These arguments are refutable if the provision is only applicable for the founders of the company and those shareholders who approve the provision. In that case the founders consider the clause efficient and the shareholders who approve the clause are autonomous to decide whether they will acquire the triggering number of shares or not. Despite the legal uncertainty, some charters do contain mandatory bid provisions. The July 2004 articles of association of the Dutch food nutrition company Numico state:

“Any Shareholder (the “Offerer”) who obtains at its disposal or is deemed to obtain at its disposal Shares or Voting Rights, as a result of which this Shareholder has at its disposal or is deemed to have at its disposal Shares or Voting Rights representing thirty per cent (30 per cent) or more of the issued capital of the Company (“the Offer Threshold”), must make an offer to acquire all remaining outstanding Shares (the “Offer”)....”

Similarly, a sellout right can be part of a contractual arrangement. In fact, due to the interest of the founders and incumbent shareholders of a company, clauses guaranteeing a sellout right are common in shareholder agreements or articles of association. This tag along right gives the holder of an economic interest in a company the right to transfer this interest to a third party in a private negotiation for part of the shares. It requires the seller of his economic interest to ensure that the arrangement with the bidder contains an offer by the bidder to purchase the interests of the other holders for an amount to be negotiated but generally equal to the amount the seller of the shares receives or an appraised value. However, these agreements and articles are commonly found in closed corporations, though not in public corporations. Next, if this tag along right is part of a shareholders agreement, it is far from sure all shareholders are involved. Hence, regulatory intervention must be considered.

Contractual agreements without a regulatory backup lack effective enforcement. Furthermore, these contracts will only take into account the maximization of the return of the constituent parties. This type of agreement can be socially inefficient. Self-interested founders and shareholders will enter into agreements that extract a larger share of the future surplus (Burkart and Panunzi, 2004). They will extract private benefits to the detriment of other parties. These parties have conflicting interests. Takeover regulation comes in as an instrument to mitigate these conflicts of interest. However, takeover regulation should offer solutions according to the different kind of parties involved. Ownership structures—the parties involved in the aforementioned contractual arrangements—can be classified into two main classes: concentrated ownership and dispersed ownership (Barca and Becht, 2001; La Porta, Lopez-de-Silanes, Shleifer, and Vishny, 1999; Van der Elst, 2001). In continental European countries most companies have major or controlling shareholders, whereas the United States and the United Kingdom are familiar with companies with a widely dispersed ownership structure.

In both continental European countries and Anglo-Saxon countries both types of ownership structures can be found, though the relative number differs. For a large sample of companies with a listing both in 1999 and 2005, the data reveal a large difference between continental European countries and the United Kingdom (Table 8.3). In the United Kingdom, almost 80% of listed companies have a dispersed ownership structure with no shareholders owning more than

Table 8.3 Ownership structures of listed companies in five European countries

2005	Belgium	Germany	France	United Kingdom	Italy
Average voting block largest shareholder	43.6%	45.0%	45.7%	18.0%	46.4%
Number of comp. with blockholder > 50%	42.5%	43.1%	50.9%	4.1%	58.6%
Number of comp. with blockholder 25% > X > 50%	36.8%	25.2%	15.2%	16.2%	19.8%
Number of comp. with largest shareholder stake < 25%	20.8%	31.7%	33.9%	79.7%	21.6%
Number of companies	105	404	112	537	162

25% of the shares. Four percent of the companies have a majority shareholder. The largest shareholder of a British company has a mean voting stake of 18%. In continental European countries, between 40 and 60% of all companies have a majority shareholder. Nevertheless, between 20% and 35% of the listed companies have no major shareholder. The mean voting block of the largest shareholder in continental Europe is approximately 45%.

Since both types of ownership structures exist in both systems, efficient takeover regulation should offer a framework to mitigate both types of opportunistic behavior. First, takeover regulation should help to restrain opportunistic managerial behavior in the dispersed ownership system. Small shareholders lack the incentives to effectively monitor management and rely on different mechanisms of external control, such as accountants and the market for corporate control. Second, takeover regulation, like sellout rights and the exit on fair terms, should also protect minority shareholders in systems with concentrated ownership (Goergen, Martynova, and Renneboog, 2005).

Grossman and Hart (1980) studied the dynamics of control allocations and the free rider problem. Their analysis is of importance as it provides a framework and motives for a squeeze-out right and a sellout right. They consider a firm with a widely dispersed ownership structure and a bidder who does not own shares of the corporation before he approaches the corporation. When the bidder makes the offer, the shareholders of the firm can reasonably assume that the target company is worth more than the price the bidder offers. Otherwise he would not have made the offer and the efforts to acquire the shares of the corporations. When the bidder will be in control the return will be higher. Hence the strategy of the target shareholders will be to hold the shares and not to tender. They will free ride on the bidders' efforts to realize a higher value for the target company. If all shareholders believe the value-increasing efforts of the bidder and all of them think that their decision to tender or not will have a negligible impact on the bidder's likelihood of success, no shareholder will tender and the takeover will fail. In fact, acquirers will anticipate the future failures of tender offers and will no longer make bids for companies, and the market for corporate control will dry. Like Burkart and Panunzi (2004) point out, the success of the value-increasing effect of the takeover is a public good for the target shareholders, and the incumbent shareholders prefer to extract the maximum gains, resulting in a failure of the bid and refraining the market from further bids. Squeeze-outs can discourage this free riding.

Fortunately this picture is incomplete. Grossman and Hart (1980) suggest that the bidder must be able to withhold part of the posttakeover share value from the minority shareholders. Shareholders will be tendering as long as the takeover price is considered to be higher than the share value under the incumbent management. After a successful bid the acquirer could divert a part of the dividends he collects.

Empirical evidence shows that controlling shareholders can allocate to themselves a disproportionate part of the gains of the company. Recently a number of studies attempt to quantify the private benefits. The authors use one of two methods available to assess this expropriation by all shareholders. In the first method it is argued

that the price the acquirer of a controlling block pays reflects the cash flow benefits and the private benefits the acquirer obtains from his controlling position in the corporation. The market price after the announcement of the acquisition only reflects the cash flow benefits the other shareholders expect to receive. Hence the difference between the price paid for the controlling block and the market price reflects the private benefits of control. The second method studies companies, which have issued multiple classes of shares with similar cash flow rights but with differential voting rights. It allows the computation of the value of the voting rights. The market value of the votes is seen as a proxy for the private benefits of control. Only shares with voting rights can decide to dismiss the directors or decide how to complete the corporate contract. Dyck and Zingales (2004) applied the first method. In their study, a shareholder block transfer is defined as a control transaction if at least 10% of the stock is involved and the acquirer moves from less than 20% of the shares to more than 20% of the shares. All transactions were screened to exclude noncontrol transfers like the transfer of shares among subsidiaries of one group, repurchases, recapitalizations, and the like. The private benefit is measured as the price difference between the price per share paid for the control block and the price on the stock exchange 2 days after the announcement of the control transaction, divided by the price on the stock exchange after the announcement and multiplied by the proportion of cash flow rights represented in the controlling block. This correction is necessary to avoid a miscalculation due to imperfect competitive markets for controlling blocks. When the share price after the announcement is deducted from the price for the controlling block it assumes that the seller is able to capture the full value of the security benefits—those benefits that are not private—produced by the buyer. Dyck and Zingales (2004) discovered for 39 countries and 393 bids a mean premium of 14%, going as high as 65% in Brazil and -4% in Japan. The maximum premium that has been paid was 299% in Brazil and 217% in the Czech Republic. In the Philippines one case was found with a negative bid price of 40%. Dyck and Zingales (2004) further differentiated between acquisitions of control blocks of more than 50% and others. The absolute majority of the votes increases the value of the block by 9.5% of the total value, a significant difference.

Nenova (2003) applied the second method to measure the private benefits. She calculated the value of the votes of a control block in companies that have issued classes of shares with similar dividend rights but with different voting rights. Her study contains data of 18 countries. The value of a control block is computed. The value of a marginal vote depends on the voting power of the multiple-voting shares, the relative number of shares in each class, and the size of the corporation and other characteristics. The adjusted value controls for firm size, the concentration of ownership, the excess dividend payment to a limited voting share, and the liquidity of the different share class. The mean values were negative in Hong Kong and Finland but were as high as 48% in Korea.

The observations for the value of votes are comparable to the block premium in control transactions, with exceptions for the results in Australia and Brazil. However, Dyck and Zingales pointed at a sample bias, and the number of Australian companies in the database of Nenova is very limited.

Both methods only measure the economic benefits of the control block. It is likely that shareholders in control enjoy other benefits, and in particular the psychic benefits from running the corporation. Dyck and Zingales (2004) suggest that both methods underestimate the value of control.

The evidence supports the idea that the cases of self-dealing will discourage free-riding by target company shareholders. Bradley (1980) discovered that the stock price of the target company did not soar in the postacquisition period, though it fell by 13%. The stock price of the acquiring company's stock increased, which is not in the interest of the remaining target shareholders. Further, in most cases the bidder already has a stake in the target. Even if the posttakeover value has to be offered, the value improvement of the initial stake flows to the bidder. In general, the initial stake will be less than 30% as this is the triggering threshold for the mandatory takeover bid. This rule does not apply to the companies with a majority shareholder. It can be argued that in those companies a large part of the value improvement will remain in the hands of the acquirer. However, the influence of the majority shareholder before the bid can be considered substantial. Hence the posttakeover share value might be limited. Another alternative to solve the free-riding problem, besides the extraction of private benefits and squeeze-outs, can be leverage. Minority shareholders will tender if they anticipate the risks of remaining a minority shareholder in a highly leveraged company (Burkart and Panunzi, 2004). Debt will be senior to equity, and this will decrease the expected posttakeover share value.

Other arguments that support the introduction of a squeeze-out and sellout rule are:

- The buyer of the company frequently wishes to acquire all shares of the target company in order to obtain exclusive control over the target. The exclusive control offers a number of advantages: general meetings—if any are necessary—can be organized as the acquirer thinks appropriate (like a written general meeting), there are no minorities that can ask questions at the general meeting of shareholders, etc. In short, retaining a small number of shareholders can be costly (McCahery, Renneboog, Ritter, and Haller, 2004). Full control is seen as a part of the acquisition planning. As Herzel and Colling (1984) put it: “The ability to squeeze out minority shareholders and thus obtain 100% of the equity of a corporation is a basic condition of the current market for corporations.”
- Related to the former argument is the ability for the bidder to easily access the assets of the target to pay off the debt for the financing of the deal. The remaining minority shareholders can successfully argue that it is not in the interest of the company or of all shareholders that the assets of the target are used to pay back the debt of the acquisition. Freezing the minority shareholders out avoids this kind of dispute. It must be noted that in Europe there are strict rules to finance the acquisition of the shares with the assets of the target.
- In groups of companies the board of directors of the 100%-held subsidiary can align the management of the subsidiary with the group's strategy and subordinate the interest of the subsidiary. In companies with (small) minority shareholders the board of directors has to run the company strictly in its own best interests and take into account the interests of the minority shareholders in its decision procedures. Synergy gains are important business considerations in acquisition decisions. In groups of companies it can be difficult to structure the development of new activities if the

group management must take into account the interests of the minority shareholder. Must a business opportunity equally be allocated among the companies of the affiliated group in order to allow minority shareholders' participation or can it be allocated in one subsidiary (Gilson and Black, 1995)? Conversely, minority shareholders can use the sellout rights in circumstances where they judge the board does not sufficiently take into consideration their interests.

- The acquisition of the full control over the company allows going private by means of canceling the remaining equity securities. It eliminates the costs of public ownership, which are considered significant. Gilson and Black (1995) estimated these costs between \$60,000 and \$400,000 each year. Securities law, listing rules, and company law are not necessarily harmonized. A successful takeover does not necessarily allow the bidder delisting the target to fully integrate the acquired company. A squeeze-out helps this process if the relation between the different legal instruments is not disputed.
- Some tax rules only allow transfer of losses and profits in a group if it is a 100%-held subsidiary (Bergström, Högfeltdt, and Molin, 1994).
- Finally, the squeeze-out right enhances legal security. In some jurisdictions the supervisory authority compelled the majority shareholder *ex post* to share the control premium with the minority shareholders.¹ This *ex post* approach creates legal insecurity and can distort the proper functioning of the market.

In short, full ownership is considered of higher value than large majority ownership. Under this condition, a bidder would be willing to offer a higher price for the remaining shares after a successful (or conditional) takeover bid. Minority shareholders will anticipate and not tender their shares or the bidder must already offer the higher price in the first stage of the offer. The squeeze-out rule can overcome this problem. Hence the squeeze-out rule can influence the dynamics of the tender offer (Burkart and Panunzi, 2004). A bidder can set the condition for a bid to be retained at the squeeze-out level. If the bid is successful, the bidder will decide whether or not he squeezes the minority. In case he does, the minority shareholders will receive the bid price.

The shareholder compares the returns of tendering and retaining. There are five possible outcomes, but one of them is unlikely to happen. First, if the bid fails, the position of the shareholder does not change whether he tenders or retains. Theoretically his value of the shares remains at the level of the pretakeover value. If the shareholder tenders, he will receive the bid price if the bid is successful. If he retains and he is squeezed the shareholder receives the bid price. If the bid is successful and the bidder does not squeeze the retaining shareholders, their return will be the posttakeover value. However, if this value is higher than the bid price, it is very unlikely the bidder will not make use of the squeeze-out procedure. He will have to share the additional value with the retaining shareholders. Hence, the shareholder will realize a maximum return when accepting the bid price. The additional post-takeover value flows to the bidder, solving the Grossman and Hart free-rider problem. It should be noted that the threshold to squeeze depends on other factors, like different tax advantages at different levels of ownership concentration. Further, if markets are efficient, competition by the incumbent management makes it unlikely

¹ See for a discussion about this case and the legal arguments Nieuwe Weme (2004: 31).

that the bid price of less than the pretakeover value will be successful. In theory a bidder will anticipate and start a bid at a price that at least equals the pretakeover value. However, empirical evidence contradicts this argument. The study of Dyck and Zingales (2004) proves bids below the market price of the shares are regularly launched. Furthermore, there is a trade-off between the protection of minority shareholders and the development of the market for takeovers. The higher the threshold, the higher the probability an insufficient number of shareholders will tender, the higher the probability the bidder will offer a higher bid price, the lower his return, the lower the number of takeovers. Figure 8.1 summarizes the decision tree.

The sellout right offers the minority shareholder the opportunity to compel the majority shareholder to buy his shares. The sellout right comforts the shareholder to retain and to reject an offer, especially when the bid price is lower than the pre-takeover share value. If it turns out that the takeover is successful, it offers the minority the right to sell. The minority shareholder will use this right if the sellout price is higher than the posttakeover share value.

The aforementioned theory of Grossman and Hart started from the hypothesis of a widely dispersed ownership structure and a bidder without a stake in the company. The data of the ownership structure of continental European corporations show that the majority of companies have a controlling shareholder. This setting creates another type of transaction. A bidder negotiates with the controlling shareholder. If the negotiation results in a transaction, a mandatory bid is launched to acquire the stakes of the other shareholders.

Wymeersch (1998) studied the takeover market in France and Belgium from 1988 to 1996. More than half of the takeovers in France are started after the acquisition of a controlling shareholder block. Most of the takeovers are followed by a freeze-out. A similar pattern can be found in Belgium. In a majority of the acquisitions, the majority shareholder started a bid to acquire the remaining minority stakes (Table 8.4).

The incumbent controlling shareholder will sell his stake if the bidder's price is higher than the sum of the security benefits and the private benefits he enjoys. The security benefits and the private benefits will also determine the bidder's price. In this setting not all transactions will be socially beneficial, and some transactions that take place will be to the detriment of the minority shareholders. The private benefits of both bidder and incumbent controlling shareholder influence the efficiency of the transactions. First, if the security benefits of the bidder are smaller than the security benefits of the incumbent controlling shareholder, but the private benefits of the bidder are larger than the private benefits of the incumbent shareholder, including the difference between the higher security benefits of the incumbent controlling shareholder and the security benefits of the bidder, the transaction will take place, but the remaining minority shareholders will be worse off. The minority shareholders will be left with the lower security benefits of the bidder.

The other scenario is that the private benefits of the incumbent controlling shareholder are high, whereas the private benefits of the bidder are low. If the security benefits of the bidder are higher than those of the incumbent controlling shareholder, the beneficial takeover will not take place as long as the joint secu-

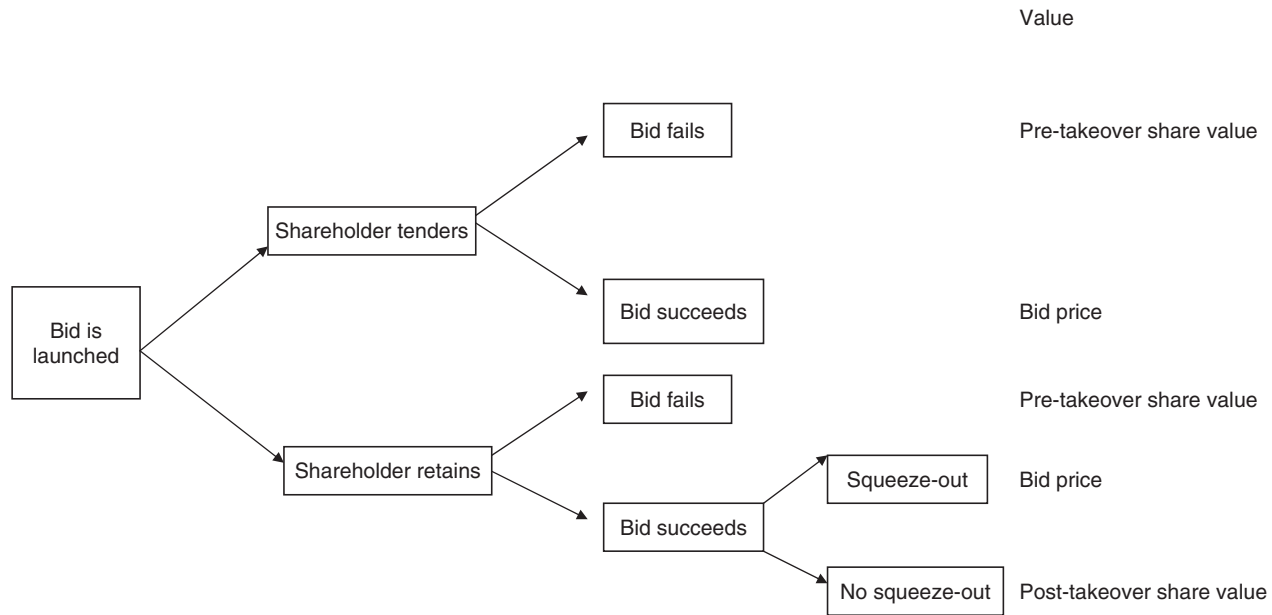


Figure 8.1 Return for shareholders in a system with squeeze-out rules

Table 8.4 Control transactions in France and Belgium during the first half of the 1990s

		1989	1990	1991	1992	1993	1994	1995	1996
France									
A	Total bids	32	25	23	17	11	15	32	
B	Freeze-outs		27	20	41	33	30	70	
C	Block transactions	48	81	67	40	24	14	18	
	C/(C+A)	60%	76%	74%	70%	69%	48%	35%	
Belgium									
A	Bid majority shareholders	5	15	13	15	11	na	8	14
B	Other bids	12	5	16	3	7	na	6	7
C	Total bids	17	20	29	18	18	na	14	21
	A/C	29%	75%	45%	83%	61%		57%	67%

Source: Wymeersch, 1998.

urity and private benefits of the bidder do not exceed the joint security and private benefits of the incumbent shareholder. He will not accept an offer that is lower than his total benefits. The positive externality will not be taken into account.

The new mandatory takeover rule intensifies the problem. The bidder not only has to pay the incumbent controlling shareholder a price exceeding his security and private benefits, he will have to offer the minority shareholders an “equitable” price. Despite the difference between “equitable” and “equal,” a potential bidder can be discouraged to start takeover negotiations with the incumbent controlling shareholder. Conversely, bids that are launched are efficient, as the price the bidder is willing to pay will exceed the sum of the private and security benefits of the incumbent controlling shareholder. Due to the mandatory bid rule, all the minority shareholders will be offered an “equitable” price. Hence, there is a trade-off between the protection of the minority shareholders and efficient control transfers.

Squeeze-out and sellout rights can enhance the efficiency in the market of control blocks. The squeeze-out right allows the bidder who bought a control block and started the mandatory bid to take the aforementioned advantages. The sellout right guarantees the minority shareholder he can compel the majority to purchase his stake.

In the European setting squeeze-out and sellout rights can have value outside the scope of takeover regulation. Controlling shareholders can increase their stake up to the level a squeeze-out is allowed. Conversely, minority shareholders can compel a controlling shareholder to acquire the remaining stakes. The European High Level Group of Company Law Experts (HLGCLE) addressed the issue, although they focused on these rights in the context of a takeover bid. First, a majority shareholder may be tempted to abuse his dominant position. Next, the market in the share can become illiquid and the market price can be considered inappropriate (HLGCLE, 2002b). Both considerations are valid outside the scope of takeovers. Both considerations, and especially the first, are valid as soon as the

company has a controlling shareholder. Why should the squeeze-out right and the sellout right be restricted to situations where the expropriation is less an issue? A small controlling block might create stronger incentives to abuse corporate power than a supermajority block (Enriques, 2003). In cases the majority shareholder has a stake of more than two thirds or three fourths of the votes, or in some countries four fifths of the votes, the rights of minority shareholders are extremely limited. The squeeze-out and sellout thresholds go even beyond these levels of ownership concentration. Both rights could overcome these expropriation problems if the threshold is set at a lower level.

A comparison can be made with a merger or division. In a merger or division scenario a (super)majority approves the transaction and binds the minority shareholders. These shareholders must accept the consideration or make use of the appraisal rights. The difference with the squeeze-out lies in the consideration. In a merger or division, shareholders are not truly gone but receive shares in the new entity. In freeze-outs, the consideration is in cash. The legislator argues that this type of transaction, including a cash consideration, requires the application of additional tests, like an entire fairness test or a higher threshold than for mergers or divisions. Delaware law offers a way out. When the bidder acquires more than 90% of the shares the freeze-out transaction can be effected without the formal action of the controlled subsidiary's board. Hence this type of transaction is started after a tender offer conditioned on the acquisition of at least 90% of the stock. Burdensome requirements like the entire fairness tests are avoided. The economic rationale of this high threshold lies, at least for the squeeze-out right, in the equilibrium of the constitutionally protected property rights (of the shares) and the social efficiency gains of efficiently managed 100% subsidiaries. In this equilibrium, the property right includes the individual assessment of the shareholder that the shares, considered a commodity, result in an optimal return, as well as the idea of the continued willingness of shareholders to cooperate. Efficiently managed companies contain the element of liquid markets. Hence, the optimal trade-off cannot be fixed, and trial and error of most corporate law systems end with a triggering threshold of 90% to 98% for the squeeze-out and the sellout.

Goergen, Martynova, and Renneboog (2005) summarize the economic rationale for a squeeze-out right and the sellout right as follows. The squeeze-out right mitigates Grossman and Hart's potential free-riding behavior of minority shareholders and allocates a larger share of the takeover gains to the bidder. It facilitates takeovers. Conversely, sellout rights offer minority shareholders a larger part of the benefits, and they discourage bids and the takeover market. Both measures reduce the conflicts of interest between the majority shareholder and the minority shareholder. Goergen, Martynova, and Renneboog (2005) first conclude that both rules can reduce the incentives of holding controlling blocks in the long run in countries where the concentrated ownership structure is the most common ownership structure but continue that the impact is likely to be small, due to the considerable private benefits of controlling blocks, especially in French law jurisdictions (Goergen, Martynova, and Renneboog, 2005). Table 8.5 summarizes the findings of Goergen, Martynova, and Renneboog (2005).

Next the issue of the protection of property rights is addressed.

Table 8.5 Consequences of the squeeze-out and the sellout regulation

Elements of takeover regulation	Concentrated ownership structure			Dispersed ownership structure		
	Impact on M&A activity	Impact on minority shareholder protection	Impact on ownership structure	Impact on M&A activity	Impact on minority shareholder protection	Impact on ownership structure
Squeeze-out	More M&A	Better protection	More dispersion	More M&A	Better protection	No impact
Sellout	Fewer M&A	Better protection	More dispersion	More M&A	Better protection	No impact

Source: Goergen, Martynova, and Renneboog (2005: 256).

8.3 Squeeze-out right and the protection of private property

8.3.1 *The first protocol of the European Convention of Human Rights*

Article 1 of the First Protocol of the European Convention for the Protection of Human Rights and Fundamental Freedoms, as amended by Protocol No. 11 (Paris, 20 March 1952), states that “every natural or legal person is entitled to the peaceful enjoyment of his possessions. No one shall be deprived of his possessions except in the public interest and subject to the conditions provided for by law and by the general principles of international law.” In the second paragraph of this article, this right is mitigated by recognizing “the right of a State to enforce such laws as it deems necessary to control the use of property in accordance with the general interest or to secure the payment of taxes or other contributions or penalties.”

The European Court on Human Rights (ECHR) first spelled out the article’s purpose in the *Marckx* judgment, declaring that “by recognizing that everyone has the right to the peaceful enjoyment of his possessions, Article 1 is in substance guaranteeing the right of property.” The concept of property is autonomously interpreted, and is granted a very broad interpretation by national courts and the ECHR alike.

The conditions for application of Article 1 were later defined in the *Sporrong and Lönnroth* case.² As interpreted by the court, the article’s three sentences embody three rules for protection. The first is general, and states the principle of peaceful enjoyment of property. The second covers deprivation of possessions and subjects it to certain conditions. The third recognizes that states are entitled to control the use of property in accordance with the general interest. The last two rules must be interpreted in light of the general principle laid down in the first. Each of these three rules corresponds to a different kind of interference with property (“interference with the substance of property,” deprivation of property, control of the use of property). Control and deprivation are two very different types of interference, deduced from the letter of Article 1. Deprivation may be defined as dispossession of the subject of property: by taking the possession away from its owner, it removes the attributes of property from it. Deprivation is, in principle, transfer of property. Control involves no transfer: the owner retains his property, but is restricted in his use of it. “Interference with the substance” of ownership is a purely judicial construct.

When the ECHR is called upon to judge a case, it must first consider whether there is a property right. To avail usefully of the protection offered by Article 1 of Protocol No. 1, an applicant must show that his right to use or dispose of his property has been interfered with. If this is the case, then the court must decide under which of the three rules of Article 1 the interference falls. First, the court assesses if the case falls within the ambit of the second or third rule. If

² Judgment of September 23, 1982 [1982] ECHR 5.

this is not so, it turns to the first rule. Next, the court will examine whether the interference serves a legitimate objective in the public or general interest. Secondly, it will look into the proportionality of the interference. That is, does it strike a fair balance between the demands of the general interest of the community and the requirements of the protection of the individual's fundamental rights? Thirdly, the interference must comply with the principle of legal security or legality. If the answer to any of these questions is negative, Article 1 is infringed.

The interference with property must be legitimate. It should be in accordance with the public interest (in cases of deprivation of property) and the general interest (in cases of control of the use of property). The concept of public interest is very broadly interpreted. The ECHR recognized that the public interest could be the interest of another individual: "a taking of property effected in pursuance of legitimate social, economic or other policies may be 'in the public interest,' even if the community at large has no direct use or enjoyment of the property taken."³ Definitions of public interest also vary from country to country and over time. As a consequence, this interpretation falls within the margin of appreciation granted to states in implementing the convention. Furthermore, any interference with property should be "appropriate." The legislature's judgment must be manifestly without reasonable foundation to be declared incompatible with Article 1. Secondly, the interference should be "proportionate," meaning that a measure is "both appropriate for achieving its aim and not disproportionate thereto."⁴ This allows the convention bodies to verify that the aims of legislation and the means it employs are balanced if no other, less harsh measures can be used. In cases of deprivation of property, proportionality is respected if the dispossessed owner is awarded compensation. Thirdly, the interference must be lawful, i.e., in accordance with domestic law.

8.3.2 The application of the first protocol to the squeeze-out rule

At first sight, the squeeze-out rule could be considered a type of deprivation, since it involves dispossession of the shareholder, following a legal provision. However, already in 1982 the ECHR decided in the *Bramelid* case⁵ that the (Swedish) squeeze-out did not fall within the second rule, since this regulation only restricted the rights and duties of shareholders within the company. This leads to an examination regarding applicability of the first rule of Article 1 of the protocol (the right to peaceful enjoyment of one's possessions) to the squeeze-out regulation. In other cases, the applicability of Article 1, second rule, does not seem to have been a problem.⁶

As stated above, in order to decide if the squeeze-out rule infringes Article 1, the court applied the threefold test described above. Assuming that the lawfulness condition is fulfilled (meaning that the squeeze-out is performed in accordance to domestic law), the legitimacy of the squeeze-out needs to be examined first. In

³ ECHR, James, and others judgment of February 21, 1986, Series A no. 98., para. 45.

⁴ James judgment, para. 50.

⁵ *Bramelid and Malmstrom/Sweden*, October 12, 1982.

⁶ Offerhaus decision, as cited in M. Krohn (2004: 167).

other words: Does a freeze-out conflict with the “public interest”? Does the bidder avail of a real, legitimate interest to buy out the minority shareholders? This can be answered affirmatively; due to the squeeze-out the bidder can turn a publicly held company private, or even delist it, and furthermore avoid unnecessary administrative costs. The economic rationale of the squeeze-out and sellout right is discussed in the first paragraph of this chapter. Secondly, the proportionality test applies to two parts. The first weighs the means of the regulation against the purpose of the regulation. Are there other, less harmful, means to obtain the same result? The squeeze-out mechanism is very hard to replace. Other means, less harsh but obtaining the same result, are hard to come across. The second part of the proportionality test balances the disadvantages caused by the squeeze-out against the general interest. In squeeze-out matters this “general interest” is that of the company itself, since it is the company that is deemed to benefit most from the squeeze-out procedure. Because the minority shareholders are indemnified, it is usually stated that the squeeze-out rule does not cause a disproportionate disadvantage.

The Report of the High Level Group of Company Law Experts on issues related to takeover bids likewise stated that, because the ability of one party to enforce the acquisition of the shares of another represents a significant infringement of the latter’s vested rights, such a squeeze-out right can only be justified in exceptional circumstances and where there are sufficient safeguards in place.

Various courts in the member states have ruled that the squeeze-out right is not to be regarded as incompatible with protective provisions such as the European Convention on Human Rights, in that this right is not exercised to satisfy private interests only.⁷ There is indeed a general and public interest in having companies efficiently managed on the one hand, and securities markets sufficiently liquid on the other hand. So long as the squeeze-out right applies only when the minority is fairly small and appropriate compensation is offered, the use of squeeze-out to address these public interests is proportionate (Report of the High Level Group of Company Law Experts on issues related to takeover bids, 2002a).

A high threshold to trigger a squeeze-out and/or a sellout can be in conflict with the economic efficiency hypothesis. Different thresholds can optimize the result in different settings, though deviating from high thresholds could be judged as contrary to the constitutional right of property protection.

8.4 The squeeze-out right and the sellout right in a comparative legal perspective

The equilibrium between the optimal functioning of the capital market and the protection of property rights of minority shareholders puzzles the legislator in

⁷ Reference can be made to, for example, the Feldmühle decision of the German Supreme Court of August 7, 1962, and the DAT/Altana Decision of August 23, 2000; the Decision of the French Supreme Court of April 29, 1997, *Association de défense des actionnaires minoritaires et autres against Société Générale et autres*, Recueil Dalloz 1998, pages 334–338; the Dutch Enterprise Chamber Decision of December 10, 1992, NJ 1993, 324.

many countries. At the European level the directive requires the European member states to provide majority shareholders the squeeze-out right and the minority shareholders the sellout right in a takeover transaction. Despite the harmonization efforts of the European Union (EU), the legislators still struggle to provide both rights outside the limited scope of the directive. The next section analyzes the legal framework in some of the member states.

The economic analysis of the (dis)advantages of the squeeze-out and the sellout right enables an assessment of the different operational squeeze-out and sellout systems in a number of European countries. Most of the member states are familiar with companies with concentrated ownership, the United Kingdom being the exception. This assessment will illustrate how the different member states as well as the EU address the equilibrium between the protection of property rights (of the shares) of the minority shareholders and the efficiency of the market.

Before the European Takeover Directive was enacted the sellout and squeeze-out were not regulated by any of the existing company law instruments adopted at EU level (Maurau, 2004). A form of squeeze-out right and sellout right was included in the draft Ninth Directive on the conduct of corporate groups, of which Article 33 and Article 39 would permit an undertaking that had acquired directly or indirectly 90% or more of the capital of a public limited company to make a declaration leading to the formation of a group and providing for the compulsory acquisition of the shares of the minority shareholders. The draft Ninth Directive has, however, not led to an official proposal from the commission.

The Takeover Directive lays down the principles for the squeeze-out and the sellout right in Articles 15 and 16. Clearly the need to ensure an adequate level of minority shareholder protection leads the European legislator to level both rights, despite their diverging economic rationale. Article 16 of the directive, concerning the sellout right, is drafted to assimilate almost entirely to the squeeze-out provisions of Article 15 of the directive. From now on, any reference to the directive will refer to both the squeeze-out and sellout rule. Any differences between the two will be expressly indicated wherever necessary. Special sellout rights organized by the laws of several member states in specific situations, e.g., following an application by a shareholder or shareholders on the grounds of “oppression” (“unfairly prejudicial conduct of the company’s affairs”) by the controllers of the company, usually leading to a court-ordered buyout of the complainants by the majority, or sometimes by the company do not fall within the scope of the present chapter.

The comparative analysis includes the squeeze-out and sellout rules in Belgium, France, the Netherlands, the United Kingdom, and Germany and the Takeover Directive.

Regarding other European member states, some important features can be highlighted. Italian law mostly is renowned for setting its squeeze-out threshold at 98%, the highest of all member states, while Ireland has set the lowest threshold, being 80%, both for squeeze-out and sellout. It is understood that in its proposal implementing the Takeover Directive, Ireland will increase the threshold to 90%

but only for companies falling within the directive's ambit (Sagayam, 2006). Austria allows a squeeze-out only under certain conditions, and in a statutory upstream merger. Luxembourg enacted the law implementing the Takeover Directive on May 19, 2006, almost literally taking over the directive, although the squeeze-out threshold is set at 95% and the sellout threshold at 90%. Sweden, Finland, and Denmark have squeeze-out procedures, all setting forth a 90% threshold. The Portuguese squeeze-out threshold is set at 90% as well. Spanish law does not provide for a proper squeeze-out procedure; there is, as long as the Takeover Directive is not implemented, only a sort of "redemption" procedure. This is subject to four strict rules. The majority shareholders must own at least 90% of the target shares, the redemption must be approved at a shareholders' meeting by a majority of the minority shareholders, the redemption must comply with the target's corporate interests, and finally, the redemption price must be fair. If no redemption is possible, the target may delist its shares by launching a buy-back offer on terms (including price) approved by the Spanish stock-exchange regulator.

In short, the squeeze-out procedure is available in English, German, and Scandinavian legal origin countries, but only in a small majority of the French legal origin countries. A majority of the German legal jurisdictions have adopted the rule since 1990, whereas it was already available before that time in Scandinavian and English origin countries (Goergen, Martynova, and Renneboog, 2005). More countries will adopt this right due to the provision in the Takeover Directive.

Belgium, France, the Netherlands, Germany, and the United Kingdom all have a squeeze-out regulation, but only France and the United Kingdom have a proper sellout mechanism in place. Hence, both rules are not considered as joint procedures to be provided for. Before examining more closely the minority shareholder protection mechanisms in the selected countries, the legal framework in place in these countries will be briefly described.

8.4.1 General framework of the squeeze-out right and the sellout right in selected European countries

Belgium

The Reparation Law of April 13, 1995, introduced a squeeze-out procedure into Belgian company law, aiming at rationalizing the well functioning of a company with highly concentrated ownership. As research abundantly has shown, the Belgian corporate landscape historically has been dominated by controlling shareholders, similar to most continental European countries (Berglof and Burkart, 2003). The decrease after the 1995 law until the late 1990s did not continue in the new millennium (Van der Elst, 2006).

Article 513 of the Companies Code (old Article 190 quinquies) provides the main legal framework, governing different types of squeeze-outs for "public" and "private" companies. The amended Royal Decree of 1989 on Takeovers and the

Royal Decree implementing the Companies Code contain a detailed set of rules, the former decree for “public” companies limited by shares, the latter for “private” companies. The Royal Decree on Takeovers for “public” companies, provides for two types of squeeze-outs. The first is called a “simplified squeeze-out procedure” and can be initiated by a bidder who controlled the company (directly or indirectly, alone or with others) before the initial public takeover bid; and, following the bid, owns 95% or more of the securities of the company. If the bidder owns 95% of the securities in the target, following either the bid or the reopening of the bid (which is mandatory when the bidder owns at least 90% of the securities to which the public takeover offer relates), provided it reserved such right in the offer document (prospectus), it can reopen the bid again for at least 15 days with a view to “squeeze out” the remaining shareholders on the same terms as the original offer. However, there is also a view that in this case only cash can be offered in a squeeze-out. Any securities not sold at the end of this period are deemed to be transferred automatically to the bidder, and the funds necessary to pay for the shares are put into an escrow account, according to Article 32, 3rd par of the Royal Decree on Takeovers. Secondly, chapter IV of the Royal Decree on Takeovers allows a person who holds 95% of the voting securities of a company other than as a result of a public bid to squeeze out the remaining shareholders. The procedure is similar to the squeeze-out following a bid but is adapted to take into account its specific nature. For instance, the offer can only be made in cash and the bidder must include in the offer document a report from an independent expert containing an opinion as to the fairness of the price offered.

As for “private” companies, the Royal Decree implementing the Companies Code grants a general squeeze-out right to a bidder who owns 95% of voting securities of the target company. A private company is a company limited by shares that does not publicly appeal to the savings.

The sellout right does not yet exist in Belgian law. At most one can refer to the conflict settlement rules, which grant shareholders the right to compel other shareholders to buy their shares, but only in cases of serious conflict, which make it virtually impossible to continue holding the shares in the company, e.g., in cases of unsolvable conflict.

The Court of Arbitration (*Cour d'arbitrage/Arbitragehof*) decided in an important judgment of May 14, 2003, that the difference between the shareholders of “public” companies and the shareholders of “private” companies is the fact that in the context of a squeeze-out procedure, the former have the right to refuse the transfer of their shares; the latter do not have that same right. This is not contrary to Articles 10 and 11 of the Belgian Constitution (i.e., not discriminatory). The Court of Arbitration also judged that the difference between the shareholders holding 95% of the shares of a company limited by shares (NV/SA) and the minority shareholders (holding 5%) of the same company consists in the fact that only the majority shareholders have the right to launch a squeeze-out when the latter do not possess a “symmetric” right (so called “sellout”) is not contrary to Articles 10 and 11 of the Constitution. The Court of Arbitration did not expressly examine the question of the legality of the squeeze-out procedure in light of rules protecting private property,

in particular Article 16 of the Belgian Constitution concerning expropriation for public purpose. However, it can be deduced from the court's decision that the legal guarantees offered to the shareholders of "public" companies, such as a report from an independent expert and control by the Belgian Banking, Finance, and Insurance Commission, ensure that the squeeze-out regulation is not contrary to Article 16 of the Belgian Constitution nor to Article 1 of the first protocol of the European Convention of Human Rights (protection of private property) (du Castillon, 2003).

A bill implementing the Takeover Directive is being drafted.

France

In 2000, the French Code Financier & Monétaire compiled several separate laws and regulations in financial law into one code. Article 433-4, in replacement of Law nr. 96-597 of July 2, 1996, offers the regulatory framework for the squeeze-out and sellout rights. Article 433-4 provides the right for the minority shareholders to be "duly compensated." The detailed filling in of article 433-4 is left to the General Regulation of the Financial Markets Authority (Règlement Général de l'AMF). The AMF issued this Règlement Général in 2004. The second book of the Règlement Général, implementing article 433-4 of the Code Financier & Monétaire, contains separate chapters for the squeeze-out and sellout rights, hereby replacing article 5-6-1 up to 5-7-3 of the old General Council Rules. Particular about the French system is that the minority shareholder must initiate a buyout offer (Article 236) before continuing the actual squeeze-out or sellout (Article 237). Article 236-3 and 236-4 provide the buyout offer rules regarding squeeze-outs, whereas Article 236-1 and 236-2 do the same for sellouts. In some cases, as put forward in the Articles 236-5 and 236-6, a controlling shareholder can be compelled to make a public buyout offer. Article 237 contains the actual procedure for a "retrait obligatoire," a mandatory freeze-out.

The act of March 31, 2006, on takeover bids ("*Loi relative aux offres publiques d'acquisition*") implements the Takeover Directive. The content of this legislation must be seen within the political and economical background of the French upheaval around the alleged Danone takeover by Pepsico. This act adds a paragraph to article 433-4 of the Code Financier & Monétaire. In April 2006, the AMF launched a consultation concerning the proposed changes it will have to make to its Règlement Général, implementing the March 2006 act. As to the squeeze-out and sellout rights, Article 236 Règlement Général remains mostly unaltered. The Senate's Financial Commission's proposal to reduce the threshold to 90% of the voting share capital was rejected by the Senate. Especially Article 237 of the Règlement Général will be revised according to the directive's guidelines, by introducing a squeeze-out and sellout right applicable without having to make a public buyout offer first. A 3-month term, after the bid period, is installed, although the AMF remarks that this is a considerably long period. The 95% threshold applies to the capital or the voting rights. The valuation method refers, first to the price proposed in the last bid (presumed to be fair, according to Article

433-3, I new Code Financier & Monétaire), or in subsidiary order, to the price resulting from the evaluation made by an independent expert (following the old “multicriteria” approach). The new Article 237 states that the consideration can be securities if the first bid was in securities, conditional upon an optional offer in cash, though, determined according to the expert’s opinion. Furthermore, the old *Règlement Général* did not demand the bidder to retain a minimal price in his buyout offer, while in the proposal for the new *Règlement Général*, the bid offer that does not reflect an accurate valuation of the target company may be rejected.

The old rules regarding squeeze-out and sellout being triggered after a public buyout remain in force next to the procedure in the revised Article 237 of the *Règlement Général*.

United Kingdom

The U.K. Companies Act contains only a limited number of provisions with regard to the conduct of a takeover offer. There are, however, a number of provisions of the Companies Act 1985 that are relevant to the squeeze-out and sellout right.

Already in 1926 the Green committee on Company Law Amendments recommended allowing the compulsory purchase of minority shareholders after a takeover. The Companies Act 1929 implemented squeeze-out provisions in Article 209, later accompanied by the reverse right for the minority shareholder to sell out. Both rules were inserted into the 1985 Companies Act in its part XIII A (correspondingly, Part 14A of the Companies Northern Ireland Order 1986).

Takeover activities in the United Kingdom have been overseen since 1968 by the Takeover Panel, a highly reputed body that also drew up the City Code on Takeovers and Mergers, a set of guidelines concerning takeovers, which, however, has no legal force. Up to this point the code does not foresee a squeeze-out nor a sellout right to minority shareholders. The Companies Act retains a broader ambit than the code.

The British legislators aimed at preserving the benefits of the flexibility and informality of the United Kingdom’s existing takeover regulatory regime within the new legal framework established by the directive. The Takeover Directive is being implemented into U.K. national law through the introduction of the Company Law Reform Bill (CLRB) and changes to the Takeover Code. The “squeeze-out” and “sellout” provisions and certain other aspects of the Companies Act 1985 are being altered in order to take account of the directive.

As the CLRB will not become law before the required date for implementation of the directive, May 20, 2006, interim regulations to implement the directive, also referred to as The Takeover Directive (Interim Implementation) Regulations 2006 (“the regulations”), have been drawn up. These regulations take effect on May 20, 2006, and will remain in force until the relevant provisions of the CLRB become operative (which is expected in 2007). During this interim period, those involved in the takeover of a company registered in and traded on a regulated market in the European Economic Area (EEA) will need to refer to both the regulations and the Takeover Code for a full statement of the legal requirements.

The regulations only contain squeeze-out and sellout provisions necessary to give effect to the directive, and therefore will only apply in the interim period to bids and companies covered by the directive (essentially bids for U.K. registered companies traded on a regulated market). In the United Kingdom the official list of the London Stock Exchange is a regulated market, but the AIM Market and OFEX are not.

Accordingly, for those companies whose shares are traded on the AIM Market or OFEX (and for other companies whose shares are not traded publicly but are governed by the code), takeover bids will continue to be governed by the code until the CLRB becomes law.

Since the squeeze and sellout provisions in the directive are broadly consistent with the provisions in Part 13A of the Companies Act, only some minor changes were required. These amendments are addressed in the CLRB and, for companies whose securities are admitted to trade on a regulated market, are being implemented by way of the regulations 2006. It is important to ensure that offer documentation properly reflects the appropriate legislation depending on the nature of the target company.

In conclusion, there are two parallel regulatory frameworks operational in the intermediary period until the CLRB is implemented.

- For companies whose shares are traded on a regulated market (primarily fully listed companies), the principal regulatory framework for takeovers will comprise the following:
 - the City Code on Takeovers and Mergers (“the code”);
 - the regulations; and
 - the directive
- For companies whose shares are not traded on a regulated market (i.e., primarily AIM companies and other unquoted companies to which the code applies), the principal regulatory framework for takeovers will comprise the following:
 - the code; and
 - the Companies Act 1985 (“the Companies Act”)

Once the CLRB comes into force, the changes to the squeeze-out and sellout provisions in Part 13A will apply to all companies and all bids within the current ambit of Part 13A.

Germany

Until halfway into the 1990s, public takeover bids did not play an important role in Germany. There was no statutory regulation of public takeovers. The Ministry of Finance’s Stock Exchange Experts Commission had developed rules concerning public takeover bids, but these “Guiding Principles” of 1979 consisted only of a few nonbinding recommendations. In July 1995 the commission published a new, comparatively comprehensive takeover code. This code was implemented through contractual recognition by potential offerers, target companies, and companies engaged in share dealing.

At that time, the only way to effect a squeeze-out was through a so-called “transferring liquidation,” (*übertragende Auflösung*) i.e., the sale of the operations of the target company to the majority shareholder combined with a subsequent dissolution of the target company.

In 2002 takeover regulation was formalized and the squeeze-out procedure was introduced. Article 7 of the Securities Acquisition and Takeover Act (*Wertpapiererwerbs- und Übernahmegesetz (WpÜG)*) changed the Companies Act (*AktienGesetz (AktG)*) by inserting a new chapter regarding the squeeze-out of minority shareholders. Section 327a of the AktG entered into force on January 1, 2002. A sellout right was not provided. The “transferring liquidation” remains available and could be considered if the required 95% threshold for a conventional squeeze-out cannot be reached. The “transferring liquidation,” however, is subject to considerable risk of shareholder litigation.

Due to the implementation of the directive, the new takeover law squeeze-out (new Article 39a of the Takeover Act—WpÜG) is an annex to a takeover or mandatory offer for a German corporation, thus existing independently, next to the old “corporate” squeeze-out. However, it is impossible to start both the corporate and the takeover squeeze-out procedure at the same time.

The Netherlands

On May 15, 1970, the Dutch SER Social and Economic Council (SER) adopted the first version of the Code of Conduct (the so-called SER Merger Code): a legally non-binding set of rules to be observed when a public offer is being prepared or made and when mergers are being prepared or implemented. These rules have been amended several times. In 2001, the chapter of the Rules of Conduct concerning public takeovers was implemented into the 1995 Act on Supervision of the Securities Markets and the Decree of the Supervision of Securities Markets, thus becoming legally binding. However, neither a squeeze-out right nor a sellout right were provided.

Despite the supervision of the Securities Markets Act, a general squeeze-out right already exists in the Dutch Civil Code. This squeeze-out right was introduced in the New Dutch Civil Code (NCC) in 1988. Article 2:92a of the NCC provides for the squeeze-out right in companies limited by shares (NV—*naamloze vennootschap*) and 2:201a NCC contains a similar rule for private limited companies (BV—*besloten vennootschap*). The squeeze-out right is not related to a particular type of transaction.

Dutch law does not yet provide a sellout right to minority shareholders. The only alternative available to shareholders is the conflict settlement regulation (Article 2:343 NCC). However, this very laborious procedure can only be used when certain conditions are met, and not only because a shareholder (alone, or acting in concert with others) has acquired 95% of share capital.

The Dutch legislator has taken the initiative to implement the Takeover Directive into Dutch law by enacting a proposal of law in 2006. The implementation of the Takeover Directive coincides with the steps being taken to modernize the rules for public takeovers in the Netherlands. These rules will be set out in the Decree on Public Offers (*Besluit Openbare Biedingen*) to be promulgated pursuant to the 1995 Act on Supervision of Securities Markets.

A squeeze-out and a sellout right are being introduced in a new Article 2:359 NCC, which deals with takeovers of companies limited by shares (NV) whose

shares are listed on a regulated market. This implies that both rights can only be enforced after a public takeover offer. As to the squeeze-out right, the Dutch legislator has tried to follow as closely as possible the existing legislation in book two of the Dutch Civil Code. The sellout right imitates this procedure.

On May 15, 2006, the Temporary Exemption Regulation for Public Offers (*Tijdelijke vrijstellingsregeling overnamebiedingen*) was issued. This regulation deals primarily with those provisions of the Takeover Directive that have direct effect, i.e., which could be invoked by market parties and which could consequently lead to complications within the European Union pending the full implementation of the Takeover Directive. The main feature of the Temporary Exemption Regulation for Public Offers is the introduction of the EU Passport pursuant to which offer circulars approved by a regulator in another EU member state will be recognized in the Netherlands in accordance with the provisions of the Takeover Directive.

8.4.2 A comparative analysis of legal issues regarding the squeeze-out right and sellout right

The directive aims at a minimal harmonization of cross-border takeover procedures. In light of the freedom granted to member states, and the differences between the existing legal dispositions in all member states, it is interesting to compare the legal framework and the implementing acts of some member states. Especially as to the following topics, the current legislation seems to differ (Report of the High Level Group of Company Law Experts on issues related to takeover bids, 2002a). First, the type of transaction (a), triggering the squeeze-out or sellout right may differ. Some countries allow for a squeeze-out right not only after a takeover bid, but also after a merger. Similarly, the type of companies (b) involved may differ. The conditions that have to be met to exercise the squeeze-out and sellout right are another variable. The securities (c) and the threshold (d) to which it applies may vary, as does the procedure (e) the party triggering the squeeze-out/sellout right needs to follow. An important procedural aspect of the squeeze-out or sellout procedure is the valuation method used to compensate the minority shareholders (f).

Finally, there are different time constraints (g).

Type of transaction

The Takeover Directive is applicable to a “takeover bid,” being “a public offer (other than by the offeree company or target itself) made to the holders of the securities of a company to acquire all or some of those securities, whether mandatory or voluntary, which follows or has as its objective the acquisition of control of the offeree company in accordance with national law.”⁸ The directive only applies to takeover bids of companies whose securities are listed on a regulated market. However, the member states might take the implementation of the directive as an opportunity to

⁸ Article 2,1,a of the Takeover Directive.

bring their regulation on internal takeover bids in line with the European legal framework. Economically, there is no reason to develop two different procedures. For the squeeze-out and the sellout right, the explanatory memorandum not only allows the member states to expand the squeeze-out and sellout beyond cross-border takeover transactions but also to provide these procedures outside the scope of takeovers. The Report of the High Level Group of Company Law Experts on issues related to takeover bids (2002a) even encourages member states to do so.

Both French and British regulation only refers to takeover transactions. In France, the *Règlement Général* does not specify how the 95% threshold is reached. Article 237 of the draft *Règlement Général*, implementing the Takeover Code, specifies, however, that it applies after a takeover bid (*offre publique*), despite the existing Article 236 of the *Règlement Général*, containing the existing sellout and squeeze-out rules. Hence, in our view, Article 236 applies regardless of how the threshold was reached. The British Companies Act provides rules for both a squeeze-out and a sellout after a takeover offer for (all shares of) a company with its registered office in the United Kingdom with securities traded on a U.K. regulated market, or an offer for other public and certain private companies resident in the United Kingdom.

In the other examined member states the squeeze-out right is available, regardless of how the applicable threshold has been reached. In Belgium, different squeeze-out systems coexist. The simplified squeeze-out procedure is applicable in the aftermath of a public takeover—both after a voluntary and a mandatory bid (when the target is a listed company in Belgium). The squeeze-out in both “public” and “private” companies only refers to the simple possession of a certain percentage of voting securities, without specifying how this possession was acquired. The squeeze-out regulation in the Dutch Book 2 on Companies does not refer to a specific transaction leading to the required possession of the shares. The bill implementing the Takeover Directive is applicable to takeovers and will be existing next to the old squeeze-out rule. The German corporate squeeze-out is not restricted to takeovers, but applies regardless of how the threshold of the possession of the shares was attained. It could be the result of a merger, a capital increase, or any other transaction or acquisition of shares.

The new “takeover” squeeze-out (and sellout alike) obviously applies after a takeover. It does not replace the old rules but applies independently to transactions falling within its proper ambit.

Table 8.6 summarizes the different types of transactions that are triggering events for allowing the squeeze-out and sellout rules.

In light of the theory of private benefits for controlling shareholders and the advantages of 100%-held subsidiaries as well as the large number of controlled companies in continental European countries, the Belgian, Dutch, and German approach should be supported. However, for the latter countries it should be encouraged to integrate the rules transposing the directive in the existing legal framework. In our opinion there is no reason to develop separate frameworks for the squeeze-out and sellout rights within and outside the scope of the directive.

Table 8.6 The triggering event for a squeeze-out and a sellout

	Directive	Belgium	Germany	France	The Netherlands	United Kingdom
Squeeze-out	Takeover	Simplified squeeze-out in public companies: after takeover Squeeze-out in public companies: all Squeeze-out in private companies: all	Corporate squeeze-out: all Takeover squeeze-out: takeover	Article 236: all (our view) new Article 237: public takeover	General procedure: all Bill: takeover	Takeover
Sellout	Takeover	Not applicable yet	Takeover sellout: takeover	Art. 236: all (our view) new Art. 237: public takeover	Bill: takeover	Takeover

Company type

European law limits the types of companies for which the squeeze-out and sell-out right is applicable. Only companies governed by the laws of member states, where all or some of those securities are admitted to trading on a regulated market within the meaning of Directive 93/22/EEC(11) in one or more member states (as replaced by the MiFID Directive of 2004), fall within the scope of the directive. The European Commission estimates the number of stock exchange-listed companies in the European Union at 7,000.

Article 1 of the directive also provides some exceptions. The directive shall not apply to takeover bids for securities issued by companies, the object of which is the collective investment of capital provided by the public. This operates on the principle of risk-spreading. The units are, at the holders' request, repurchased or redeemed, directly or indirectly, out of the assets of those companies. The directive shall also not apply to takeover bids for securities issued by the member states' central banks. In light of the purpose and organization of the first type of companies, the protection of the controlling or the minority shareholders with a squeeze-out right and a sellout right is redundant. The number of listed national banks is limited. The Belgian National Bank is stock exchange listed, but the Belgian state controls 50% of the shares and the votes. Despite the policy considerations to exclude the national banks from the takeover directive, there are no reasons to exclude shareholders of these companies from the squeeze-out right and the sellout right.

The French scope of application was already in line with the directive: The existing framework refers to companies limited by shares (*SA/société anonyme*) whose shares are admitted to trading on a regulated market or whose securities have ceased to be quoted on a regulated market.

The U.K. Companies Act chapter on takeovers does not clearly state which type of company falls within its scope, so it must apply to “any type of company within the meaning of the act.” Typically, a takeover aims at acquiring all of the shares in a public company, as defined in section 1 of the Companies Act (usually a company that is publicly listed). It is, however, possible to make an offer for the shares in a private company.

The existing legislation of some of the other member states retains a broader scope than the directive (Table 8.7).

In Belgium, the squeeze-out rule can be applied both to a “private” company and to a “public” company. A private company is either a company limited by shares (*NV/naamloze vennootschap—SA/société anonyme*) or a partnership limited by shares (*Comm VA/commanditaire vennootschap op aandelen—SCA/société en commandite par actions*) that has not made a public appeal to the savings. A “public” company is a NV/SA making (or having made) a public appeal to the savings.

The Dutch “ordinary” squeeze-out regulation refers to all the public and private limited liability companies (the *NV/naamloze vennootschap* and the *BV/besloten vennootschap*). The bill implementing the Thirteenth Directive, containing a new article 2:359 CC, deals with companies limited by shares (NV) whose shares are listed on a regulated market.

Table 8.7 Companies for which the squeeze-out right and sellout right are available

	Directive	Belgium	Germany	France	The Netherlands	United Kingdom
Squeeze-out	Companies governed by the laws of member states, where all or some of those securities are admitted to trading on a regulated market in one or more member states	Simplified squeeze-out in public companies: NV/SA Squeeze-out in public companies: NV/SA Squeeze-out in private companies: NV/SA or CommVA / SCA	Corporate squeeze-out: German Stock Corporation (AG Aktiengesetz) or a partnership limited by shares (KGaA Kommanditgesellschaft auf Aktien), if the issuer is domiciled in Germany and its shares are listed on a regulated market in Germany or another member state of the European Economic Area: takeover squeeze-out: German stock corporation (AG)	Article 236: companies (SA/société anonyme) whose shares are admitted to trading on a regulated market or whose securities have ceased to be quoted on a regulated market Article 237: companies (SA/société anonyme) whose shares are admitted to trading on a regulated market or whose securities have ceased to be quoted	General procedure: the public and private limited liability companies (NV /naamloze vennootschap and BV/besloten vennootschap). Bill: companies limited by shares (NV) whose shares are listed on a regulated market	Public or private company within the scope of the Companies Act

(Continued)

Table 8.7 (Continued)

Directive	Belgium	Germany	France	The Netherlands	United Kingdom
Sellout	Companies governed by the laws of member states, where all or some of those securities are admitted to trading on a regulated market in one or more member states	Not applicable yet	or partnership limited by shares (KGaA), which are admitted to trading on an EU or EEA regulated market Takeover sellout: German stock corporation (AG) or partnership limited by shares (KGaA), which are admitted to trading on a EU or EEA regulated market	on a regulated market Companies (SA/ <i>société anonyme</i>) whose shares are admitted to trading on a regulated market or whose securities have ceased to be quoted on a regulated market	Bill: companies limited by shares (NV) whose shares are listed on a regulated market Public or private company within the scope of the Companies Act

The same goes for the corporate squeeze-out in Germany, applicable to a German stock corporation (*AG Aktiengesetz*) or a partnership limited by shares (*KGaA Kommanditgesellschaft auf Aktien*). The new set of “takeover rules” refers to a German stock corporation (AG) or partnership limited by shares (KGaA), which are admitted to trading on a EU or EEA regulated market. The “corporate” regulation (“listed” securities) and the “takeover” regulation (“traded securities”) are not identical.

The aforementioned overview illustrates that the different legislators distinguish two or even three company types with regard to squeeze-out and/or sell-out right. This classification is, at least from an economic perspective, artificial. The first class is the companies listed on a regulated market or formerly listed on that market. For this class of companies all legislators provide a squeeze-out right (and a sellout right). It includes companies limited by shares and partnerships limited by shares. The former type is the most common, though the latter is well-known in some member states where it is used as a “special purpose vehicle” for protection against hostile takeover bids or for the development of specific activities like real estate in Belgium. The second class of companies is the other companies limited by shares and in most jurisdictions partnerships limited by shares. It is a very heterogeneous group of entities, going from large companies even listed entities on a stock exchange like the U.K.’s “AIM,” the French “Marché libre,” or the Belgian “Vrije Markt,” to companies traded over-the-counter, companies that have made a public appeal on the savings, large nonlisted companies and sometimes thousands of smaller “open” entities limited by shares. Not all jurisdictions offer a squeeze-out right for these types of companies, and even less offer a sellout right, but all are treated identically in all jurisdictions. It raises a number of questions. In the “contractarian company approach,” the constituent parties draft an efficient open-ended company contract. The first question is: Why do different countries treat the shareholders of similar company types differently; that is, do some countries offer a squeeze-out right to controlling shareholders while others do not? Second, company law offers large controlling shareholders the option to transform the company into another legal form. All power remains in the hands of the large controlling shareholder who can decide to continue as a nonlisted entity or opt for a listing on a regulated market or a listing on another market. The decision is decisive for the applicable framework. Can there be a justification for the lock-in of all other shareholders? It is a static approach to solve a dynamic company issue. In light of the aforementioned advantages of the squeeze-out and the sell-out right, it is hard to discover the rationale for the different treatment of a company listed on an “alternative or free” market and a company listed on a regulated market. The third class is the closed companies. Only in the Netherlands is a squeeze-out rule offered for this company type. In all other countries the “lock in” of shareholders is considered to be part of the contract. Parties are informed about the low or even nonexistent liquidity of the securities. Only in the Netherlands have legislators considered the freeze-out rule an essential part of the legal framework for closed companies. In the United Kingdom it is open for

controlling shareholders of closed corporations, but only after a takeover. The consequence of the Dutch approach is the absence of a company type with limited liability for all shareholders without a squeeze-out rule.

Financial instruments

Only transferable securities carrying voting rights are taken into account when the calculation of the threshold is set forth in the Takeover Directive. Member states may extend this to securities convertible into voting securities. The memorandum adds that “the obligation to launch a bid should not apply in the case of the acquisition of securities which do not carry the right to vote at ordinary general meetings of shareholders. Member states should, however, be able to provide that the obligation to make a bid to all the holders of securities relates not only to securities carrying voting rights but also to securities which carry voting rights only in specific circumstances or which do not carry voting rights.”⁹

In most member states, the threshold is set by reference to the amount of capital held or the number of voting rights held.

It is a common factor to refer to securities carrying voting rights.

Belgian legislation refers to all securities conferring voting rights that may or may not represent the capital, and all securities that give the right to subscribe to or obtain similar securities or the conversion of such securities, with the exception of ordinary debentures. The prerequisite that it must concern securities conferring voting rights has brought about controversy among Belgian scholars. For instance, *winstbewijzen/Parts bénéficiaires*, securities that do not form the capital but only give right to a part of the profit, can have voting rights if it has been provided in the articles of association. According to the letter of the law, such securities should be excluded in calculating the threshold. This would, however, contradict the rationale of the law. It would, in that respect, be better to read the law accordingly and take these types of securities into account.

The French *Règlement Général* refers to voting rights laid down in shares, investment certificates, or voting right certificates. All securities must be (have been) listed. According to Viandier (1999) securities convertible into shares are also to be seen as shares in light of the *Règlement Général*.

The U.K. Companies Act only mentions “shares,” without explicit reference to the voting rights attached to the shares. Section 430 F of the Companies Act allows for securities convertible into shares to be seen as a “class” of shares.

The Dutch general squeeze-out only relates to issued capital in general (*geplaatste kapitaal*), without referring to the voting rights the shares incorporate, although only shares through which can be voted, are meant (Maeijer, 1994). The new legislative bill also mentions share capital carrying voting rights.

In Germany, the “corporate” squeeze-out refers to capital (*Grundkapital*). The new implementation law takes up the directive’s threshold: share capital carrying voting rights (*stimmgerichtigtes Grundkapital*).

⁹ Explanatory Memorandum to the Takeover Directive, nr. 11.

In the economic view, it would be of help that the legislator provides as a rule that all holders of securities with (conditional) rights that can hinder the optimal use of the advantages of a 100% subsidiary be squeezed-out or have a sellout right. It is connected with the reassessment of the need to calculate the triggering threshold for each class of securities separately. This issue is discussed next.

Triggering threshold

According to the Takeover Directive, the squeeze-out right and sellout right can be triggered when, following a bid made to all the holders of the offeree company's securities for all of their securities, one of the two following conditions is met: either

- (i) where the offerer holds securities representing not less than 90% of the capital carrying voting rights and 90% of the voting rights in the offeree company.

or

- (ii) where, following acceptance of the bid, he/she has acquired or has firmly contracted to acquire securities representing not less than 90% of the offeree company's capital carrying voting rights and 90% of the voting rights comprised in the bid.

The first case refers to the situation where the holder simply holds a part of the capital. In this case member states may set a higher threshold that may not, however, be higher than 95% of the capital carrying voting rights and 95% of the voting rights. The minimum of 90% is considered appropriate at the European level in view of the necessity to restrict any interference with the right of property to a reasonable degree. On the other hand, the maximum of 95% is justified in view of the practical difficulty in reaching a higher percentage through a takeover bid due to the presence in most companies of untraceable shareholders and the possible existence of an obdurate minority that refuses to accede to the bid even on reasonable terms. In the second case, the bidder's possession follows from the takeover offer and refers to the acceptances made through the takeover.

Member states shall ensure that rules are in force making it possible to calculate when the threshold is reached. Where there are several classes of securities outstanding, the squeeze-out/sellout right should apply on a class-by-class basis. As a consequence, the right can be exercised only for the class(es) in which the applicable threshold (percentage of capital of the relevant class or percentage of acceptances for the relevant class) has been reached by virtue of a bid made in respect of the relevant class(es). This allows for a proportional application of the squeeze-out right, in the interest of both the majority shareholder (who need not reach the threshold for the company as a whole to be able to squeeze out the minority shareholders in one class) and the minority shareholders (who cannot be squeezed out from one class if the threshold is not reached in that particular class).

Particular about the directive guidelines is the double standard, made in both situations: Reference is made to both the capital carrying voting rights and the voting rights themselves.

In most member states, the threshold is set by reference to the amount of capital held or the number of voting rights held (Table 8.8).

Table 8.8 Triggering threshold to initiate a squeeze-out or sellout procedure

	Directive	Belgium	Germany	France	The Netherlands
Squeeze-out	Bidder holds 90% (max. 95%) of the capital carrying voting rights and 90% of the voting rights or after acceptance of the bid, bidder acquired or has firmly contracted to acquire securities representing 90% of the offeree company's capital carrying voting rights and 90% of the voting rights comprised in the bid	Simplified squeeze-out in public companies: bidder holds 95% of the voting securities in the target squeeze-out in public companies: bidder holds 95% of all voting securities squeeze-out in private companies: bidder holds 95% of all voting securities	Corporate squeeze-out: bidder owns 95% of the capital (<i>Grundkapital</i>) takeover squeeze-out: bidder owns 95% of voting capital (<i>stimm-berechtigten Grundkapital</i>)	Article 236: bidder holds 95% of the voting rights. New Article 237: bidder holds 95% of the capital or voting rights	General procedure: 95% of the issued share capital. Bill: the bidder must own at least 95% of share capital, carrying at least 95% of voting rights as well
Sellout	Bidder holds 90% (max. 95%) of the capital carrying voting rights and 90% of the voting rights or after acceptance of the	Not applicable yet	Takeover sellout: bidder owns 95% of voting capital (<i>stimm-berechtigten Grundkapital</i>)	Art. 236: bidder holds 95% of the voting rights. New Article 237: bidder holds	Bill: the bidder must own at least 95% of share capital, carrying at least 95% of voting rights as well

bid, bidder acquired or has firmly contracted to acquire securities representing 90% of the offeree company's capital carrying voting rights and 90% of the voting rights comprised in the bid

95% of the capital or voting rights

In Belgian law, the threshold is set at 95% of all voting securities, regardless of whether they represent the capital, both in the simplified squeeze-out, the “ordinary” squeeze-out for “public” companies and the squeeze-out for “private” companies. Moreover, the simplified squeeze-out procedure presupposes that the bidder in the squeeze-out procedure possesses control over the company before starting the squeeze-out procedure.

French legislation requires the bidder to hold 95% of voting shares and investment certificates as well as voting certificates. The law only refers to 95% of the voting rights, since a shareholder in a French company may obtain double voting rights after 2 years. The proposal for a new *Règlement Général* grants a squeeze-out and sellout right for the remaining securities, representing not more than 5% of the capital *or* voting rights, which are not held by a majority shareholder.

In the United Kingdom, the bidder must have acquired or contracted to acquire by virtue of acceptances of the offer 90% (9/10) in value of all shares for which the offer is made. The threshold is set for each class of shares. This threshold must be met with respect to acceptances in relation to shares to which the offer relates. There is the possibility of counting the bidder’s shares, but they must be acquired in another way than through acceptance in the offer period. That should be allowed by the court. The takeover offer can be made conditional upon reaching the 90% threshold to be tendered in the offer. Due to the new set of takeover rules a dual test will be imposed: The bidder must have acquired both 90% of the shares carrying voting rights to which the offer relates and 90% of the voting rights in the target company. It is understood that the changes to the calculation of the relevant thresholds will make little practical difference as the percentage of total equity capital carrying voting rights in the target company and the percentage of voting rights will normally be the same.

In Dutch squeeze-outs, the bidder must own at least 95% of the issued share capital. The new bill on squeeze-out and sellout after takeovers prescribes that the bidder must own at least 95% of share capital, carrying at least 95% of voting rights as well.

Germany sets the threshold by reference to the amount of share capital. The German corporate squeeze-out bidder must own 95% of the capital (*Grundkapital*). Shares held by the corporation should be deducted from the capital for the determination of the 95% shareholding. According to new German takeover rules, the bidder must own 95% of voting capital (*stimm-berechtigten Grundkapital*). The law only sets the threshold in reference to the voting capital, and not cumulatively in reference to the voting rights, for in German listed stock companies owning the voting capital normally implies owning the voting rights. This 95% threshold is not linked to the acquisition of shares through the offer, at least not expressly, meaning that it can be attained through market purchases as well—although it must be noted that the squeeze-out is only possible within 3 months of the end of the offer period. This is mostly a theoretical question.

A related question to the threshold setting concerns the way the majority is calculated. The Takeover Directive states that “persons acting in concert” shall

mean “natural or legal persons who cooperate with the offerer or the offeree company on the basis of an agreement, either express or tacit, either oral or written, aimed [...] at acquiring control of the offeree company [...]” Persons controlled by another person within the meaning of Article 87 of Directive 2001/34/EC (12) shall be deemed to be persons acting in concert with that other person and with each other. This directive was replaced by the Directive 2004/109/EC of the European Parliament and of the Council of December, 15, 2004, on the harmonization of transparency requirements in relation to information about issuers whose securities are admitted to trading on a regulated market and amending Directive 2001/34/EC.¹⁰

In Belgian law, Article 513 Companies Code states that the threshold can be reached by a natural person or legal entity if it holds alone or in concert with another person 95% of the voting securities.

The same goes for French law, both for the squeeze-out and the sellout: The majority shareholder may hold the voting rights alone, or “together, in the sense of Article L 233-10 of the French Commercial Code.” The British Companies Act also takes into account the “associates” of a bidder. There are four categories of associates. They are a nominee of the offerer, a holding company, subsidiary, or fellow subsidiary of the offerer, a nominee of any such company, or any company in which the offerer is substantially interested.

Dutch law grants the squeeze-out right to two or more group corporations acting in concert.

The German Stock Corporation Act refers to a general rule concerning groups, and it is accepted that shares held by an entity under dominant influence by a controlling shareholder are treated as shares of that controlling shareholder.

In all European countries the threshold is very high, and we agree with Enriques (2003) that small controlling blocks offer more interesting opportunities of expropriation than a large controlling block. Hence a lower threshold should be encouraged. However, considering the modest ownership dispersion in most European countries a lower threshold can endanger the business process of a large number of European companies. A constant threat of controlling and minority shareholders to make use of their squeeze-out or sellout right will hamper the development of a well-balanced corporate strategy. Hence as a second-best solution the high threshold can be supported. It requires further study to evaluate whether appraisal remedies or other rights offer an adequate alternative in cases of high expropriation risks by controlling shareholders.

There are apparent fiscal implications attached to the threshold, although these will not be revised in detail in this chapter.

In a European perspective, the threshold, necessary to be able to squeeze out and sellout the minority shareholders after a takeover, is not only of importance

¹⁰ OJ L 390, December 31, 2004, pp. 38–57.

to obtain the right to (enforce) a squeeze-out. It is often also the threshold to obtain tax benefits. In France, for instance, holding 95% of the voting rights, the bidder becomes eligible for consolidation (*intégration fiscale*) with the target and its 95%-held subsidiaries. This allows for the interest charge incurred at the bidder's level to be deducted from the profits made at the target's level. In the United Kingdom, although squeezing out and selling out requires a 90% threshold, the fiscal advantages of a takeover are available from the moment the bidder owns 75% of the target's shares. Even Spain, not providing a proper squeeze-out mechanism (yet), allows for the bidder to obtain tax advantages from a 75% possession of the target's shares. Group tax relief is not available under Belgian law. Therefore the bidder's interest expenses could not be offset against the target's profits to reduce tax liabilities. Subject to certain conditions, other techniques, mostly allowing for movements of cash upstream, are available to achieve the same result (e.g., dividend distribution, reduction of share capital, repurchase of shares by the target, and so on).

Conditions and procedure

Neither the directive nor the Report of the High Level Group of Company Law Experts contains provisions as to the squeeze-out and sellout procedure, the question if the minority shareholders have a right to object, the conditions and considerations that have to be taken into account, etc. All this is left entirely up to the discretion of the member states.

Different member states opt for different approaches, and harmonization is unlikely to occur (Table 8.9). Some procedures, such as the French and Belgian *modus operandi*, call upon the supervisory authority—the Belgian Banking, Finance and Insurance Commission (CBFA) and the French *Autorité des Marchés Financiers* (AMF)—for an assessment of the claim; whereas others refer the parties to the courts, like in the case of the Dutch squeeze-out procedure and the new German procedure that transposes the European Directive. The “corporate” German squeeze-out and the British rules leave it up to the parties, although judicial review is at hand.

The Belgian squeeze-out procedure is rather lengthy and differs as to the type of squeeze-out, as mentioned before. Therefore, only a brief overview is given here, setting aside the details of the procedures. The simplified squeeze-out is only applicable when the bidder, after a takeover bid, owns 95% or more of voting securities, and if the prospectus contains a provision allowing the simplified squeeze-out. If the threshold is met, then the bidder may reopen the bid for a period of 15 days after the takeover offer results have been published. The securities that have not been transferred after this time are deemed to be transferred automatically to the bidder.

In case of a squeeze-out in a “public” company, the bidder makes a public offer for all voting securities not yet owned by the bidder and affiliated persons or persons acting in concert with it, as well as all securities that give a right to subscribe, acquire, or convert those securities. The public buyout offer is com-

Table 8.9 Conditions for a squeeze-out and a sellout

	Directive	Belgium	Germany	France	The Netherlands	United Kingdom
Price determined by	Not specified: member states only must guarantee that it is a “fair” price	Bidder	Corporate squeeze-out: bidder, in light of the current value of (the future earnings of) the target company, through a formal enterprise evaluation. Takeover squeeze-out/sellout: the bidder	Article 236: bidder. New Article 237: bidder	General procedure: Enterprise Chamber (<i>Ondernemingskamer</i>) bill: “fair price” set by the Enterprise Chamber	The consideration is left to the discretion of the bidder. The entire procedure must follow the terms of the offer, or on such terms as agreed upon
Form of price?	Price is the same as the consideration offered in the bid or in cash	In cash	Corporate squeeze-out: the cash compensation should be made at fair value (the law expresses it as “full real value” of the shares). Takeover squeeze-out/sellout: the kind of compensation must be the same as the consideration under the offer. If it is an exchange offer, a cash compensation must be offered	Article 236: cash (French doctrine: also securities). New Article 237: price is the same as the consideration offered in the bid or in cash	General procedure: cash bill: the price is payable in cash	

(Continued)

Table 8.9 (Continued)

	Directive	Belgium	Germany	France	The Netherlands	United Kingdom
Determinants of price	<p>Presumption of "fair" price if offerer acquired minimal 90% of all shares following a voluntary bid.</p> <p>Presumption of fair price following a mandatory bid</p>		<p>Corporate squeeze-out: Price determined in light of the current value of (the future earnings of) the target company, through formal enterprise evaluation.</p> <p>Takeover squeeze-out/sellout: "fair" compensation. Offer price under the preceding takeover offer presumed "fair" if at least 90% of the shares were acquired through the takeover or mandatory offer. If the 90% threshold is not met, the court will have to decide upon the valuation, through an inde-</p>	<p>Old Article 236: multicriteria approach: based on the value of the company's assets, its earnings, the market price of its shares, its business prospects and its subsidiaries', in each case, appropriately weighted.</p> <p>New Article 237: takeover offer price or multicriteria method</p>	<p>General procedure: the chamber determines independently the value of the shares at the date the court considers appropriate. The Enterprise Chamber also sets the method for determining the price. bill: "fair price."</p> <p>Chamber determines the worth of the shares on a certain moment, chosen by the judge. The Enterprise Chamber is free to decide upon the determining elements constituting the price setting.</p> <p>After a mandatory bid, the price paid in this offer is considered to be a fair price if 90% of the shares, at which</p>	<p>Shares or debentures of the bidder or another company, or cash, or of a combination</p>

			pendent expert valuation of the current value of (the future earnings of) the company.		the takeover offer aimed, were acquired In that situation, the judge may appoint up to three experts to assess the worth of the shares to be transferred	
Expert control	Not specified	Squeeze-out in “public” company: independent expert squeeze-out in “private” company: accountant or auditor	Corporate squeeze-out: the squeeze-out report must be audited by an independent, court-appointed auditor who must confirm that the price paid to the minority shareholders is adequate. Takeover squeeze-out/sellout: if presumption is not applicable	Independent expert valuation report	Old procedure: chamber may order up to three experts to evaluate this price (only in exceptional circumstances). Bill: Enterprise Chamber (court of law) who may order up to three experts to evaluate this price. Whenever the presumption of a “fair price” is applicable, the chamber may appoint up to three experts to assess the worth of the shares to be transferred	Not specified
Expert election	Not specified		Appointed by the court	Appointed by bidder but approved by AMF	Appointed by the court	Not specified

(Continued)

Table 8.9 (Continued)

	Directive	Belgium	Germany	France	The Netherlands	United Kingdom
Court intervention Kind of intervention	Not specified	No	Corporate squeeze-out: if shareholders challenge this valuation. The court will examine the valuation, if necessary appoint an expert, and set its own fair price, with final and binding effect. Takeover squeeze-out/sellout: if presumption is not applicable	The AMF's decision concerning the valuation may be challenged in the French courts	Yes. Against any judgment by the Enterprise Chamber, only appeal with the Supreme Court is possible	Not specified
Other regulatory supervision	Not specified	Squeeze-out in "public" company: CBFA controls prospectus	No	Terms of the offer are subject to review and approval by the AMF. If the AMF would judge that the proposal damages the interest of the minority shareholders, it may request the bidder to alter the proposal	No	Not specified

municated to the CBFA (Banking, Finance, and Insurance Commission) and must take place 1 month before the beginning of the transaction.

The buyout offer is published and can only be altered from then on in favor of the shareholders or upon an order by the CBFA. The public buyout offer must mention the price, the main terms and conditions of the offer, and contain a file with a draft prospectus, a report from an independent accounting expert who gives his advice about (the relevance of) the valuation methods, and the opinion of the board of directors of the target company. The examination of the conditions of the offer in terms of its regularity is carried out by the minority stockholders. They have no insight into the draft prospectus. The minority stockholders have a period of 15 days after notification of the buyout offer to make their opposition known to the CBFA. After the expiration of this period, the CBFA will assess the quality of the information regarding the public buyout bid that will be disseminated in the prospectus and whether the interests of the stockholders are being safeguarded. If the prospectus is approved by the CBFA, it is published. After this publication, the shareholders have a minimum of 10 days and a maximum of 20 days to accept the buyout offer. The securities that have not been transferred to the bidder during this period are deemed to have been transferred automatically.

The squeeze-out procedure in “private” companies is less formalistic. The bidder must make an elaborate report concerning the buyout offer. This report contains the price offer, the valuation method used, the targeted shares, and so on. The report also includes a report from the board of directors of the bidder, a report by an accountant or auditor concerning the valuation methods, and the advice of the target company board. The shareholders receive due notice that these reports are available. Within 30 days after this notification, the shareholders may confer their objections concerning the offer to the bidder. The bidder can only alter the offer in a more advantageous manner for the shareholders or leave the offer as it is. Either way the bidder chooses, the (un)altered offer must be published within 15 days after expiration of the 30-day period. After this publication, the shareholders have a minimum of 10 days and a maximum of 20 days to accept the buyout offer. In this period, the shareholder may also inform the bidder that he does not wish to abstain from his securities.

The securities that have not been transferred to the bidder during this period are deemed to have been transferred automatically, except for the securities owned by the shareholder who explicitly states that he does not wish to abstain from his securities. In short, the main differences between the squeeze-out in a “public” and a “private” company are that the latter does not require a prospectus to be drafted, but only an elaborate report, the CBFA does not intervene, the valuation methods are reviewed by an auditor instead of an independent expert, and the offer is not binding for the minority shareholders.

In France, there are two separate stages to a squeeze-out procedure: first a public buyout offer (*offre publique de retrait*—OPR) effected by the bidder making purchases in the market for at least 10 trading days; and secondly, immediately following the end of the buyout offer, the automatic transfer of all

outstanding shares to the bidder as part of the squeeze-out offer, provided that the bidder reached 95% of the voting rights of the company.

The first step, the buyout offer, may also be launched at the discretion of a holder of 95% of the shares in a company or at the request of the AMF upon application by minority shareholders who can demonstrate that there is no longer sufficient liquidity to enable them to sell their shares in the market. This is the sellout right for minority shareholders.

In addition, the AMF may request that a buyout offer be made when the controlling shareholder(s) (even if he(they) hold(s) less than 95% of the voting rights) propose(s) significant changes to the company's bylaws (for example, a change to the corporate form or the procedure for transferring shares or voting rights). It includes proposals to merge; to dispose of all or substantially all of its principal assets; decisions to change the business purpose or to exclude the payment of dividends. It also applies after the decision to convert an SA (company limited by shares) into an SCA (*société en commandite par actions*/partnership limited by shares).

The buyout offer must always contain minimal conditions, which easily can be altered, concerning the identity of the independent expert, the evaluation methods, and the expert's appreciation of the bid price. After the AMF approves of this, an announcement that a squeeze-out will take place is published.

According to the U.K. Companies Act, whenever a shareholder obtains the required threshold, he can serve notice on those who have not accepted the offer that he desires to acquire those shares. The board of directors from the target company must recommend whether to accept or reject the offer. If the notice is duly made, the bidder is entitled and bound to acquire the shares on terms of the offer. Within a period of 6 weeks following the notice, when any choice of consideration must be made, the bidder must send a copy of the notice to the target company and pay to it the consideration for the nonoffered shares. This 6-week timetable is suspended if a shareholder applies to court. The minority shareholders have a right to apply to the court, either to prevent the compulsory purchase or to specify different terms.

In the Netherlands, the Enterprise Chamber (in Amsterdam) investigates the claim of the bidder. The shareholders have a right to object. The claim can be dismissed if the Enterprise Chamber finds that the transfer will cause the targeted shareholder to suffer from serious material damage despite the financial compensation offered by the bidder. Next, the case will be dismissed if a targeted shareholder owns shares with special codecision rights or if the bidder has given up its right to invoke the squeeze-out right. Hence, the preferred shares are an important instrument to discourage takeovers as they exclude the possibility for the bidder to fully integrate the target without the consent of the preferential shareholder. If the chamber does not come across such an inhibitive circumstance and decides that the controlling shareholder complies with all conditions for the squeeze-out procedure, it orders the shares to be transferred against payment of the price, as set according to the chamber. Against the decisions by the Enterprise Chamber, only an appeal with the Supreme Court (Hoge Raad) is possible. In the final judgment, the shareholders are condemned to

transfer their shares to the bidder. The bill implementing the European directive refers to this procedure, both for squeeze-out and sellout. The Enterprise Chamber investigates the claim of the bidder to see if the bidder meets the threshold. If the chamber decides that the controlling shareholder meets all requirements, it orders the shares to be transferred against payment of the price, as set according to the chamber.

The German corporate squeeze-out procedure requires that the majority shareholder calls a shareholder meeting to decide upon the transfer of all shares. The decision to squeeze out is made by way of a resolution (taken with an ordinary majority) by the general meeting of shareholders. The controlling shareholder is allowed to participate. Hence, the decision is a mere formality. The squeeze-out becomes effective when this shareholder resolution is registered in the commercial register. Shareholders have a right to object to the valuation, although this does not affect the transaction itself and the registration of the shareholder decision. Such objection can consist in a violation of the shareholders' right to information relating to the adequacy of the compensation. The competent court will, if deemed necessary, determine an adequate compensation itself. The general meeting decides the resolution of the squeeze-out. This decision requires a report of the majority shareholder as well as an auditor's fairness opinion. The minority shareholders also have to receive the financial statements of the previous year. Disagreements will be settled in court. Two types of court procedures can be distinguished. First, there is the compensation settlement procedure. This procedure only challenges the compensation package but does not block the transaction. The risk of the majority shareholder is the additional amount of money he will have to pay to all the minority shareholders even if they did not participate in the court procedure. In the second court procedure the squeeze-out itself is challenged and it prevents the squeeze-out from becoming effective.

The new German "takeover squeeze-out and sellout procedure" calls upon the court. No shareholder meeting is required, nor a formal shareholder resolution. The bidder applies to the district Court of Frankfurt am Main, which publishes this request. The court decides upon the squeeze-out/sellout. This means that challenges from minority shareholders concerning substantive and formal errors of the decision are not possible. Registration in the corporation register is no longer required.

The transfer of shares becomes effective if the decision is final and can no longer be appealed. Appeal can only be applied to the Oberlandesgericht Frankfurt am Main, the final appeal court for these matters. An appeal may concern the important issue of compensation and the constitutionality of the decision (expropriation demands justification and fair compensation in German law). The decision is effective against all shareholders.

Valuation

According to the directive, member states shall ensure that a fair price is guaranteed. That price shall take the same form as the consideration offered in the

bid or shall be in cash. Member states may provide that cash shall be offered at least as an alternative.

Following a voluntary bid, the consideration offered in the bid shall be presumed to be fair where, through acceptance of the bid, the offerer has acquired securities representing not less than 90% of the capital carrying voting rights in the bid. According to the Report of the High Level Group of Company Law Experts on issues related to takeover bids, this should apply in both types of thresholds (percentage of capital or percentage of acceptances). This can result in a fair price, to the extent that the period in which the squeeze-out or sellout can be invoked is limited, as provided for in the directive. However, this presumption is rebuttable. It can be challenged before courts or the authority supervising the takeover bid in particular circumstances. Following a mandatory bid, the consideration offered in the bid shall be presumed to be fair, even if the bid has been accepted by shareholders holding less than 90% of the share capital. Here again, the presumption is rebuttable. In all other situations, the consideration should be determined by an expert, according to the Report of the High Level Group of Company Law Experts on issues related to takeover bids. As far as the nature of the consideration is concerned, the shareholders who refused the offer should be treated no less favorably than those who originally accepted it. As a consequence, if cash, or a cash alternative, has been offered in the takeover bid, cash, or a cash alternative, should be offered in the squeeze-out procedure as well. This policy consideration is in conflict with the aforementioned Grossman and Hart theory.

Valuation standards vary enormously in each country. Some jurisdictions provide a very detailed valuation procedure, such as Germany. Others, like the United Kingdom, grant the bidder a considerable amount of discretion in deciding the bid price.

In Belgium, the bid price is decided by the bidder, but the consideration should be motivated. The terms of the offer must comply with the applicable regulations and must safeguard the minority shareholders' interests (in particular with relation to the price). Only cash consideration is allowed. The motivation of the price refers to the type of valuation methods that have been used, the weight granted to these methods, and so on. It should be noted that the valuation of the company and the price offered for the shares do not necessarily converge.

For buyouts in "public" companies, an independent expert evaluates the bid price. Furthermore, the CBFA controls and approves the prospectus.

In squeeze-out procedures for "private" companies, an accountant or auditor must report on the valuation methods. However, in light of the refusal right of shareholders to accept the squeeze-out, the bidder will tend to suggest an equitable price.

All funds necessary for the realization of the bid are available, either in an account with a credit institution established in Belgium or in the form of an irrevocable and unconditional credit facility made available to the bidder by a credit institution established in Belgium. These funds are deposited in a blocked bank account. A credit institution or a stock exchange company established in Belgium is appointed to ensure the payment of the price.

According to French legislation, the price is determined in the proposal to squeeze out, and reference is made to a number of specified criteria (called the multicriteria approach). The price offered to the minority shareholders is based on a valuation of the target's securities by the bidder, using "objective methods applied to business or share transfers, based on the value of the company's assets, its earnings, the market price of its shares, its business prospects and its subsidiaries" in each case, appropriately weighted. The bidder's valuation must be accompanied by an independent expert valuation report giving an opinion on the bidder's valuation, including the relevance of the criteria used and respective weighting. The appointment of the expert has to be approved by the AMF.

As with any other form of takeover offer, the terms of the offer are subject to review and approval by the AMF. If the AMF judges that the proposal damages the interest of the minority shareholders, it may request the bidder to alter the proposal. The AMF's decision concerning the valuation may be challenged in the French courts. The minority shareholders may also apply the *attestation d'équité* in order to evaluate the price. This attestation is modeled after the American fairness opinion. The compensation is to be done in cash according to the Règlement Général, but according to French scholars, it is also possible to do it in securities (Viandier, 1999). However, it is interesting to note that, unlike in the U.K. legislation, the bidder is not obliged to offer the same terms as formulated in the initial takeover offer. The proposal for a new Règlement Général relies closely upon the directive's general guidelines as to valuation.

The U.K. Companies Act states very briefly that the entire procedure must follow the terms of the offer, or on such terms as agreed upon. The consideration is left to the discretion of the bidder. It may consist of shares or debentures of the bidder or another company, of cash, or of a combination. It is important to bear in mind that the offer must be on the same terms for assenting and dissenting shareholders (e.g., both cash and securities) (Davies, 2003).

According to the Dutch Book Two of the New Civil Code, the price is set by the Enterprise Chamber (*Ondernemingskamer*), which may order up to three experts to evaluate this price. Appointing the experts, however, is only done in exceptional circumstances. The chamber independently determines the value of the shares at the date the court considers appropriate. The Enterprise Chamber also set the method for determining the price, which should be in cash. As long as the price is not paid, interest is being charged. In the takeover bill, the valuation procedure remains more or less the same. A "fair price" is set by the Enterprise Chamber, which may order up to three experts to evaluate this price. However, if a mandatory bid was made, the price paid in this offer is considered to be a fair price if 90% of the shares, at which the takeover offer is aimed, were acquired. In that situation, the court may appoint up to three experts to assess the value of the shares to be transferred.

The German corporate squeeze-out bid price is determined by the bidder, in light of the current value of (the future earnings of) the target company, through a formal enterprise evaluation. The majority shareholder is required to prepare a squeeze-out report that explains how the cash payment to be made to the

minority shareholders has been calculated. The valuation must take into account the relations within the company at the time of the decision by the general shareholders concerning the squeeze-out. The German valuation method, adopted by the German Institute of Accountants, is called EDW S1 (formerly the “IDM-S1 method”)—a discounted future earnings analysis. This standard considers the enterprise value to be the net present value of the net profits accrued to the shareholders. The cash compensation should be made at fair value (the law expresses it as “full real value” of the shares). This is stressed by the German Constitutional Court, stating that a loss of personal assets can only be compensated through full compensation of the loss. This constitutional guarantee is also important in light of the valuation as proposed by the directive since this price is always under review by the German Constitutional Court, and will be weighed as to its full compensation ability. The German valuation method can be criticized from an economic perspective, as the private benefits of the controlling shareholder will not be taken into account. It is important to note that due to a best-price rule, the successful bidder who buys additional shares within 1 year after the offer for a price exceeding the offer price is obliged to pay this premium to every shareholder who tendered. It encourages the controlling shareholder to use this period to expropriate the minority shareholders and put pressure on future earnings, hence lowering the squeeze-out price.

The squeeze-out report must be audited by an independent, court-appointed auditor who must confirm that the price paid to the minority shareholders is adequate. In addition, the majority shareholder must furnish the target company management with a confirmation from a bank. Every shareholder may challenge this valuation. The proceedings must be initiated within 2 months following the registration of the transfer in the commercial register. However, this proceeding does not suspend or otherwise affect the validity of the transfer of the shares.

The court will examine the valuation, if necessary appoint an expert, and set its own fair price, with final and binding effect. This procedure usually leads to increasing the price in the advantage of the minority shareholder.

The law that transposes the directive introduces an additional procedure. According to the new takeover rules, the price is decided by the bidder. The kind of compensation must be identical to the takeover consideration. If it is an exchange offer, a cash compensation must be offered. “Fair” compensation is required. The offer price under the preceding takeover offer is considered to be fair if at least 90% of the shares were acquired through the takeover or mandatory offer. If the 90% threshold is not met, the court will have to decide upon the valuation, through an independent expert valuation of the current value of (the future earnings of) the company. If, however, the 90% threshold is met, an enterprise evaluation is no longer required, although litigation remains possible. Legal scholars already pointed at some weaknesses.

Uncertainty in the legal framework discourages the efficient organization of the business environment.

The conditions and the valuation procedure are important legal issues. However, the economic theory does not assess this part of the legal procedure. In a squeeze-out the bidder determines the price, and if the bid is successful, economists consider the price appropriate as the large majority of the shareholders assessed the bid price high enough to tender. However, outside the scope of takeovers it is extremely difficult to develop an efficient valuation methodology that takes into account the innumerable number of variables. To name but a few: the position and behavior of the controlling shareholders, the position and behavior of the minority shareholders, time, quality of the courts, available information, quality of the experts, etc. This topic requires much more research.

Timing of the procedures

The Takeover Directive requires that the squeeze-out or sellout procedure is initiated within 3 months of the end of the time allowed for acceptance of the bid referred to in Article 7 of the directive.

Most examined countries do not provide for a timetable within which the right to squeeze out or sellout must be exercised. This does not come as a surprise as the squeeze-out right can be applied outside the scope of takeovers.

Most timing references are of a procedural nature. The United Kingdom sets forth the clearest rule as to timing to exercise both rights. Squeeze-out rights can be exercised within a period of 4 months beginning with the date of the offer and have to be exercised within 2 months of reaching the 90% threshold. Sellout rights may be exercised during a 3-month period following the end of the period within which the bid can be accepted. The new regime will also allow an offerer to leave its offer open indefinitely and thereby maintain its ability to squeeze out minorities without a time limit.

In Belgian law, on the other hand, the timing mainly refers to the procedure, and depends upon the type of squeeze-out procedure. In both the squeeze-out for “public” and “private” companies, the shareholders have a minimum of 10 days and a maximum of 20 days to accept the buyout offer. The securities that have not been transferred to the bidder during this period are deemed to have been transferred automatically.

The new French law, the German Implementing Act, and the Dutch Bill have taken over the directive’s timing.

8.5 Conclusion

Companies require flexibility of the legal framework to optimally implement strategic goals. Contracts cannot solve all the conflicting interests of the constituents and third parties. Hence, the legislator should provide for an appropriate framework. Financing the corporation is one of the issues where the legal framework should not only consider the strategic needs of the companies but also the protection of the different corporate constituents. Squeeze-out rights

help the majority shareholder profit from all the advantages of a fully integrated subsidiary. At the same time the rules must protect the minority shareholders against the expropriation of the controlling shareholder. Conversely, sellout rights look after the protection of the minority shareholders when the majority shareholder confuses his personal interest with the interests of the company. This framework should achieve the right balance between property rights and efficient allocation of power. It is shown that economically required flexibility conflicts with the European legal setting.

The European member states approach deviates significantly from the American method, which starts from the idea that certain kinds of transactions go hand in hand with 100%-held subsidiaries and hence offer a number of techniques to freeze out the minority, be it a long-form merger, a reverse stock split, a tender offer with a preapproved merger, or a second step short-form merger. In Europe, probably due to the different ownership structure with large controlling shareholders, most member states developed a setting where the transaction is not necessarily the triggering event to start a freeze-out procedure. The threshold determines whether the controlling shareholder in a freeze-out or the minority shareholder in a sellout can start a procedure. The European Directive thwarts the European member states methodology. Takeovers must be accompanied with a right for majority shareholders to squeeze out the minority and cash out as a minority. The result is an additional level of regulation—for the relatively speaking limited number of listed companies—that comes on top of the existing rules in the different member states. It is hard to find any harmonization in the legal framework for squeeze-outs and sellouts. It must be considered a missed opportunity.

The examined legal rules of the member states all offer a squeeze-out right. The sellout right is more an exception than a rule. It illustrates the power of the incumbent controlling shareholders. Next, the devil is in the details. All member states have different systems. It is sufficient to point at the different company types for which the squeeze-out right is available to illustrate the legal patchwork. Large majority shareholders of Belgian public companies limited by shares, partnerships limited by shares, Dutch private and public companies limited by shares, and French listed companies are granted the right to squeeze out the minority shareholders. While corporate mobility is growing at the speed of light (Becht, Mayer, and Wagner, 2006) and the stock exchanges have merged, the French, Dutch, and Belgian legislators with headquarters less than 400 kilometers from each other issued divergent rules for which even policy considerations seem to be missing. The economic rationale for the different treatment of the Belgian, French, and Dutch controlling shareholder of a private company limited by shares and a public unlisted company limited by shares is hard to find. However, it affects a large number of companies.

Finally, all the differences put pressure on the academic law and finance community to develop enhanced models to assess the relationship between law and finance. The chapter illustrates that the dummy-variable approach is insufficient to measure the complex legal patchwork. There remains a long road ahead, and it seems to be getting longer.

References

- Barca, F. and Becht, M. (2001). "The Control of Corporate Europe." Oxford University Press, Oxford.
- Becht, M., Mayer, C., and Wagner, H. (2006). "Corporate Mobility and the Costs of Regulation." ECGI Law, working paper No. 70/2006.
- Berglof, E. and Burkart, M. (2003). European takeover regulation. *Economic Policy* 36, 171–213.
- Bergström, C., Högfeldt, P., and Molin, J. (1994). The optimality of the mandatory bid rule. *Journal of Law, Economics and Organisation* 13, 433–451.
- Bradley, M. (1980). Interfirm tender offers and the market for corporate control. *Journal of Business* 53, 345–376.
- Burkart, M. and Panunzi, F. (2004). Mandatory bids, squeeze-outs, sell-out and the dynamics of the tender offer process. In "Reforming Company and Takeover Law in Europe" (G. Ferrarini, K. Hopt, J. Winter, and E. Wymeersch, eds.). Oxford University Press, Oxford.
- Davies, P. (2003). "Gower and Davies' Principles of Modern Company Law." Sweet & Maxwell, London.
- Du Castillon, L-F. (2003). L'offre publique de reprise: mesure discriminatoire? Mesure contraire aux garanties contre la privation de la propriété privée? (note under Cour d'Arbitrage May 14, 2003). *Rev. Dr. Banc. & Fin.* 5, 301–308.
- Dyck, A. and Zingales, L. (2004). Private benefits of control: An international comparison. *Journal of Finance* 59, 537–600.
- Enriques, L. (2003). The mandatory bid rule in the proposed EC Takeover Directive: Harmonization as rent-seeking? In "Reforming Company and Takeover Law in Europe" (G. Ferrarini, K. Hopt, J. Winter, and E. Wymeersch, eds.). Oxford University Press, Oxford.
- Gilson, R. and Black, B. (1995). "The Law and Finance of Corporate Acquisitions." The Foundation Press, Westbury, NY.
- Goergen, M., Martynova, M., and Renneboog, L. (2005). Corporate convergence: Evidence from takeover regulation reforms in Europe. *Oxford Review of Economic Policy* 21, 243–268.
- Grossman, S. and Hart, O. (1980). Takeover bids, the free rider problem, and the theory of the corporation. *Bell Journal of Economics* 11, 42–64.
- Herzel, L. and Colling, D. (1984). Squeeze-out mergers in Delaware—the Delaware Supreme Court Decision in Weinberger v. OUP, Inc. *Corporate Law Review* 7, 195–231.
- High Level Group of Company Law Experts (2002a). "Report of the High Level Group of Company Law Experts on Issues Related to Takeover Bids." European Commission, Brussels.
- High Level Group of Company Law Experts (2002b). "Final Report of the High Level Group of Company Law Experts on a Modern Regulatory Framework for Company Law in Europe." European Commission, Brussels.
- Krohn, M. (2004). Minority squeeze-outs and the European Convention on Human Rights. *European Business Law Review* 15, 159–182.

- La Porta, R., Lopez-de-Silanes, F., Shleifer, A., and Vishny, R. (1999). Ownership around the world. *Journal of Finance* **54**, 471–514.
- Maeijer, J. M. M. (1994). “Vertegenwoordiging en Rechtspersoon. 3: De Naamloze en de Besloten Vennootschap.” Tjeenk Willink, Zwolle.
- Maurau, A. (2004). Het Sell-out-recht: Weldra een nieuw recht voor minderheidsaandeelhouders? *Tijdschrift voor Rechtspersoon en Vennootschap* **16**, 533–553.
- McCahery, J., Renneboog, L., Ritter, P., and Haller, S. (2004). The economics of the proposed European Takeover Directive. In “Reforming Company and Takeover Law in Europe” (G. Ferrarini, K. Hopt, J. Winter, and E. Wymeersch, eds.) Oxford University Press, Oxford.
- Nenova, T. (2003). The value of corporate voting rights and control: A cross-country analysis. *Journal of Financial Economics* **68**, 325–351.
- Nieuwe Weme, M. (2004). “Het Verplicht Bod op Effecten.” Kluwer, Deventer.
- Renneboog, L. and Martynova, M. (2005). “Takeover Waves: The Triggers, Performance and Motives.” ECGI Finance, working paper No. 97/2005.
- Renneboog, L. and Martynova, M. (2006). “Mergers and Acquisitions in Europe.” ECGI Finance, working paper No. 114/2006.
- Sagayam, S. (2006). Member states struggle to adopt Takeover Directive. *International Financial Review* **25**, 9–14.
- Van der Elst, C. (2001). “Aandeelhouderschap van Beursgenoteerde Vennootschappen.” Larcier, Gent.
- Van der Elst, C. (2006). “Agency and Ownership in the Financial Services Industry.” Tilburg University, Tilburg.
- Van Olfen, M. (2000). “Beschermingsmaatregelen in the 21^e eeuw.” Kluwer, Deventer.
- Viandier, A. (1999). “OPA, OPE et Autres Offres Publiques.” Editions Francis Lefebvre, Levallois.
- Wymeersch, E. (1998). A status report on corporate governance rules and practices in some continental European States. In “Comparative Corporate Governance—the State of the Art and Emerging Research” (K. Hopt, H. Kanda, M. Roe, E. Wymeersch, and S. Prigge, eds.). Clarendon Press, Oxford.

9 Valuation methods and German merger practice

Wolfgang Breuer, Martin Jonas, and Klaus Mark

Abstract

In Germany, a standardized and detailed corporate and merger law was introduced that allows control agreements, squeeze outs, mergers, and delistings. The quintessential aspect of the respective legal regulations is the protection of minority shareholders: The cash compensation for departing shareholders, or the share exchange ratio, or the guaranteed dividend for remaining shareholders, has to be fair. The fairness has to be verified by an independent auditor and can be checked in a lawsuit. In the last 5 years, some hundreds of fairness verifications and lawsuits have been executed or initiated. Against this background, the standard setter for the valuation method, which is applied to find a fair compensation or share exchange ratio, is the German Institute of Certified Public Accountants (*Institut der Wirtschaftsprüfer* (IDW)). The IDW Standard No. 1 (IDW S1) lays down the principles for executing valuations of companies. We explain this valuation method based on the “German Tax Capital Asset Pricing Model,” discuss its assumptions, and present an example of its application.

9.1 Introduction

In Germany, there exists a standardized and detailed corporate and merger law. It allows control agreements, squeeze outs, mergers, and delistings. The quintessential aspect of the respective legal regulations is the protection of minority shareholders: The cash compensation for departing shareholders, or the share exchange ratio, or the guaranteed dividend for remaining shareholders has to be fair. The fairness has to be verified by an independent auditor and can be checked in a lawsuit. In the last 5 years, some hundreds of fairness verifications and lawsuits have been executed or initiated, e.g., in the case of the Daimler-Chrysler merger, the merger between Deutsche Telekom and T-Online, or the Vodafone-Mannesmann takeover.

Against this background, the standard setter for the valuation method, which is applied to find a fair compensation or share exchange ratio, is the German Institute of Certified Public Accountants (*Institut der Wirtschaftsprüfer* (IDW)). The IDW Standard No. 1 (IDW S1) lays down the principles for executing valuations of companies. In general, IDW S1 rules the globally accepted discounted

cash flow or discounted earnings methods. But in detail there are some important specialties. In particular with regard to the conjunction of corporate and personal income tax, the inclusion of personal income tax in the valuation calculus is compulsory. Therefore the preferred model background is not the Capital Asset Pricing Model (CAPM) in its standard version as developed by Sharpe (1964), Lintner (1965), and Mossin (1966). In contrast, we have to apply an enhanced version of the Tax CAPM introduced by Brennan (1970) that explicitly takes the German tax rules into account. We will call this the German Tax CAPM. The main goal of this chapter is to explain this German valuation method, to discuss its underlying assumptions, and to present an example of its application. To this end, Section 9.2 gives more detailed background information about merger processes in Germany. Section 9.3 explains the basic principles of firm valuation in Germany. The German Tax CAPM is introduced in Section 9.4, which forms the main part of this chapter. Section 9.5 shows how the German Tax CAPM has been used to determine the value of the equity of the German company Deutsche Telekom as of 01/01/2005. In Section 9.6, the relevance of the valuation standard IDW S1 for the German takeover practice is discussed in more detail. Section 9.7 gives a brief outlook on future research requirements.

9.2 The background of merger processes in Germany

Transactions like control agreements, squeeze outs, mergers, delistings or the change of the corporate form can be used to implement the strategic goals of a firm in a rapid and fundamental manner and also work as governance devices. For example, the reason for a merger may be the firm's intention to implement a fast growth strategy in order to enhance market power or to reduce cost by economies of scale and scope (Brealey *et al.*, 2006). Another reason for transactions leading to changes in a firm's control structure, however, is to mitigate agency conflicts between management and shareholders (and other outside investors, Shleifer and Vishny, 1997). That is, in an agency context, different ownership and control structures may prove to be an efficient governance device for firms with, for example, different size, product range, or age. Thus, flexibility concerning control changes can be seen as an important element of a corporate governance system. The financial system and the corporate law of a country will work efficiently, if control transactions are possible without causing substantial frictions, because control transactions endow firms with flexibility for rapid strategic moves and enable them to adjust their governance structure in order to mitigate agency conflicts.

However, control transactions may end with winners on the one hand and losers whose rights are diluted on the other. In particular, small shareholders have to fear that their ownership rights are diluted as a result of control transactions. For example, if a firm has acquired more than 75% of the voting shares of another company, it can accomplish the signing of a control agreement by a corresponding 75% majority decision at the shareholders' meeting. After sign-

ing a control agreement, the controlling party is able to force the management of the dominated company to make certain decisions even if they are unfavorable for its own earnings situation. Moreover, usually a control agreement is combined with an agreement that entails an obligation for the dominated company to transfer its profits to the other party of the contract. As a consequence, small shareholders have to fear that, in the end, they may suffer severe losses if one party is building a major block holding that allows the signing of a control agreement. Of course, profit transfer agreements are by themselves disadvantageous for minority shareholders not involved, since small shareholders' dividend rights are devalued. As rational investors will account for major blockholders' discretion resulting from control agreements, they will (*ex ante*) adjust their minimum required rate of return for investing in a firm's stock in equilibrium. Thus, even the opportunity to sign control agreements may be economically disadvantageous, because frictions resulting from the possibility of rights dilution and small shareholders' rational reactions are more pronounced than economic gains from the flexibility of the governance structure of firms.

To reduce frictions resulting from control agreements or other transactions like mergers or squeeze outs because of major shareholders' discretion for diluting actions, German corporate law entails certain mechanisms to protect small shareholders' ownership rights and wealth when control transactions are taking place. According to the corporation law and important decisions by the German Federal Constitutional Court (*Bundesverfassungsgericht*), infringements of the constitutional right of ownership require a "fair" monetary compensation for concerned parties. Since the basis for a "fair" compensation for minority shareholders is often a "fair" share value, the calculation of compensations for minority shareholders typically requires the valuation of the involved firms or of their equity, respectively.

The system to protect small shareholders' rights by enforcing fair compensations in control transactions has two safeguards: First, an independent auditor has to check and to verify the fairness of a compensation for the dilution of ownership rights resulting from control transactions. According to German law, this independent auditor has to be a *Wirtschaftsprüfer* (German legal Certified Public Accountant). Second, there is a possibility for a check-up of the fairness concerning small shareholders' compensations by a lawsuit conducted by an arbitral jurisdiction that appoints regularly an independent appraiser. These appraisers are in most cases *Wirtschaftsprüfer* and sometimes professors of business administration.

Because of these two reasons, the major standard setter of valuation standards in Germany is the *Institut der Wirtschaftsprüfer*. Anticipating that valuations are checked in a lawsuit, firms often choose *Wirtschaftsprüfer* as advisors for valuations in the context of control transactions. The German valuation practice, therefore, is dominated by the *Wirtschaftsprüfer* profession. As mentioned above, the standard IDW S1 is relevant for the valuations of firms to calculate fair compensations for minority shareholders in control transactions. Recently, this standard has been renewed in order to incorporate

the consequences of a tax reform relevant for shareholders from 2002 on. Moreover, valuations have been brought nearer to capital market theory with respect to risk aspects.

9.3 Basic valuation principles in Germany

It is common practice to value a company by calculating the net present value of future cash flows. Whereas in the United Kingdom and in the United States the predominant valuation method is the discounted cash flow model, in Germany the discounted earnings model is used more often. The discounted cash flow method looks at expected free cash flows, which can be distributed to shareholders as well as debt holders and uses weighted average cost of capital to discount future payments. The discounted cash flow approach thus computes the total market value of a firm (the value of equity *and* debt). To account for the value of equity only, this total firm value has to be reduced by the value of debt in a second step. In contrast, the discounted earnings method computes the value of equity straightforward by calculating the net present value of expected cash flows to shareholders with the cost of equity as the relevant discount rate.

When both models are applied in a correct manner, they lead to the same result, and IDW S1 allows the utilization of both models. Nevertheless, in this chapter we focus on the discounted earnings method, which is more common in Germany for the calculation of fair compensations if control transactions take place.

The numerator in the net present value formula of the discounted earnings model is given by the net (after tax) cash flows to shareholders. In Germany, corporations have to pay trade tax with the taxable base being defined as the sum of earnings before taxes (EBT) and half of the interest paid on long-term debt. In addition, there is a corporation income tax. The corresponding taxable base is given by the EBT less amount paid for trade tax. The amount remaining after the EBT has been reduced by trade tax, and corporate income tax describes the resulting net income of the corporation and is relevant for valuation, because it can be paid out to shareholders. On the shareholders' level, capital gains are tax exempt, if the holding period is more than 1 year and the shareholding is less than 1% of the firm's equity. Such conditions are regularly met by "typical" minority shareholders. Moreover, since the introduction of the half-income system in 2002, dividends are burdened only by half of the regular income tax rate. Valuations in accordance with IDW S1 take these special tax items on the shareholders' level into consideration. This means that in valuations according to IDW S1, dividends are burdened with half of the personal tax rate. Retentions are assumed to be attributed implicitly to shareholders via capital gains so that there is no tax burden on retentions. Since there is no possibility to look for the relevant income taxation conditions of a huge number of minority shareholders, IDW S1 accounts for a typical (average) German minority shareholder. According to statistical results, the relevant marginal personal taxation rate of a typified minority shareholder is 35%. So if the firm to be

valued is expected to pay out dividends in future periods, these payments are burdened with a tax rate of $0.35/2 = 17.5\%$. In contrast, future retentions are attributed to shareholders in the corresponding period in the net present value formula of the discounted earnings model, thereby implicitly assuming that the net present value of reinvested retentions (after corporate taxes) is zero.

A fundamental idea concerning a “fair” valuation approach is included in IDW S1 via so-called equivalence principles: The numbers in the denominator of the net present value formula of the discounted earnings model—the cost of equity—should reflect an alternative investment that is equivalent to the one under consideration with respect to maturity structure, risk properties, and tax aspects.

In this chapter, we focus on the integration of risk equivalence and tax equivalence (see, for example, Jonas *et al.*, 2005, for aspects of maturity equivalence). Thereby, the rules in IDW S1 are intended to use knowledge from capital market theory to calculate the cost of equity. In the past, risk equivalence and tax equivalence could be achieved relatively easily by two steps: first, applying the well-known standard CAPM to take risk aspects into consideration; second, reducing the cost of equity with the typified tax rate of 35% for tax equivalence. After the introduction of the half-income system this procedure does not seem appropriate anymore. As a result, the valuation expert team of the IDW has altered the valuation standard IDW S1 to account for the problems of the simultaneous integration of the risk equivalence principle and the tax equivalence principle. This is done by a modification of the Tax CAPM originally formalized by Brennan (1970) and will be explained in more detail in the following section.

9.4 The German tax CAPM—a tax CAPM with German income tax

As the Tax CAPM currently used for valuations in accordance with IDW S1 is an extension of the standard CAPM, the basic model assumptions of the CAPM are also valid in the Tax CAPM. Just as in the standard CAPM, we have a one-period model of a frictionless capital market, but with taxation. There are S different risky securities ($s = 1, \dots, S$) and I investors ($i = 1, \dots, I$). Moreover, there is a riskless asset denoted as $s = 0$, which can also be sold short (a possibility for riskless lending and borrowing). Let \bar{X}_i^s stand for the initial number of security s held by an individual i at time $t = 0$. Correspondingly, \bar{X}_i^s is the number of security s an investor i is endowed with after trade has taken place at time $t = 0$.

The value of one unit of stock s at time $t = 1$ is risky and determined by the random variable \tilde{p}_1^s . The stockholder also receives dividends at $t = 1$, which are not risky. Though in reality future dividend payments are obviously uncertain, this assumption is needed to keep the model mathematically tractable. However, the development of dividend payments of stocks is in fact less volatile than the development of stocks' market values (see, for example, Lintner, 1956). The stock price at $t = 0$ reflects investors' expectations concerning stocks' market value D^s at $t = 1$ as well as dividend payments and is given by $p_0(\tilde{p}_1^s + D^s)$.

Without loss of generality we assume the price of the riskless asset at $t = 0$ to be one per unit. The resulting (pretax) risk-free interest rate is denoted by r_f .

In the Tax CAPM by Brennan (1970), there are investor-specific taxation rates τ_i^C for capital gains, τ_i^D for dividend payments, and τ_i^0 for interest payments. All investors $i = 1, \dots, I$ face a budget restriction as a result of their individual endowments and want to maximize their preference function Φ_i which only depends on the expected overall rate of return on their portfolio from $t = 0$ to $t = 1$ after taxation and on the corresponding portfolio return variance. Thus, an investor's decision problem can be written in the following way:

$$\begin{aligned} \max_{X_i^0, \dots, X_i^s} \quad & \Phi_i \left[X_i^0 \cdot \left(1 + (1 - \tau_i^0) \cdot r_f \right) \right. \\ & + \sum_{s=1}^S X_i^s \cdot \left[(1 - \tau_i^C) \cdot E \left[\tilde{p}_1^s \right] + \tau_i^C \cdot p_0 \left(\tilde{p}_1^s + D^s \right) + (1 - \tau_i^D) \cdot D^s \right], \\ & \left. (1 - \tau_i^C)^2 \sum_{s=1}^S \sum_{q=1}^S X_i^s \cdot Cov \left[\tilde{p}_1^s, \tilde{p}_1^q \right] \cdot X_i^q \right], \quad (9.1) \\ \text{s.t.} \quad & \sum_{s=1}^S X_i^s \cdot p_0 \left(\tilde{p}_1^s + D^s \right) + X_i^0 = \sum_{s=1}^S \bar{X}_i^s \cdot p_0 \left(\tilde{p}_1^s + D^s \right) + \bar{X}_i^0. \end{aligned}$$

In capital market equilibrium, the following conditions must hold: (1) All investors maximize their preference value according to (9.1). (2) Market supply is equal to market demand.

Brennan's (1970) basic model shows the characteristics of a capital market equilibrium, when market prices are influenced by investors' personal tax burden. Actually, that model derives stock returns expected in equilibrium in a CAPM world *before taxation*, where investors are exposed to different taxation rates for capital gains, dividends, and interest payments. However, concerning stock returns expected in equilibrium *after taxation*, which we are interested in, the model by Brennan (1970) faces the following problem: In order to calculate expected returns after taxation, investor-specific information with respect to individual preference functions and tax rates as well as initial endowments is needed. As a consequence, we have information and aggregation problems that render a practical application of Brennan's (1970) original Tax CAPM quite difficult.

Jonas *et al.* (2004) showed that expected returns *after taxation* can also be derived in a capital market model where investors' decisions are influenced by taxation, if all investors in Brennan's (1970) Tax CAPM are confronted with the same ("typical") taxation rates (capital gains 0%, dividends 17.5%, and interest payments 35%). Under this assumption, the two-fund separation theorem originally derived by Tobin (1958) for portfolio selection problems without taxation is in effect despite taxation. This means that all investors want to realize the same optimal stock portfolio, which in equilibrium must be of the same monetary structure as the market portfolio. The market portfolio is defined as the total supply of all risky securities on the capital market under consideration.

Because of the validity of the two-fund separation, it is possible to derive a capital market equilibrium in which expected stock returns *after taxation* are not depending on investor-specific issues such as individual preference functions and endowments. To be more precise, the after-tax expected return of security s can be expressed by the following equation:

$$c^s + (1 - \tau^D) \cdot d^s = \underbrace{(1 - \tau^0) \cdot r_f}_{\text{Riskless rate after taxation}} + \underbrace{(c^M + (1 - \tau^D) \cdot d^M - (1 - \tau^0) \cdot r_f)}_{\text{Market risk premium after taxation}} \cdot \beta^s, \quad (9.2)$$

where c^s is the return investors expect from capital gains of stock s and d^s is the certain (pretax) rate of return due to dividend payments. Furthermore, c^M is the expected return on the market portfolio from capital gains and d^M is the corresponding (pretax) dividend rate. τ^D reflects the “typical” taxation rate for earnings from dividend payments and τ^0 the respective taxation rate for interest earnings. Note that capital gains face no tax burden. On the left-hand side of formula (9.2) it can be seen that the expected after-tax return from a stock s in market equilibrium has two components: the expected return due to capital gains and the return from dividend payments, which are reduced by the “typical” taxation rate. The economic background reflected by the right-hand side of equation (9.2) is analogous to the valuation formula resulting from the standard CAPM: Equilibrium-expected, after-tax returns of stocks are given by the sum of the (after-tax) return of the riskless security and the market risk premium after taxation weighted with a stock-specific parameter β^s . This “beta” parameter is defined as the covariance between the return \tilde{r}^M of the market portfolio M (capital gains and dividends) before personal taxes and the return \tilde{r}^s of stock s (capital gains and dividends) before personal taxes divided by the variance of \tilde{r}^M . It is identical to the regression coefficient of a linear regression of the return of security s before personal taxes on the return of the market-portfolio M before personal taxes and can therefore easily be determined empirically. The parameter β^s describes how sensitive the expected return of a stock reacts to changes in the expected aggregate return on the market portfolio. As is well-known from the discussion of the standard CAPM, only this “systematic” (“beta”) risk is relevant for the determination of equilibrium risk premia, because this part of the overall risk of an uncertain payoff cannot be diversified away by market participants.

Obviously, for $\tau^D = \tau^0 = 0$, equation (9.2) reduces to the famous security market line of the standard CAPM. In this context, it is interesting to notice that for $r_f > 0.5 \cdot d^M$, which in reality is typically the case, the after-tax market risk premium is *ceteris paribus* higher than the corresponding pretax risk premium of the standard CAPM. This is due to the fact that—in Germany—earnings from interest payments face a higher tax burden than earnings from dividend payments or capital gains (to be more precise, we have $\tau^D = 0.5 \cdot \tau^0$ in Germany). Therefore, the distribution quota, that is the percentage of gains that are paid out as dividends, becomes relevant for the resulting firm value in the German Tax CAPM, while it is irrelevant in the standard CAPM without taxes. This effect alone

already highlights the necessity of the application of an after-tax valuation formula, as pre- and posttax equity firm values can be identical only by chance.

Certainly, the original CAPM is just a one-period model. But it can also be applied to multiperiod valuation problems, when certain stationarity conditions are met. In particular, Fama (1977) shows that the standard CAPM without taxes is valid in a multiperiod context, if all future one-period risk-free interest rates, all future market prices of risk, and all future one-period costs of capital are already known with certainty at time $t = 0$. Wiese (2006) examines under which conditions the Fama (1977) approach can be applied to the German Tax CAPM as well. However, while for a single-period German Tax CAPM the assumption of deterministic dividend rates seems quite sensible, this does not hold true for a multiperiod context because of uncertain future share prices. Up to now, even in a one-period capital market model there is no easily applicable valuation formula with uncertain dividend rates. As a consequence, additionally to the requirements identified by Fama (1977) capital gains and dividends have to be taxed in the same way in order to justify a multiperiod version of the German Tax CAPM because—with uncertain future share prices—only under this assumption is there no need to distinguish between these two income categories. Uncertain dividend rates then will cause no additional problems. Obviously, the necessity of homogeneous tax rates for capital gains and dividends can be seen as a major theoretical drawback of possible practical applications of the German Tax CAPM for valuation issues in multiperiod settings. Nevertheless, up to now there is a lack of alternatives to avoid this problem. We will return to this issue later on.

9.5 A valuation example: merger valuation of Deutsche Telekom

In fall 2004, the German telecommunication giant Deutsche Telekom and the Internet provider T-Online signed a merger agreement. Deutsche Telekom, which had already been the major shareholder of T-Online, was to buy all the assets of T-Online (a so-called merger by way of absorption). The price for T-Online's assets was paid in Deutsche Telekom shares. Minority shareholders of T-Online who were not involved in the agreement could receive a certain number of Deutsche Telekom shares for their T-Online shares. As a consequence, the values of Deutsche Telekom and T-Online had to be calculated to determine the share exchange ratio.

By the time the valuations were conducted, the “new” IDW S1 stipulating the use of the German Tax CAPM had just been adopted as a draft version. Since draft versions are already binding for current valuations according to IDW rules, the values of Deutsche Telekom and T-Online were determined using the German Tax CAPM to calculate the cost of equity for discounting expected earnings. In the following, the valuation of Deutsche Telekom in accordance to IDW S1 using an after-tax calculus is briefly discussed.

Table 9.1 below shows the derivation of the discounted earnings value of Deutsche Telekom as of 01/01/2005, according to the Joint Merger Report (2005)

Table 9.1 Discounted earnings value of Deutsche Telekom as of 01/01/2005

Deutsche Telekom	Medium-term planning			Long-term planning							Sustainable
	2005 € m	2006 € m	2007 € m	2008 € m	2009 € m	2010 € m	2011 € m	2012 € m	2013 € m	2014 € m	2015 et sqq. € m
Net income	4,859	8,019	7,857	6,630	7,182	8,068	8,954	9,913	10,863	11,501	11,209
Retention (not directly attributable to shareholders)	2,266	4,849	4,074	0	0	0	0	0	0	0	949
Value impact of retention	0	0	0	2,556	2,860	3,389	3,955	4,838	5,361	5,723	4,656
Value impact of distribution	2,593	3,170	3,784	4,074	4,322	4,679	4,999	5,075	5,503	5,777	5,605
<i>Distribution quota</i>	53.37%	39.53%	48.15%	61.45%	60.18%	57.99%	55.83%	51.20%	50.65%	50.23%	50.00%
Typified income tax on distribution	-454	-555	-662	-713	-756	-819	-875	-888	-963	-1,011	-981
Net earnings received	2,139	2,615	3,121	5,917	6,425	7,249	8,079	9,025	9,900	10,490	9,280
Net earnings received	2,139	2,615	3,121	5,917	6,425	7,249	8,079	9,025	9,900	10,490	9,280
Present value as of 12/31	124,011	131,895	139,662	144,967	150,163	154,681	158,781	162,057	164,642	166,708	
Capitalization subtotal	126,151	134,510	142,783	150,884	156,588	161,930	166,861	171,082	174,542	177,198	9,280
Discount rate	8.55%	8.47%	8.26%	8.04%	8.02%	7.84%	7.87%	7.75%	7.70%	7.63%	5.57%
Present value factor applicable to the year	0.9212	0.9220	0.9237	0.9256	0.9258	0.9273	0.9270	0.9281	0.9285	0.9291	17.9648
Applicable present value as of 01/01	116,212	124,011	131,895	139,662	144,967	150,163	154,681	158,781	162,057	164,642	166,708
Net earnings value as of 01/01/2005	116,212										

Source: Joint Merger Report (2005), prepared by the Boards of Management of Deutsche Telekom AG, Bonn, T-Online International AG, Darmstadt.

of Deutsche Telekom and T-Online. As a starting point, the first line of figures presents the expected (planned) values of the net income for the medium-term and the long-term planning (years from 2005 to 2014) as well as the expected sustainable income from 2015 on (for the period after the year 2015, it was assumed that net income would increase by a constant growth rate of 2% per year).

Whereas net income is already reduced by corporate taxes, the personal income tax of shareholders also has to be taken into account when determining the discounted earnings value. According to the half-income system, there are additional personal taxes only on dividends. Because shareholders only have to pay taxes on dividend earnings, the dividend payout ratio is a relevant parameter in IDW S1 valuations. In the valuation of Deutsche Telekom, a distribution quota of 50% of the consolidated net income, after taking the impact of deferred taxes into account, was chosen for the years 2006 onward. The resulting distribution quotas for the net income *before* the consideration of deferred taxes are exhibited in Table 9.1. For 2005, it was assumed that dividends payable would be the same as the amount expected to be payable in 2004. A reference for the distribution quota of the years 2015 onward was given by those firms comparable to Deutsche Telekom, whose distribution quota is 50%. The amounts transferred to retained earnings in the years 2005 to 2007 were assumed to be used for the repayment of debt. Retained earnings from 2008 to 2014 were, for simplification purposes, treated as net income received by the shareholders via a “direct transfer.” As mentioned earlier, this is appropriate when we assume that the (after-tax) net present value of investments financed with retained earnings is zero. From 2015 onward, a certain part of retained earnings has to be utilized in order to finance the growth of the company’s assets and will thus not be paid out to shareholders at any future point in time. This part of retained earnings is calculated as 2% (that is, the assumed growth rate of earnings) of the book value of the company’s equity at the beginning of the year 2015 (not presented here). Only the remaining part of retained earnings, €4,656,000,000 in 2015, is “free cash flow” that can be used for *additional* investments with an assumed net present value (after taxes) of zero. The sum of the lines “Retentions (not directly attributable to shareholders)” and “Value impact of retention” give the total amount of retained earnings for any year under consideration. While the former part of the overall retention is used for debt repayments and for growth financing, only the latter part can be directly attributed to shareholders.

The total value of net earnings received by the shareholders via retained earnings and dividends (less typified shareholder income tax) were capitalized by period-specific discount rates representing costs of equity. To account for the specific tax treatment of earnings, these costs of equity were calculated on the basis of the German Tax CAPM according to Table 9.2. From equation (9.2) in the previous section, it is known that after-tax cost of equity expected by investors in capital market equilibrium is given by the sum of the risk-free interest rate after typified shareholder’s income tax and a premium for the “systematic” risk as measured by a company’s beta.

Table 9.2 Discount rates reflecting after-tax costs of equity to capitalize expected earnings of Deutsche Telekom

Deutsche Telekom	Medium-term planning			Long-term planning							Sustainable
	2005 € m	2006 € m	2007 € m	2008 € m	2009 € m	2010 € m	2011 € m	2012 € m	2013 € m	2014 € m	2015 et sqq. € m
Risk-free interest rate before	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Typified income tax	-1.75%	-1.75%	-1.75%	-1.75%	-1.75%	-1.75%	-1.75%	-1.75%	-1.75%	-1.75%	-1.75%
Risk-free interest rate after typified income tax	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%
Market-risk premium after typified income tax	5.50%	5.50%	5.50%	5.50%	5.50%	5.50%	5.50%	5.50%	5.50%	5.50%	5.50%
Unlevered beta	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72
<i>Applicable present value as of 01/01</i>	116,212	124,011	131,895	139,662	144,967	150,163	154,681	158,781	162,057	164,642	166,708
<i>Interest-bearing debt</i>	51,573	47,746	42,250	36,439	34,827	31,292	29,742	25,355	23,092	20,910	19,681
Debt-equity ratio	0.44	0.39	0.32	0.26	0.24	0.21	0.19	0.16	0.14	0.13	0.12
Levered beta	0.96	0.95	0.91	0.87	0.87	0.83	0.84	0.82	0.81	0.80	0.78
Risk markup	5.30%	5.22%	5.01%	4.79%	4.77%	4.59%	4.62%	4.50%	4.45%	4.38%	4.32%
Growth rate	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	2.00%
Capitalization interest rate	8.55%	8.47%	8.26%	8.04%	8.02%	7.84%	7.87%	7.75%	7.70%	7.63%	5.57%

Source: Joint Merger Report (2005), prepared by the Boards of Management of Deutsche Telekom AG, Bonn, T-Online International AG, Darmstadt.

In Germany, government bonds come closest to meeting the risk-free requirement of the German Tax CAPM. Since companies are valued over an infinite time period, the return of a corresponding government bond with an infinite duration would in principle serve as a reference for the risk-free interest rate. As no perpetual government bonds exist, existing government bonds are used for the derivation of a yield curve of risk-free interest rates by a nonlinear regression (Jonas *et al.*, 2005; Svensson, 1994).

As was illustrated in the previous section, the risk premium calculated on the basis of the German Tax CAPM consists of the (after-tax) market risk premium and the beta factor (before personal taxes). It is common practice in Germany to calculate the market risk premium by using historical averages. Based on capital market studies (see, for example, Stehle, 2004; see also Dimson *et al.*, 2003, for an overview of risk premia across countries), the expert committee for valuation of the IDW currently recommends taking a value for the market risk premium before taxes between 4 and 5%. Because of the different taxation rates for earnings from capital gains, dividends, and interest payments, the after-tax market risk premium is slightly higher: 5 to 6%. Therefore, for the valuation of Deutsche Telekom, a risk premium of 5.5% and thus just in the middle of that range was chosen. Taking into account that the beta factor as a risk indicator for shareholders can be divided into a (quite stable) component that only reflects the operating risk of a firm (so-called unlevered beta or asset beta) and a (more varying) component that reflects additional risk induced by leveraging, period-specific beta factors adjusted by capital structure effects were used to determine the cost of equity for Deutsche Telekom. Thus, at first, the unlevered beta β^{tot} of Deutsche Telekom was computed on the basis of historical values with adjustments to neutralize capital structure effects. Second, period-specific relevered beta factors β^{equ} were calculated allowing for the corresponding debt-to-equity ratio of Deutsche Telekom according to the earnings and balance sheet planning.

A typical procedure here is to utilize the following relationship (in accordance to β^s of the German Tax CAPM: before personal taxes, but after corporate taxes) between the uncertain rate of return \tilde{r}^{equ} on firm equity on the one side and the uncertain rate of return $=\tilde{r}^{tot}$ on total firm value and \tilde{r}^{debt} on the market value of its debt on the other side:

$$\begin{aligned}\tilde{r}^{equ} &= \tilde{r}^{tot} + (\tilde{r}^{tot} - \tilde{r}^{debt}) \cdot \delta \\ \Leftrightarrow \beta^{equ} &= \beta^{tot} + (\beta^{tot} - \beta^{debt}) \cdot \delta,\end{aligned}\tag{9.3}$$

with δ as the company's debt-to-equity ratio. According to the security market line of the standard CAPM, the parameter β^{debt} ($:= Cov(\tilde{r}^{debt}, \tilde{r}^M)/Var(\tilde{r}^M)$) can be calculated as the quotient $(E(\tilde{r}^{debt}) - r_f)/(E(\tilde{r}^M) - r_f)$. While the market risk premium $(E(\tilde{r}^M) - r_f)$ can be assumed to be constant 4.5% p.a. over time, the risk premium on the company's debt can be determined in a separate calculation for each year (not presented here). For practical methods to compute the risk premium of a company's debt, see Aders and Wagner (2004) and the liter-

ature cited therein. For the figures of 2005 in Table 9.2, for example, a debt risk premium of about 0.75% would *ceteris paribus* yield a levered beta of about 0.96 as offered by Table 9.2.

Finally, the discount rate for the years 2015 onward was reduced by the expected sustainable growth rate of earnings of 2% to compute the corresponding valuation effects, because the present value at time $t = 0$ of an infinite stream of cash flows $cf, (1+g) \cdot cf, (1+g)^2 \cdot cf, \dots$ from $t = 1$ on is just $cf/(r-g)$ for a given (constant) discount rate r .

After calculating the discounted value of Deutsche Telekom as of 01/01/2005 some additional adjustments have to be made. First, in the discounted earnings value, some special items are not taken into consideration. Table 9.3 gives an overview of these special items. Second, in order to compute the share exchange ratio, the value of Deutsche Telekom equity (as well as that of T-Online) has to be determined as of 04/29/2005 (the date of the relevant shareholders' meeting of T-Online where the merger had to be approved). To this end, the Deutsche Telekom equity value as of 04/29/2005 (day #119 out of 365 in 2005) has to be computed on the basis of the equity value at the beginning of the respective year, assuming an annual growth rate according to the after-tax cost of equity of that year. This implies a period-specific growth rate of $0.0855 \cdot 119/365 = 2.788\%$.

According to IDW S1, some assets of the firm to be valued and some special value effects have to be taken into account in a separate calculation. In particular, these special items comprise assets that are not required to conduct the business of the firm like, for example, real estate not used for purposes "closely" related to the value creation process of the firm as well as "pure" financial holdings or other financial assets. Such assets are called "participating interests." Additionally, in comparison to the pension provisions of Deutsche

Table 9.3 Derivation of Deutsche telekom equity value comprising special items and discounting effects resulting from the date of the merger

Derivation of Deutsche Telekom equity value	€ m
Net earnings value	116,212
Special items	
Participating interests	1,295
Underfunding pensions	-309
Special items T-Online	176
Stock option plans	-57
U.S. Stock option plans	484
Convertible bond	-2,252
Equity value as of 01/01/2005	115,550
Growth rate until 04/29/2005	0.027882
Equity Value as of 04/29/2005	118,771

Source: Joint Merger Report (2005), prepared by the Boards of Management of Deutsche Telekom AG, Bonn, T-Online International AG, Darmstadt.

Telekom as computed actuarially, the pension provision as of 12/31/2004, established in accordance with the International Financial Reporting Standards (IFRS), discloses an underfunding in the provision which, under IFRS, cannot be reflected in the balance sheet. The corresponding value effect is determined in a separate calculation, too. Moreover, special items resulting from Deutsche Telekom's holding of T-Online shares before the merger are valued separately. Finally, stock option programs for the management of Deutsche Telekom, and U.S. stock option plans resulting from acquisition activities of Deutsche Telekom in the United States, as well as a mandatory convertible bond issued on 02/24/2003, must be taken into consideration. After these adjustments, the value of Deutsche Telekom equity is simply divided by 4,195,183,321, the number of shares outstanding, which gives €28.31 as the "fair" value per share of Deutsche Telekom.

To account for the corresponding exchange ratio, this value has to be compared with that of T-Online. In order to derive the T-Online value per share a similar calculation was conducted. This leads to an equity value of €17,998,000,000, which—with a total number of 1,223,890,578 outstanding shares—gives a value per share of €14.71 and thus an exchange ratio of 0.5196 shares of Deutsche Telekom for each share of T-Online.

9.6 Consequences for German takeover practice

The valuation standard IDW S1 is designed for expert opinions needed to calculate cash compensations, exchange ratios, or guaranteed dividends. These are transactions regulated by law, because a majority can force minority shareholders to quit the company against their wishes. Nevertheless, the scope of IDW S1 goes far beyond these cases. In particular, IDW S1 has also great importance for unregulated takeover bids, although in Germany there is no obligation that a takeover bid has to reflect the fundamental ("intrinsic") value of a company. However, a bidder typically aims at gaining control over the target firm. Therefore, a takeover bid to get a qualified majority of 75% is usually only the first step in a chronology of events that leads to the conclusion of a control agreement and, subsequently (if a majority of 95% is met), the enforcement of a squeeze-out. A shareholder who has to decide whether he should accept a takeover bid or not will not compare that bid with the former or present stock market price. In contrast, he will be wondering whether the bid is higher than the cash compensation he can expect when a control agreement is established or a squeeze-out is eventually enforced. Thus, a takeover bid is only accepted if most of the shareholders expect no higher future compensation; that is no higher IDW S1 valuation. The bidder as well as shareholders of the target thus "execute IDW S1-valuations," may it be for their own decision making or in order to convince the other side to accept the bid or to raise it. These considerations highlight once more the great practical relevance of theoretical foundations of valuation issues.

9.7 Conclusion

As we could see in Section 4, the German Tax CAPM derives a simple equation to determine after-tax cost of equity. The example presented in Section 9.4 shows that, in addition, the after-tax calculus based on the German Tax CAPM can be implemented in practical valuations quite easily. Section 9.6 emphasizes the great relevance of such applications of the German Tax CAPM.

Nevertheless, from a theoretical point of view, the multiperiod application of the German Tax CAPM is burdened with even more problems than the corresponding utilization of the simple multiperiod version of the standard CAPM without taxes. This is due to the fact that there is no straightforward way to derive a valuation formula for the case of uncertain dividend rates as long as dividends and capital gains are taxed in different ways. In a multiperiod context, dividend rates are necessarily uncertain or future share prices must be deterministic as well. This implies that the German Tax CAPM can be extended to a multiperiod setting on a sound theoretical basis only in the rather uninteresting case of identical tax rates for dividends and capital gains. A reconciliation of the theoretical requirements of the multiperiod German Tax CAPM version and the practical necessities in firm valuation thus seems to be a major issue for future research activities.

References

- Aders, C. and Wagner, M. (2004). Kapitalkosten in der bewertungspraxis: Zu hoch für die “New Economy” und zu niedrig für die “Old Economy.” *Finanzbetrieb* 6, 30–42.
- Brealey, S. C., Myers, R. A., and Allen, F. (2006). “Principles of Corporate Finance.” (8th ed.). Boston, McGraw-Hill/Irwin.
- Brennan, M. J. (1970). Taxes, market valuation and corporate financial policy. *National Tax Journal* 23, 417–427.
- Dimson, E., Marsh, P., and Staunton, M. (2003). “Global Evidence on the Equity Risk Premium.” London Business School, working paper.
- Fama, E. (1977). Risk-adjusted discount rates and capital budgeting under uncertainty. *Journal of Financial Economics* 5, 3–24.
- Joint Merger Report (2005). Prepared by the Boards of Management of Deutsche Telekom AG, Bonn, T-Online International AG, Darmstadt.
- Jonas, M., Löffler, A., and Wiese, J. (2004). Das CAPM mit deutscher einkommensteuer. *Die Wirtschaftsprüfung* 57, 898–906.
- Jonas, M., Wieland-Blöse, H., and Schiffarth, S. (2005). Basiszinssatz in der unternehmensbewertung. *Finanzbetrieb* 7, 647–653.
- Lintner, J. (1956). The distribution of incomes of corporations among dividends, retained earnings and taxes. *American Economic Review* 46, 97–113.
- Lintner, J. (1965). The valuation of risk assets and the selection of risky investments in stock portfolios and capital budgets. *Review of Economics and Statistics* 47, 587–615.

- Mossin, J. (1966). Equilibrium in a capital asset market. *Econometrica* 34, 768–783.
- Sharpe, W. F. (1964). Capital asset prices: A theory of market equilibrium under conditions of risk. *Journal of Finance* 19, 425–442.
- Shleifer, A. and Vishny, R. (1997). A survey of corporate governance. *Journal of Finance* 53, 737–783.
- Stehle, R. (2004). Die festlegung der risikoprämie von aktien im rahmen der schätzung des wertes von börsennotierten kapitalgesellschaften. *Die Wirtschaftsprüfung* 57, 906–927.
- Svensson, L. E. O. (1994). “Estimating and Interpreting Forward Interest Rates: Sweden 1992–1994.” NBER, working paper No. 4871.
- Tobin, J. (1958). Liquidity preference as behaviour towards risk. *Review of Economic Studies* 25, 65–86.
- Wiese, J. (2006). Das nachsteuer-CAPM im mehrperiodenkontext. *Finanzbetrieb* 8, 242–248.

10 Share buybacks, institutional investors, and corporate control

Paul U. Ali

Abstract

Corporations routinely use buybacks to return excess capital to their shareholders, manage their capital structures, and convey signals to the market about the corporation's financial performance. These are the publicly disclosed motivations for the vast majority of buybacks that occur in the Australian market. This chapter examines how buybacks can be used by Australian corporations to achieve those aims as well as undisclosed objectives such as consolidating management's control of the corporation and creating a deterrent to takeover bids.

10.1 Introduction

Australian corporations, in common with their counterparts in markets such as the United States, routinely make use of share buybacks to channel excess capital to their shareholders, reorganize their capital structures by contracting the corporation's equity base, or provide a boost to a flagging or stagnant share price. However, compared to U.S. corporations, the rate at which Australian corporations have resorted to buybacks can be described as "pedestrian" (Mitchell and Robinson, 1999), with dividends remaining the dominant means by which Australian corporations make cash distributions to their shareholders. Despite the low rate of take-up of buybacks by Australian corporations, buybacks in the Australian market, in line with markets displaying far greater buyback activity, have evolved beyond their original role.

Foremost among these newer uses of buybacks is their employment as a defensive measure against takeovers (Bagnoli, Gordon, and Lipman, 1989; Hunt, 2004). The boost to a target corporation's shares provided by a buyback can make it considerably more expensive to acquire a corporation and erode the feasibility of a hostile takeover bid. Moreover, the removal of potentially hostile or disloyal shareholders from the corporation's share register has the effect of reducing the free float of shares that can potentially be sold into a hostile takeover bid, and by so doing consolidates control of the corporation by interests supportive of the incumbent management who have not participated in the buyback.

The role of buybacks in the market for corporate control has received widespread attention following the recent contest for control of Arcelor Steel, the

world's second-largest steelmaker. The buyback proposed here by the target corporation, if it had been implemented, would have concentrated control in the hands of a single "white knight" shareholder, and would have made it much more expensive, if not completely impracticable, for the bidder, Mittal Steel, the largest steelmaker in the world, to wrest control away from the white knight. The relevant facts are fairly straightforward (Arcelor, 2006a, 2006b). In early 2006, Mittal Steel made an unsolicited takeover bid for Arcelor to which Arcelor responded by rejecting the bid, announcing plans to buy back approximately 22% of its shares at a substantial premium to their market price and also the price being offered by Mittal Steel for the shares, and entering into a merger agreement with SeverStal, the thirteenth-largest steelmaker in the world. This agreement provided for the owner of SeverStal, Mr. Alexy Mordashov, to acquire approximately 32% of Arcelor in exchange for the steel manufacturing and coal and iron mining assets of SeverStal. Had the buyback of shares been implemented, Mr. Mordashov's shareholding in Arcelor would have risen to approximately 38% (on the basis of his nonparticipation in the buyback), further strengthening his control of Arcelor. The proposed buyback was abandoned in the face of strong opposition from Arcelor's institutional shareholders and, midway through 2006, Arcelor accepted a revised bid by Mittal Steel and terminated its merger agreement with SeverStal.

Buybacks have similarly been implemented by Australian corporations as a response to takeover bids or, more commonly, to deter hostile bids. By and large, however, Australian corporations have been discreet (one might even say secretive) when employing buybacks in that role. Typically, a buyback whose chief purpose appears to be the consolidation of control of the corporation will shelter behind a publicly announced purpose such as returning excess capital to shareholders or improving the financial performance or capital structure of the corporation. Disguising the actual purpose of a buyback is also true of the latest innovation in buybacks in the Australian market. Increasingly, the largest Australian corporations have begun to implement buybacks to stream dividends to their institutional shareholders, with the ostensible purpose of these buybacks being the return of excess capital to shareholders.

This chapter discusses the use of buybacks to deter takeovers and effectively stream dividends in the context of the various mechanisms available in Australia for the buyback of shares. These mechanisms include Dutch auctions, which are increasingly being favored by the largest Australian corporations. The chapter will also discuss the motivations of Australian management in engaging in buybacks.

10.2 Buyback mechanisms

10.2.1 *Types of buybacks*

Buybacks are classified in the Australian market according to the following factors: the shareholders to whom offers to buy shares are made by the corporation;

the class of shares; the subject of the buyback; whether the buyback is conducted on- or off-market; and whether the buyback concerns a uniform proportion of each shareholder's shares (Corporations Act 2001: §§9 and 257B).

Three main types of buybacks can be identified using the above factors. An "equal access buyback" is a buyback that applies only to ordinary shares (or common stock) and involves a corporation making offers to all of its ordinary shareholders to buy, off-market, the same, fixed proportion of each shareholder's shares (Corporations Act 2001: §257B(2)). An "on-market buyback" involves a corporation making offers for its shares on-market (Corporations Act 2001: §257B(6)). Other buybacks fall into a residual category of "selective buybacks" where, for example, a corporation makes offers off-market to buy ordinary shares to only some of its shareholders or makes offers off-market to buy preference shares (or preferred stock) (Corporations Act 2001: §9).¹ Of these three types of buybacks, on-market buybacks are the most common while equal access buybacks are the least common (Brown and Efthim, 2004; Mitchell, Dharmawan, and Clarke, 2001; Mitchell and Robinson, 1999).

Distinguishing between the different types of buybacks is a necessary endeavor due to their disparate treatment under Australian law, with selective buybacks having to satisfy far more onerous authorization requirements.

10.2.2 Implementation of buybacks

Selective buybacks can be implemented in one of three ways (see Table 10.1)—fixed-price tender offer, Dutch auction or self-tender, and targeted buyback—while equal access buybacks are effected via fixed-price tender offers and on-market buybacks are effected in the open market (Grullon and Ikenberry, 2000; Lamba and Ramsay, 2000):

- Fixed-Price Tender Offer – The corporation offers to buy a fixed proportion of shares from all or some of its shareholders at a single, fixed price within a specified period.
- Dutch Auction – Like fixed-price tender offers, Dutch auctions result in the corporation buying back its shares at a fixed price. The price in a Dutch auction is, however, set using pricing information solicited by the corporation from its shareholders. The corporation states the aggregate number of shares it wishes to buy from its

Table 10.1 Mechanisms for implementing buybacks

Mechanism	Equal access buyback	On-market buyback	Selective buyback
Fixed-price tender offer	✓	✗	✓
Dutch auction	✗	✗	✓
Open market	✗	✓	✗
Targeted buyback	✗	✗	✓

¹ There are two other types of buybacks in the Australian market, namely "minimum holding buybacks" and "employee share scheme buybacks," but they are rarely encountered.

shareholders and invites the shareholders to offer to sell their shares within a fixed price range. On the basis of the offers received from its shareholders, the corporation calculates the minimum price necessary to purchase the requisite number of shares. Shares are acquired at that price from all shareholders who offered to sell at that price or lower.

- Open Market – The corporation stands in the market and buys its shares at the prevailing market price in the ordinary course of trading on the stock exchange.
- Targeted Buyback – The corporation privately negotiates the purchase of shares from a single shareholder or small group of shareholders.

The purchase of shares in the open market remains, by far, the most common means by which buybacks are implemented in the Australian market but, increasingly, Australian corporations have begun to resort to the Dutch auction mechanism when buying back their shares (Brown and Efthim, 2004). For example, a snapshot of buyback activity during January to July 2006 reveals that eight of the twenty largest Australian corporations undertook buybacks during that period and three of those corporations bought back their shares via a Dutch auction.

The regulatory framework for buybacks in the Australian market affords corporations there a considerable flexibility in buying back their shares. Corporations intending to implement a buyback must satisfy a creditor protection requirement and also a shareholder authorization requirement (Corporations Act 2001: §257A). First, the buyback must not negatively impact the corporation's ability to meet the claims of its creditors. Secondly, depending upon the volume of shares to be acquired or whether the buyback is a selective buyback, the buyback must be authorized by the corporation's shareholders.

For equal access and on-market buybacks, shareholder authorization is only required where the volume of shares being bought back exceeds a specific threshold. Corporations may freely engage in such buybacks without having to obtain the consent of their shareholders where no more than 10% of the corporation's ordinary shares (as well as hybrid and other equity securities that carry voting rights in excess of the minimum voting rights enjoyed by preference shareholders) are bought back during a 12-month period (Corporations Act 2001: §257B(1)). Where that threshold is exceeded, the buyback must be authorized by a simple majority of the corporation's shareholders who are entitled to vote on the buyback and who are present and vote at the general meeting to consider the buyback (Corporations Act 2001: §257C(1)).

Selective reductions face much stiffer authorization requirements. All selective buybacks, regardless of the volume of shares being acquired, must be authorized at a general meeting of the corporation's shareholders by either a special majority of the shareholders entitled to vote on the buyback or all the ordinary shareholders (Corporations Act 2001: §257D(1)). This constitutes a significant disincentive for corporations to engage in selective buybacks. Obtaining the unanimous approval of the ordinary shareholders in a general meeting is unlikely to be feasible for any corporation with a large and diverse body of shareholders (Austin and Ramsay, 2005). The special majority in

question is also considerably more difficult to achieve than the simple majority required in the case of equal access and on-market buybacks. To achieve this special majority, the buyback must be authorized by at least 75% of the votes cast by shareholders entitled to vote on the buy-back, with none of the shareholders whose shares are to be purchased or their associates being permitted to vote in favor of the buyback. The shareholders who are the subject of a selective buyback not only have the freedom to accept or reject the buyback offer when made, but they can also vote against the buyback and may make it considerably more difficult for the special majority to be reached.

Furthermore, in contrast to the United States and the United Kingdom, the buyback of shares in the Australian market automatically results in the cancellation of the shares and the extinguishment of all rights attaching to the shares (Corporations Act 2001: §257H). It is thus not possible, in the Australian market, to create treasury shares that may later be resold by the corporation or to finance executive stock option exercises (Kahle, 2002; Morse, 2004).

10.2.3 *Disguising the objectives of buybacks*

Notwithstanding the different ways in which a buyback can be implemented, the vast majority of the buybacks that are undertaken by Australian corporations superficially share common objectives. Improving the financial performance of the corporation or its capital structure and returning excess capital to shareholders are among the reasons most often proffered for a corporation's implementation of a buyback, regardless of whether the buyback is an equal access buyback, on-market buyback, or a selective buyback effected via a Dutch auction (see Section 10.3.1). It seems likely that, in some instances, the stated purpose of the buyback may obscure or disguise the actual objective that the corporation is seeking to achieve in offering to buy shares from its own shareholders. Two prime examples are the use of buybacks as a takeover deterrent and to stream dividends in the Australian market.

10.3 Myth and reality of buybacks

10.3.1 *Motivations for buybacks*

Despite the low incidence of buybacks in the Australian market relative to the United States market, the results of two surveys of the motivations of Australian management in engaging in buybacks are consistent with the main reasons put forward in the U.S. literature to explain the prevalence of buybacks in the U.S. market (Mitchell, Dharmawan, and Clarke, 2001; Mitchell and Robinson, 1999). Five main reasons for buybacks have been identified in the U.S. literature: (1) information signaling; (2) free cash flows; (3) capital market allocation; (4) dividend substitution; and (5) capital structure adjustments (Baker, Powell, and Veit, 2003; Grullon and Ikenberry, 2000).

A brief elaboration of these reasons follows:

- Information signaling – A buyback is a signal to the market that the corporation's management views the corporation's shares as undervalued. The content of the signal is either new information conveyed by management to the market relating to future increases in the corporation's earnings and cash flows or that management disagrees with how the market is pricing existing publicly available information about the corporation.
- Free cash flows – By distributing cash to its shareholders either in the form of dividends or via buybacks, a corporation is able to reduce the agency costs to its shareholders of the corporation's management overinvesting excess capital or otherwise allocating excess capital to activities that are not in the best interests of shareholders.
- Capital market allocation – The distribution of excess capital via buybacks to shareholders that they are free to reinvest enables capital to be reallocated from corporations with limited or diminishing investment opportunities to corporations with more promising prospects.
- Dividend substitution – Buybacks are a tax-motivated substitute for dividends. Corporations can confer tax benefits on their shareholders by distributing cash to them in the form of capital via a buyback rather than in the form of income via dividends.
- Capital structure adjustments – Buybacks enable corporations to optimize their debt–equity mix by shrinking their equity base while increasing debt through the distribution of excess cash to their shareholders or through financing the purchase of their shares.

To varying degrees, each of the above reasons has been advanced as the basis for engaging in buybacks by Australian corporations.

Information signaling—whether to boost the share price by signaling management's view that the corporation's shares are undervalued or by conveying new information in the form of improved key indicators such as earnings per share—appears to be the principal motivation for Australian corporations engaging in on-market buybacks, the most common type of buyback in the Australian market (Mitchell, Dharmawan, and Clarke, 2001; Mitchell and Robinson, 1999). Australian corporations also employ on-market buybacks to optimize their capital structure, but this is treated as secondary to the information signaling role of buybacks (Mitchell, Dharmawan, and Clarke, 2001). Similarly, information signaling is an important driver for the two other main types of buybacks in the Australian market, equal access buybacks and selective buybacks (Mitchell, Dharmawan, and Clarke, 2001; Mitchell and Robinson, 1999). Equal access buybacks are also motivated by the return of excess capital to shareholders and dividend substitution (Mitchell, Dharmawan, and Clarke, 2001; Mitchell and Robinson, 1999) while selective buybacks are also motivated by capital structure adjustments (Mitchell and Robinson, 1999).

The principal motivation for Australian corporations implementing selective buybacks is the removal of specific shareholders from the corporation's share register, rather than information signaling or capital structure adjustments, although the latter are important considerations (Mitchell, Dharmawan, and

Clarke, 2001; Mitchell and Robinson, 1999). This is not to say that selective buybacks have been overtly employed by Australian corporations to consolidate control of the corporation or defend against a takeover bid. They have, in a small number of cases, been used to remove minority shareholders who are critical of management, but they have also been used to serve the interests of major shareholders by providing an alternative exit mechanism to an on-market sale or by paying a premium above market price for those shareholders' shares (Mitchell, Dharmawan, and Clarke, 2001).

There have been two important developments in the practice of buybacks in the Australian market since the two surveys were carried out. First, Australian corporations now typically frame plans to buy back shares, whether via an on-market buyback or otherwise, in terms of returning excess capital to their shareholders, although information signaling and capital structure adjustments remain key motivating factors. This is borne out by the author's review of selected buyback documentation released to the stock exchange by Australian corporations from 2002 to 2006. In the vast majority of cases reviewed, the buyback has been explicitly justified on the basis of returning excess capital to the corporation's shareholders. While the documentation indicates that information signaling (as manifested in statements relating to the share price or financial performance of the corporation) and capital structure adjustments are also relevant to management's decision to implement a buyback, those factors have usually been used to substantiate the case for returning excess capital to the shareholders.

Second, selective buybacks were usually implemented via fixed-price tender offers to specific shareholders during the period to which the above surveys relate. In contrast, the largest Australian corporations are now increasingly employing Dutch auctions—which involve all of the shareholders of a corporation being invited to tender their shares—when implementing selective buybacks. Again, for Dutch auctions reviewed by the author, the stated motivation has been the return of excess capital.

What these developments mean is that, when an Australian corporation now engages in buybacks, the publicly disclosed rationale for the buyback will typically comprise the return of excess capital to shareholders and supporting statements indicating the desire of management to improve the financial performance or capital structure of the corporation.

10.3.2 Buybacks and the market for corporate control

Control of a corporation can be consolidated through a buyback directed at specific shareholders, as the acceptance by those shareholders of the buyback offer and their consequent removal from the corporation's share register enlarges shareholding in the corporation among shareholders outside the group to whom offers have been made. Targeted buybacks and fixed-price tender offers are an obvious means by which this objective of consolidation of control can be achieved.

In the U.S. market, for instance, the targeted buyback of shares at a significant premium to their prevailing market price has emerged as a common means of dealing with greenmailers (Klein and Rosenfeld, 1988). Targeted buybacks, whether to effect the exit of greenmailers or other unwanted shareholders, are, however, rarely encountered in the Australian market. Nor are fixed-price tender offers frequently encountered in the Australian market—selective buybacks, in general, constitute only a minority of all buybacks in the Australian market, and Australian corporations have begun to demonstrate a marked preference for Dutch auctions over fixed-price tender offers when implementing selective buybacks. In addition, the two surveys cited in Section 10.3.1 did not disclose the consolidation of control as a major motivating factor for selective buybacks in the Australian market.

The low incidence of selective buybacks in the Australian market is not, however, surprising when the regulatory framework for buybacks is taken into account. As detailed in Section 10.2.2, selective buybacks face significantly more onerous shareholder authorization requirements compared to on-market and equal access buybacks, such that a corporation is unlikely to choose a selective buyback when the same objective can be achieved by another, more lightly regulated form of buyback.² This raises the possibility of management pursuing consolidation of control or defending against or deterring a takeover bid by using some other form of buyback masquerading, for instance, as a return of excess capital.

In an equal access buyback, offers are made to all of the shareholders in the corporation while, in an on-market buyback, the corporation stands in the open market and buys shares as they become available from those shareholders prepared to dispose of shares during the period of the buyback. These two types of buybacks, which are subject to less onerous shareholder authorization requirements, can readily be used to consolidate control simply by the majority or controlling shareholders not accepting the offers made by the corporation to buy shares. This is equally true of selective buybacks implemented via a Dutch auction (see Section 10.3.3). In that case, the majority or controlling shareholders can increase their proportionate ownership of the corporation by declining the invitation extended to all shareholders by the corporation to tender their shares.

These buybacks, which are directed at the entire body of shareholders, can also prove an effective deterrent to a hostile takeover bid. They reduce the number of shares available to the bidder, as well as making it more expensive to acquire the target corporation. The shareholders who exit the corporation via a buyback are the shareholders who are willing to sell their shares at the price offered by the corporation, meaning that those shareholders (other than the majority or controlling shareholders) who have not participated have a higher

² Consolidation of control can be achieved by means other than buybacks without resorting to a formal takeover bid, including a selective reduction of capital and the exercise of constitutional expropriation powers. However, the latter carries more legal risk than buybacks as an Australian court may view the coercive removal of shareholders as constituting oppression.

“reservation price” and will require a higher price from a bidder to part with their shares (Bagwell, 1991; Weston, Mitchell, and Mulherin, 2004).

The capacity of on-market, equal access, and selective buybacks effected via Dutch auctions to facilitate the consolidation of control of a corporation or provide a deterrent to a takeover bid is obscured by the fact that the expressed rationale for their use is invariably a purpose other than the consolidation of control. This is not, however, conclusive. In fact, what little evidence there is suggests that such buybacks can be—and are being—used to consolidate control. That evidence is in the form of the legal proceedings relating to a proposed on-market buyback of shares by Village Roadshow Limited (VRL), an Australian entertainment company.

In late 2004, VRL went to its shareholders to seek approval for an on-market buyback of up to 20% of its ordinary shares. This proposal was justified by capital structure adjustment objectives, yet if the buyback was fully implemented and Village Roadshow Corporation Limited (VRC), the controlling shareholder of the VRL, did not participate in the buyback, VRC’s shareholding in VRL would rise from approximately 53% to approximately 68%. The documentation provided to the shareholders of VRL stated that VRC had not decided whether it would participate in the buyback, but a reasonable shareholder might have inferred that VRC would not participate since it had not participated in an on-market buyback for 10% of VRL’s shares that had been implemented by VRL earlier in the same year.

Following an application by one of the minority shareholders of VRL, the Australian Takeovers Panel obtained from VRC an undertaking that it would not vote its shares in favor of the buyback, notwithstanding the absence of any formal regulatory constraint on voting by a controlling shareholder in relation to a buyback other than a selective buyback (Takeovers Panel, 2004). The panel considered that it would be unacceptable to permit VRC, as a controlling shareholder, to vote to authorize a transaction that would result in VRC’s control over VRL increasing (the simple majority required to authorize an on-market buyback could be obtained by VRC voting its own shares in favor of the buyback, even if every other shareholder of VRL voted against it).

The panel put forward two grounds for denying VRC the ability to vote its shares in support of the buyback: (1) a vote on whether a buyback or any other transaction with control implications should proceed should be decided only by those shareholders who would not gain any special benefits from the change in control that the transaction might bring about; and (2) the effect of the buyback might be to increase the control over VRL enjoyed by VRC to the detriment of the other shareholders of VRC and thus, regarding the issue of whether the buyback should proceed, there was no community of interest between VRC and the other shareholders of VRL. VRC was free to vote against the buyback proposal, but that was not likely to occur.

This decision has implications not just for buybacks but for all other change of control transactions where the vote of a majority or controlling shareholder may be decisive in determining whether or not the transaction proceeds. In any case,

this decision is significant for two reasons. First, it provides rare evidence of the use by Australian corporations of buybacks (other than targeted buybacks or selective buybacks implemented via fixed-price tender offers) to consolidate control of the corporation behind the “smokescreen” of a stated intention to return excess capital to shareholders or improve the financial performance or capital structure of the corporation. Second, the use of an on-market buyback (or an equal access buyback or selective effected via a Dutch auction) to consolidate control raises the possibility that the panel will intervene to preclude the issue of the buyback being decided by not just a majority shareholder like VRC but also any major shareholder whose influence over the corporation is likely to be enhanced by the buyback (in particular, shareholders who could move to a majority position via the buyback).

10.3.3 Dutch auctions and dividend streaming

Buybacks implemented via a Dutch auction are considered a more effective deterrent to takeovers than those implemented via fixed-price tender offers. Fixed-price tenders are a more effective means of information signaling than Dutch auctions (Persons, 1994). In a fixed-price tender offer, the corporation states the price at which it is willing to buy back shares, whereas in a Dutch auction the price at which shares are bought back depends upon the prices tendered by shareholders within the price range set by the corporation. A Dutch auction forces shareholders to decide the lowest price at which they are prepared to sell their shares; even though shareholders would naturally prefer to sell their shares at the highest possible price, they bear the risk that their shares will not be sold if they submit too high a price (Hunt, 2004). Thus, not only are the premiums paid in a Dutch auction likely to be smaller than for fixed-price tender offers—and hence the stronger information signaling of the latter—but it is also more likely that the corporation will be able to buy sufficient shares from its shareholders to deter potential bidders and concentrate ownership of the corporation in the hands of interests supportive of the incumbent management.

The use of buybacks, whether by way of a Dutch auction or otherwise, to consolidate control and deter potential bidders by making it more expensive for them to persuade the remaining shareholders to sell their shares is predicated upon the corporation buying its own shares at a premium. That, however, has not been the case with the Dutch auctions recently implemented by Australian corporations (Brown and Efthim, 2004). The shareholders of those corporations have been invited to tender their shares at varying discounts to the market price and, in each instance, the corporation has been able to implement the buyback fully by purchasing up to the maximum number of shares sought at a significant discount to the market price. For example, regarding the three of the twenty largest Australian corporations that effected buybacks via a Dutch auction during 2006, the buybacks were fully implemented at discounts of 13%, 14%, and 14% to market price (where the price ranges set by the corporations were discounts of 5–14%, 8–14%, and 8–14% respectively). In

addition, in each of these cases, the buyback was justified, not as a takeover deterrent, which is a key motivating factor for the buyback of shares via a Dutch auction at a premium to the market price, but on the basis that management had decided to return excess capital to the shareholders.

The return of excess capital (assuming that the actual motivation of management coincides with the stated purpose of the buyback) to shareholders via soliciting prices from shareholders at discounts to the price they would have received on-market from a third party is only explicable when the tax treatment of the buyback price under Australian law is taken into account. The final buyback price paid by the corporation comprises two components, a deemed dividend component and a substantially smaller capital component.³

This dividend component carries a taxation credit for the tax paid by the corporation on its income, which shareholders who are resident in Australia for taxation purposes can offset against their own taxable income and thus reduce their liability to pay Australian income tax. The value of this credit to a shareholder depends upon the income tax rate to which that shareholder is subject, and the lower the income tax that a shareholder must pay on the dividend component, the greater the value of the tax credit to the shareholder. (Individual shareholders in Australia are taxed progressively on their income, with a top marginal tax rate of 46.5%, whereas institutional investors are subject to a flat corporate tax rate of 30% or a flat tax rate of 15% for pension funds.) In general, for buybacks of this type that have been implemented in Australia, the incorporation of a tax credit in the buyback price has meant that for institutional investors, in particular pension funds, selling their shares back to the corporation at a discount to the market price is a superior option to selling their shares on-market at the market price (as the tax credit when aggregated with the after-tax return from the buyback is in excess of the after-tax return from an on-market sale).⁴ In contrast, an individual investor in the highest marginal tax rate is likely to find that participating in the buyback is an inferior option to an on-market sale.

Accordingly, institutional investors are likely to participate disproportionately in these buybacks, with the result that the bulk of the tax credits incorporated in the dividend component of the buyback price will be distributed to those investors. This is not dividend streaming as that term is conventionally understood, in the sense of a corporation differentially streaming tax credits to its shareholders (a practice that would clearly contravene the prohibition against dividend streaming under Australian tax law). The end result, nonetheless, is substantially the same. The buyback price has been structured in such

³ This treatment of the buyback price has been approved by ASIC and the Australian Taxation Office. The dividend component is deemed by ASIC not to constitute a dividend for corporate law purposes and is therefore not subject to the requirement in the Corporations Act 2001 that dividends must only be paid out of profits (ASIC, 2005).

⁴ The return to a shareholder may be further enhanced by the capital loss accrued on the sale of the shares given the relatively small capital component and the buyback price being at a discount to the market price.

a way that the lower the income tax rate to which a shareholder is subject the more attractive participation in the buyback is, leading to the tax credits being effectively streamed to those shareholders (Brown and Eftim, 2004).

In effect, by structuring the buyback price in this manner, the corporation is able to discriminate between its institutional shareholders, on the one hand, and its individual shareholders on the other, on the basis of their differing tax status (Mitchell and Robinson, 1999). That Australian corporations are engaging in discriminatory buybacks for the benefit of their institutional shareholders is unsurprising in light of the studies of buyback activity in the United States and United Kingdom, which have shown that corporations, when structuring buybacks, are sensitive to the tax position of their institutional investors (Lie and Lie, 1999; Rau and Vermaelen, 2002).

The Australian securities regulator (Australian Securities and Investments Commission (ASIC)) disagrees. It has stated that these buybacks are not discriminatory, as the greater the tax benefits to some shareholders the greater the possibility that the corporation will be able to buy back shares at a discount to the market price (ASIC, 2005). The point that the corporation has structured the buyback price to benefit certain investors is subsumed within the assumption on the part of ASIC that a buyback employing such a structure will benefit the remaining shareholders in the corporation. This may not be as tenable a position as ASIC seems to think given the difficulty with establishing that buybacks, in general, lead to improved financial performance (Grullon and Michaely, 2004).

In addition, there may be significant control implications due to the disproportionate participation of institutional investors in these buybacks (which the regulator does not appear to have taken into account). While the buybacks are nominally open to all shareholders, the buyback price has been structured in a manner that ensures that the buyback is attractive mainly to institutional shareholders. The implementation of such a buyback is likely to lead to a reduction in institutional shareholdings in the corporation and a concomitant increase in retail shareholdings—and the typically dispersed nature of retail shareholdings is likely to mean that the ultimate result of the buyback is a further entrenchment of management. Hence, a buyback that is superficially designed to return excess capital to all shareholders but is attractive only to a subset of the corporation's more influential shareholders may, for management, be a useful means of eroding the influence of those shareholders.

Finally, Australian corporations have been able to implement buybacks of shares off-market via Dutch auctions far more easily compared to selective buybacks employing other mechanisms. The buyback of shares via a Dutch auction is necessarily a selective buyback as the buyback is being conducted off-market and the corporation is not offering to purchase a uniform proportion of each shareholder's shares. The disincentive normally created by the shareholder authorization requirements that apply to selective buybacks (see Section 10.2.2) is not, however, an issue here. In each of the cases in which an Australian corporation has used a Dutch auction to effect a buyback of shares at a discount to the market price, ASIC has allowed the corporation to conduct the buyback

as if it were an equal access buyback (and subject to less onerous shareholder authorization requirements). This is presumably on the basis that Dutch auctions, like equal access buybacks, provide all shareholders with an equal opportunity to participate in the buyback and sell their shares back to the corporation at a uniform price. Therefore, for Australian corporations seeking to remove specific, influential shareholders from their share registers, the Dutch auctions discussed in this section are likely to be a more feasible option than a targeted buyback or a fixed-price tender offer.

10.4 Conclusion

Buybacks can be used to remove specific shareholders from a corporation's share register and consolidate management's control of the corporation. However, the buybacks that are, on their face, most suited to this task—targeted buybacks and fixed-price tender offers directed toward specific shareholders—are not commonly encountered in the Australian market. Instead, buyback activity in the Australian market is dominated by on-market buybacks and, to a lesser extent, Dutch auctions implemented for the publicly stated purposes of returning excess capital to shareholders and improving the financial performance or capital structure of the corporation.

It is likely that at least some of these on-market buybacks, as well as Dutch auctions, are being used for purposes other than their advertised purposes, that is to consolidate control of the corporation by management and their supporters. One rare piece of direct evidence comes in the form of the legal proceedings relating to the proposed on-market buyback by a major Australian entertainment company of up to 20% of its shares. Although the buyback was nominally open to all shareholders, it was likely that the controlling shareholder would not have sold any of its shares into the buyback offer and the implementation of the buyback would have resulted in that shareholder holding an overwhelming majority of the shares in the corporation.

The Dutch auctions, which are increasingly being employed by the largest Australian corporations, differ in one key aspect from those encountered in other markets such as the United States. The price ranges within which shareholders have been invited to tender their shares in an Australian Dutch auction and the final price of the buyback have been set at significant discounts to the prevailing market price for the shares in the corporation. At first glance, this seems to be inexplicable. However, a closer analysis establishes that the buyback price has been structured to enable Australian corporations to effectively stream dividends (and the tax credits incorporated in those dividends) to their most influential shareholders, namely institutional investors and, in particular, pension funds.

As these Dutch auction buybacks continue to concentrate shareholding in the hands of those shareholders who do not participate in the buyback, there are important implications for the control of the corporation as well. The buyback

price can be viewed as a “sweetener” (in much the same way as the targeted buybacks and fixed-price tender offers directed to specific shareholders entice their exit by offering them a premium to the market price) to reduce the shareholding of those shareholders most able to intervene in the management of the corporation, thereby further entrenching the power of management.

Acknowledgments

This research was supported by a grant from the Australian Research Council (DP0557673). The author is also indebted to Dr. Chander Shekhar, Faculty of Economics and Commerce, University of Melbourne, for his comments on the recent practice of Australian corporations buying back their shares at a discount to market price.

References

- Arcelor (2006a). “Report of the Board of Directors on the Self Tender Offer.” Luxembourg.
- Arcelor (2006b). “Response Prospectus Presented by Arcelor in Response to the Information Memorandum by Mittal Steel.” Luxembourg.
- Austin, R. P. and Ramsay, I. M. (2005). “Ford’s Principles of Corporations Law.” (12th ed.). Butterworths, Sydney.
- Australian Securities and Investments Commission (2005). “ASIC’s Position on Off-Market Share Buy-Backs Incorporating Fully Franked Dividends.” 05-44, March 3.
- Bagnoli, M., Gordon, R., and Lipman, B. L. (1989). Stock repurchase as a takeover defense. *Review of Financial Studies* 2, 423–443.
- Bagwell, L. S. (1991). Share repurchase and takeover deterrence. *Rand Journal of Economics* 22, 72–88.
- Baker, H. K., Powell, G. E., and Veit, E. T. (2003). Why companies use open-market repurchases: A managerial perspective. *Quarterly Review of Economics and Finance* 43, 483–504.
- Brown, C. and Efthim, K. (2004). “The Effect of Taxation on Equal Access Buy-Backs.” Melbourne University, working paper.
- Corporations Act 2001. Canberra: Federal Parliament of Australia.
- Grullon, G. and Ikenberry, D. L. (2000). What do we know about stock repurchases? *Journal of Applied Corporate Finance* 13, 31–51.
- Grullon, G. and Michaely, R. (2004). The information content of share repurchase programs. *Journal of Finance* 59, 651–680.
- Hunt, P. A. (2004). “Structuring Mergers & Acquisitions.” (2nd ed.). Aspen Publishers, New York.
- Kahle, K. M. (2002). When a buyback isn’t a buyback: Open market repurchases and employee options. *Journal of Financial Economics* 63, 235–261.

- Klein, A. and Rosenfeld, J. (1988). Targeted share repurchases and top management changes. *Journal of Financial Economics* 20, 492–506.
- Lamba, A. S. and Ramsay, I. M. (2000). “Share Buy-Backs: An Empirical Investigation.” Melbourne University, research paper.
- Lie, E. and Lie, H. J. (1999). The role of personal taxes in corporate decisions: An empirical analysis of share repurchases and dividends. *Journal of Financial and Quantitative Analysis* 34, 533–552.
- Mitchell, J. D., Dharmawan, G. V., and Clarke, A. W. (2001). Managements’ views on share buy-backs: An Australian survey. *Accounting and Finance* 41, 93–129.
- Mitchell, J. D. and Robinson, P. (1999). Motivations of Australian listed companies effecting share buy-backs. *Abacus* 35, 91–119.
- Morse, G. (2004). The introduction of treasury shares into English law and practice. *Journal of Business Law* 303–331.
- Persons, J. C. (1994). Signaling and takeover deterrence: Dutch auctions versus fixed price tender offers. *Journal of Finance* 49, 1373–1402.
- Rau, P. R. and Vermaelen, T. (2002). Regulation, taxes, and share repurchases in the United Kingdom. *Journal of Business* 75, 245–282.
- Takeovers Panel (2004). “In the Matter of Village Roadshow Limited 03.” ATP 22, October 15.
- Weston, J. F., Mitchell, M. L., and Mulherin, J. H. (2004). “Takeovers, Restructuring, and Corporate Governance.” (4th ed.). Pearson Prentice Hall, Upper Saddle River, NJ.

This page intentionally left blank

Index

A

- Accountability, 72
- Accounting standards index, 54
 - alternative test, 62, 63t, 64
 - regression in, 59, 60t
 - summary statistics, 56t
 - test results, 57t, 58
- ACLs. *See* Antitrust and competition laws
- Acquirer wealth effects, during acquisition
 - announcements (Dutch firms), 10, 131–161
 - abnormal returns (percentage) in, 143, 144t, 145
 - development of, 145f
 - distribution of, 146f
 - regression analysis of, 149–151, 149t–150t
 - stated acquisition motives and, 146t
 - yearly, 147, 147t, 148, 148f
 - acquirer characteristics in, 141, 142t, 143
 - financial, 142t
 - governance, 142t
 - deal characteristics in, 141, 142t–143t, 143
 - Euro wealth transfers in, 143, 144t, 145
 - yearly, 147, 147t, 148, 148f
 - explanation of, 149–151
 - research design of, 138–141
 - dataset in, 138–139
 - market reaction model in, 140
 - variables definition in, 139–140
 - results in, 141–158
 - sample description in, 141–148
 - wealth-destructing deals in, 134, 151–158
 - likelihood of, 156, 157t–158t, 158
 - model of, 140–141
 - non-wealth destructing deals *v.*, 151, 152t–154t, 155–156
- Acquirer wealth effects, during acquisition
 - announcements (U.S. firms), 132–133
 - agency problems in, 133
 - shareholder returns in
 - negative, 132
 - positive, 132
 - studies on, 132, 133
 - takeover defenses and, 132–133
- Acquirers, cross-border mergers and, 43, 45, 48, 62, 64, 65
- Acquisitions. *See also acquisitions under specific countries*; Mergers and acquisitions
 - of domestic firms, 28t–29t
 - by region and year, 30t, 31t
 - cross-border, 31t
 - domestic, 30t
- Acxiom, 121
- ADRs. *See* American Depositary Receipts
- Agency, 45, 55, 67t
 - acquirer wealth effects (U.S.) and, 133
 - across industries, 67t
 - regression in, 59, 60t
 - summary statistics, 56t
 - theory, 106
 - disciplinary mergers and, 106
- Agricultural market, 80
- AIM Market, 213, 221
- AktG*. *See* *AktienGesetz*
- AktienGesetz (AktG)*, 214
- Allocative efficiency, 171n
- Altadis, 72
- American Depositary Receipts (ADRs), 75
- AMF. *See* Autorité des Marchés Financiers
- Antidirector rights, 54
 - index, 87–89, 88t
- Antitakeover measures
 - board neutrality and, 5–6, 8t
 - hostile takeovers and, 103, 115, 117–118, 127
- Antitrust and competition laws (ACLs), 16
 - countries', enactment dates of, 19t–20t, 22t
 - mergers and, 36
- Arcelor Steel, 191, 260
- Argentina
 - acquisitions of domestic firms in, 28t
 - cross-border M&As in, 51t
 - MLs in, 19t, 22t, 23t–24t
 - effect of, 33t
- Artesyn Technologies, 123t
- ASIC. *See* Australian Securities and Investments Commission
- Astra, 80
- Attestation d'équité*, 237
- Australia. *See also* Buybacks
 - acquisitions of domestic firms in, 28t
 - cross-border M&As in, 51t
 - MLs in, 19t, 22t, 23t–24t

- Australian Securities and Investments Commission (ASIC), 270, 271
- Austria
- acquisitions of domestic firms in, 28t
 - cross-border M&As in, 51t
 - MLs in, 19t, 22t, 23t–24t
 - squeeze-out right in, 209
- Autorité des Marchés Financiers (AMF), 228, 232t, 234
- Aventis, 71–101. *See also* Hoechst; Rhône-Poulenc
- antidirector rights index and, 87–89, 88t
 - board members (proposed) for, 85, 86t
 - executive committee, 86t
 - management, 86t
 - supervisory, 86t
 - board of directors, 91–93, 94t–95t
 - characteristics and results in, 73–75
 - corporate governance structure, 9, 71, 91–96, 97t–99t, 100
 - Hoechst *v.* Rhône-Poulenc *v.*, 71, 91–96, 97t–99t
 - formation of, 80–85
 - investor benefits in, 84
 - merger history and exchange timeline in, 81t–82t
 - preliminary steps in, 80–81, 83
 - strategic rationale for, 83
 - synergies in, 84
 - synergy value in, 84
 - management board, 93
 - mission of, 84
 - pharmaceuticals and agricultural products, 84–85
 - protective provisions of, 71, 73, 74–75, 89, 94t, 100
 - Sanofi-Synthelabo and, 100
 - shareholders' meetings at, 96, 97t–99t
 - structure of, 84–85
 - supervisory board, 91–93, 94t–95t
 - two-tier system and, 94t
- B**
- BALO. *See Bulletin des Annonces Légales Obligatoires*
- Bank development, 54
- alternative test, 62, 63t, 64
 - regression in, 59, 60t
 - summary statistics, 56t
 - test results, 57t, 58
- Belgian Banking, Finance, and Insurance Commission. *See* CBFA
- Belgian National Bank, 218
- Belgium
- acquisitions of domestic firms in, 28t
 - Constitution of, 210, 211
 - cross-border M&As in, 51t
 - MLs in, 19t, 22t, 23t–24t
 - effect of, 33t
 - ownership in listed companies of, 195t
 - sellout right and, 210, 217t
 - squeeze-out right in, 209–211
 - company types in, 218, 219t–220t, 221, 240
 - conditions for, 228, 229t, 231t–232t, 233
 - financial instruments in, 222
 - timing of, 239
 - triggering event for, 216, 217t
 - triggering threshold in, 224t, 226, 227, 228
 - valuation standards in, 236
 - Takeover Directive and, 211
- Beverly Enterprises Inc., 121, 122
- Biotechnology, 80
- Blair Corp, 121
- Blasius Standard*, 164
- Blockbuster Video, 121
- Board neutrality, antitakeover measures and, 5–6, 8t
- Board of directors, 89
- Aventis, 91–93, 94t–95t
 - two-tier system for, 90–91
 - unitary system for, 89–90
- Bramelid* case, 206
- Brazil
- acquisitions of domestic firms in, 28t
 - cross-border M&As in, 51t
 - MLs in, 19t, 22t, 23t–24t
- Breakthrough rule, 5, 8t, 165–166, 185, 192
- mandatory bid rule *v.*, 166–167
 - problems with, 166
- Bulletin des Annonces Légales Obligatoires* (BALO), 96, 97t
- Buybacks, 259, 271
- in Australian market, 259–273
 - disguising of objectives and, 12, 259, 260, 263, 267, 268, 271
 - dividend streaming and, 268–272
 - Dutch auctions and, 12, 260, 261, 261t, 262, 263, 265, 266, 267, 268–272
 - fixed-price tender offer and, 261, 261t, 262, 265, 266, 268, 271, 272
 - implementation of, 261–263, 261t
 - important developments in, 265
 - market for corporate control and, 12, 260, 265–268
 - motivations for, 259, 260, 263–265
 - myth/reality of, 263–271
 - open market repurchases and, 261, 262, 262t, 266
 - regulatory framework for, 262–263, 266
 - types of, 261
 - capital market allocation and, 12, 264, 265

- capital structure adjustments and, 12, 264, 265
 - discriminatory, 270
 - dividend substitution and, 264, 265
 - employee share scheme, 261n
 - equal access, 261, 262, 263, 265, 266, 267, 268, 271
 - free cash flows and, 264, 265
 - information signaling and, 12, 259, 264, 265
 - minimum holding, 261n
 - on-market, 12, 261, 262, 263, 264, 265, 266, 267, 268, 269, 271
 - selective, 261, 262, 263, 264, 265, 266, 267, 268, 270
 - targeted, 261, 261t, 262, 266, 268, 271, 272
 - in U.S. market, 263
 - motivations for, 264
- C**
- CalPERS, 72
 - Canada
 - acquisitions of domestic firms in, 28t
 - announced target M&As of, 192t
 - cross-border M&As in, 51t
 - MLs in, 19t, 22t, 23t–24t
 - Capital Asset Pricing Model (CAPM), 244, 247
 - multi-period valuation problems and, 250, 257
 - security market line of, 249, 254
 - Capital market allocation, buybacks and, 12, 264, 265
 - Capital market equilibrium, 248, 249
 - Capital structure adjustments, buybacks and, 12, 264, 265
 - CAPM. *See* Capital Asset Pricing Model
 - CAR. *See* Cumulative abnormal returns
 - CBFA (Banking, Finance, and Insurance Commission), 228, 233
 - Celanese, 75, 76
 - divestiture of, 80, 81
 - Cenveo Inc., 121
 - Cerberus Capital Management, 121
 - Certificates, Dutch firms and, 133, 135, 158
 - Charter amendments, supermajority requirements for, 133
 - Chile
 - acquisitions of domestic firms in, 28t
 - cross-border M&As in, 51t
 - MLs in, 19t, 22t, 23t–24t
 - Chiron Corp., 123t
 - Cicero (2001), 18
 - Circuit City, 121
 - Civil law system, 71
 - CLRB. *See* Company Law Reform Bill
 - Co-determination Act, 90
 - Colombia
 - acquisitions of domestic firms in, 28t
 - cross-border M&As in, 51t
 - MLs in, 19t, 22t, 23t–24t
 - Common law system, 71
 - Communication on Enhancing Corporate Governance in the EU, 163
 - Companies Act
 - British, 212, 213, 227, 234, 237
 - German (*AktG*), 214
 - Companies Code, Article 513, 209, 227
 - Company Law Reform Bill (CLRB), 212
 - Complete contracts, 171
 - one-share one-vote principle and, 171
 - COMPUSTAT, 67t
 - Computer Horizons Corp, 123t
 - Conglomerate mergers, 25
 - Contractual convergence, 44, 71, 72
 - cross-border mergers and, 71, 72–73, 100. *See also* Aventis
 - examples of, 44, 72
 - Control agreements, 243, 244, 245, 256
 - Control blocks, 197, 198, 200, 202, 203, 227
 - Control, of property, 205
 - Control transactions
 - in France, 200, 202t
 - free rider problem and, 196, 197, 198
 - in Germany, 200, 202t, 244–245
 - Control transparency, ownership and, 4–5, 7t
 - Convergence, in corporate governance, 6, 43–44
 - contractual, 44, 71, 72. *See also* Aventis
 - cross-border mergers and, 44, 71, 72–73, 100
 - examples of, 72
 - formal, 44, 71, 72
 - evidence on, 72
 - functional, 44, 71, 72
 - example of, 72
 - limits of, 72
 - worldwide, 43, 44
 - Corporate charter clauses, 94
 - Corporate democracy, 163
 - Corporate governance, 44
 - Aventis's structure of, 71, 91–96, 97t–99t, 100
 - convergence, 6, 43–44. *See also* Aventis
 - Corporate voting, 168
 - economic theory of, 168–169
 - ownership structure and, 168–169
 - Court of Arbitration, 210
 - Creditor protection, 54
 - alternative test, 62, 63t, 64
 - regression in, 59, 60t
 - summary statistics, 56t
 - test results, 57t, 58
 - “Creditor rights,” 54

- Cross-border merger and acquisition activity (model), 8–9, 45–50
 cross-industries and, 49–50
 predictions of, 45
 empirical analysis of, 50–64
 methodology in, 54–57
 equilibrium in
 with cross-border mergers, 48–49
 without cross-border mergers, 46–48
 extension in, 50
 industry analysis in, 58, 59t
 predictions of, 43, 45, 54, 64, 65
 proposition 1 in, 48
 proposition 2 in, 48–49
 illustration of, 65, 65t
 prediction of, 48, 62
 testing of, 57, 58, 62, 63t, 64
 proposition 3 in, 49
 illustration of, 66, 66t
 prediction of, 49–50
 testing of, 58–59, 60t
 results in, 57–62
 statistics summary in, 51t–52t
 countries listed in, 51t–52t
 variables and, 56t
 tests of, 57t
 alternative, 62, 63t, 64
 time series of, 53f
- Cross-border mergers, 16, 25
 acquirers in, 43, 45, 48, 62, 64, 65
 contractual convergence and, 44, 71, 72–73. *See also* Aventis
 examples of, 44, 72
 domestic mergers *v.*, 16
 finance literature and, 45
 frequency of, 25, 27f
 governance motive in, 43–69
 MLs' impact on, 32
 cross-sectional evidence in, 32, 34
 panel regression results in, 34–39
 number of
 by region and year, 31t
 by year, 26f
 targets in, 43, 45, 48, 62, 64, 65
- CTS Corp. v. Dynamics Corp of America*, 117
- Cumulative abnormal returns (CAR), 140
- Czech Republic's Competition Act, 21, 23
- D**
- DaimlerChrysler, 72, 243
- Danone, 211
- Delaware Supreme Court, 117, 164
- Delistings, in Germany, 193, 193t, 243, 244
- Denmark
 acquisitions of domestic firms in, 28t
 cross-border M&As in, 51t
 MLs in, 19t, 22t, 23t–24t
 effect of, 33t
 squeeze-out procedures in, 209
- Deprivation, of property, 205
- Deutsche Telekom, 243, 250
 discount rates reflecting after-tax costs of equity to capitalize expected earnings of, 252, 253t, 254–255
 discounted earnings value of, 250, 251t, 252
 long-term planning and, 251t, 252
 mid-term planning and, 251t, 252
 sustainable, 251t, 252
 equity value of, 255, 255t, 256
 derivation of, 255, 255t, 256
 special items in, 255, 255t
 merger valuation of, 250–256
 T-Online and, 243, 250, 252, 255, 255t, 256
- Disciplinary mergers, 9, 103, 104–105. *See also* Hedge fund shareholder activism
 agency theory and, 106
 conditions for, 105–106
 disappearance of, 112–113
 EMH and, 105–106
 management turnover and, 105, 106–108
 theory of, 105–106
 waves/shocks and, 110–111
 implications in, 111–113
- Disclosure, transparency and, 176–177
 EU, 176–178
- Discounted cash flow model, 246
- Discounted earnings model, 246
 IDW S1 and, 246
- Discriminatory buybacks, 270. *See also* Buybacks
- Disproportionate class of shares, 173
- Distributive efficiency, 171n
- Dividend streaming, Dutch auctions and, 12, 268–272
- Dividend substitution, buybacks and, 264, 265
- Divisions, squeeze-outs *v.*, 203
- Domestic mergers, 16
 cross-border mergers *v.*, 16
 frequency of, 25, 27t
 MLs' impact on, 32
 cross-sectional evidence in, 32, 34
 panel regression results in, 34–39
 number of
 by country and year, 28t–29t
 by region and year, 30t
 by year, 26f
- Dual-class capitalization, 164, 178, 179, 180, 181, 183

- Dutch auctions, 12, 260, 261, 261t, 262, 263, 265, 266, 267, 268–272. *See also* Buybacks
dividend streaming and, 12, 268–272
purpose of, 262
- Dutch Civil Code, 214, 215, 237
- Dutch corporate law, 135
- Dutch firms. *See also* Acquirer wealth effects, during acquisition announcements
certificates and, 133, 135, 158
governance characteristics of, 135–136
leverage and, 134, 136, 137, 139, 142t, 158, 159
preference shares and, 133, 135, 158
priority shares and, 133, 135, 158
structured regime in, 133, 135, 158, 159
takeover defenses of, 131, 132–133, 133, 158–159
- Tobin's Q of, 134, 136, 137, 139, 142t, 152t, 155, 156, 157t, 158
- wealth-destructing deals in, 134, 151–158
likelihood of, 156, 157t–158t, 158
model of, 140–141
non-wealth destructing deals *v.*, 151, 152t–154t, 155–156
- Dutch SER Social and Economic Council, 214
- E**
- Earnings before taxes (EBT), 246
- EBT. *See* Earnings before taxes
- EC. *See* European Commission
- ECHR. *See* European Court on Human Rights
- Economic efficiency, 171
- Ecuador, cross-border M&As in, 51t
- Edgar v. MITE*, 115
- EDW S1, 238
- EEA. *See* European Economic Area
- Effectengids*, 139
- Efficient market hypothesis (EMH), 105
disciplinary mergers and, 105–106
- Egypt, cross-border M&As in, 51t
- Elliott Associates, 124
- EMH. *See* Efficient market hypothesis
- Employee share scheme buybacks, 261n
- Endesa, 191
- Enterprise Chamber, 229t–232t, 234, 235, 237
- Entrenchment, management, 112, 113, 132
- E.ON, 191
- Equal access buybacks, 261, 262, 263, 265, 266, 267, 268, 271. *See also* Buybacks
- Equal treatment of shareholders principle, 4, 7t
- Equity swaps, 182
- Equivalence principles, IDW S1 and, 247
- ESL Partners, 121
- EU. *See* European Union
- Europe, announced target M&As of, 192t
- European Commission (EC), 10, 163
corporate policy of, 163, 183–184
alternatives to, 184–185
- European Convention on Human Rights, 207
first protocol of, 205–207
squeeze-out right and, 205–207
- European Court on Human Rights (ECHR), 205, 206
- European Economic Area (EEA), 212
- European Merger Regulation of 1989, 18, 32
- European Union (EU), 163
differentiated voting rights in, 174t
harmonization efforts of, 11, 183, 191, 208, 215, 227, 228, 240
multiple voting rights in, 169, 170f
one-share one-vote principle in
companies applying, 169, 169f
exceptions to, 169, 170f
ownership in, 173, 174t
U.S. ownership *v.*, 173
shareholder democracy in, 10, 163, 165–167
stock exchange-listed companies in, 218
stock market performance in, 175t
U.S. and, 175t
- Takeover Directive, 164. *See also* Takeover Directive, EU
takeover regulation, 163
one-share one-vote principle and, 10, 163–189
- External dependence, 45, 55, 67t
across industries, 67t
interactive variable for, 59, 61t–62t
summary statistics, 56t
- F**
- Financial sector, 58, 59t
- Finland
acquisitions of domestic firms in, 28t
cross-border M&As in, 51t
MLs in, 19t, 22t, 23t–24t
squeeze-out procedures in, 209
- Fixed-price tender offer, 261, 261t, 262, 265, 266, 268, 271, 272
purpose of, 262
- Footstar, 121
- Foreign listing, 72
- Formal convergence, 44, 71, 72
evidence on, 72
- France
acquisitions of domestic firms in, 28t
announced target M&As of, 192t
control transactions in, 200, 202t
corporate code of, 85

- France (*continued*)
- German corporate code *v.*, 89–91
 - cross-border M&As in, 51t
 - MLs in, 19t, 22t, 23t–24t
 - ownership in listed companies of, 195t
 - squeeze-out/sellout right in, 193, 211–212
 - company types in, 218, 219t–220t, 221, 240
 - conditions for, 228, 229t–232t, 233–234
 - financial instruments in, 222
 - timing of, 239
 - triggering event for, 216, 217t
 - triggering threshold in, 224t–225t, 226, 227, 228
 - valuation standards in, 237
 - Takeover Directive in, 211
 - Frankfurt am Main district court, 235
 - Free cash flows, buybacks and, 264, 265
 - Free rider problem, 173–175
 - control allocations and, 196, 197, 198
 - leverage and, 198
 - Freeze-out. *See* Squeeze-out right
 - French Code Financier & Monétaire, 211
 - Article 237, 211, 212, 217t
 - Article 433-4, 211
 - French Commercial Code, Article L 233-10, 227
 - Functional convergence, 44, 71, 72
 - example of, 72
 - limits of, 72
- G**
- Gaz de France, 191
 - GDP. *See* Gross domestic product
 - GenCorp, 121
 - General Motors, 121
 - General Regulation of the Financial Markets Authority. *See* Règlement Général de l'AMF
 - Genetic engineering, 80
 - German Federal Constitutional Court, 238, 245
 - German Implementing Act, 239
 - German Institute of Certified Public Accountants. *See* IDW
 - German legal Certified Public Accountant (*Wirtschaftsprüfer*), 245
 - German merger practice, 243. *See also* Deutsche Telekom
 - background of, 244–246
 - IDW S1 in, 243
 - relevance/consequences of, 244, 256
 - Tax CAPM in, 247–250
 - Deutsche Telekom and, 250–256
 - German Stock Corporation Act, 227
 - Germany
 - acquisitions of domestic firms in, 28t
 - announced target M&As of, 192t
 - Companies Act in, 214
 - control transactions in, 200, 202t, 244–245
 - corporate code of, 85
 - French corporate code *v.*, 89–91
 - cross-border M&As in, 51t
 - delistings in, 193, 193t, 243, 244
 - minority shareholder protection in, 243
 - MLs in, 19t, 22t, 23t–24t
 - ownership in listed companies of, 195t
 - squeeze-out procedures in, 193, 193t, 214
 - company types in, 218, 219t–220t, 221, 240
 - conditions for, 228, 229t–232t, 235
 - financial instruments in, 222
 - timing of, 239
 - triggering event for, 216, 217t
 - triggering threshold in, 224t, 226, 227, 228
 - valuation standards in, 236, 237–238
 - valuation principles in, 246–247
 - GlaxoSmithKline, 100
 - Globalization, 15
 - in financial markets, 39
 - M&A's increase from, 15
 - Going private transactions
 - definition of, 115
 - incidence of, 116f
 - Golden parachute arrangements, 133
 - Governance index, 133
 - Governance regimes, country
 - cross-border mergers and, 43–69
 - financial determinants of, 54
 - legal determinants of, 54
 - quality of, 54
 - Greece
 - acquisitions of domestic firms in, 29t
 - cross-border M&As in, 51t
 - MLs in, 20t, 22t, 23t–24t
 - effect of, 33t
 - Greenmailers, 266
 - Gross domestic product (GDP), 54
 - Guidant/Boston Scientific, 123t
 - “Guiding Principles,” of 1979, 213
 - Gyrodyne, 121
- G**
- Half-income system, 246
 - Handboek Nederlandse Beursfondsen*, 139
 - Hedge fund shareholder activism, 9–10, 103, 104, 118–126, 127
 - beneficial impact of, 126
 - interventions in mergers through, 122–126, 123t
 - policy implication from, 125–126
 - offers to purchase in, 120–122
 - outcomes of, 119, 119t, 120

- private equity firm interventions *v.*, 119, 120–121
- Hedges, direct/indirect, 182
- Herfindal Index, 36
- Het Financieele Dagblad*, 138, 139
- High Level Group of Company Law Experts (HLGCLE), 165, 202
- squeeze-out right and, 207
- HLGCLE. *See* High Level Group of Company Law Experts
- Hoechst, 71, 75–77. *See also* Aventis
- antidirector rights index and, 87–89, 88t
- corporate governance structure, 85, 87–89
- Rhône-Poulenc *v.* Aventis *v.*, 71, 91–96, 97t–99t
- key personnel, 77t
- name of, 77t
- position of, 77
- role in merger for, 77t
- merger of Rhône-Poulenc and, 80–85
- premerger assets, debt, sales, 76t
- categories for, 76t
- final book value, 1997, for, 76t
- sales by region, 77t
- shareholder meetings at, 96, 97t–99t
- two-tier system of, 94t
- Hollywood Entertainment Inc., 123
- Hong Kong
- acquisitions of domestic firms in, 28t
- cross-border M&As in, 51t
- MLs in, 19t, 22t, 23t–24t
- Horizontal mergers, 25, 26t
- nonhorizontal mergers *v.*, 36, 37t
- Hostile takeovers, 1, 9, 103–129. *See also*
- Hedge fund shareholder activism
- antitakeover regulation and, 103, 115, 117–118, 127
- decline of, 113–118
- high point of, 104, 113
- shareholder democracy and, 165
- Houston Exploration, 121, 122
- I**
- IAS. *See* International Accounting Standards
- IDM-S1 method, 238
- IDW (German Institute of Certified Public Accountants), 238, 243, 245
- IDW Standard No. 1 (IDW S1), 243, 245, 246
- discounted earnings method and, 246
- equivalence principles and, 247
- scope of, 243–244, 256
- IDW-S1. *See* IDW Standard No. 1
- IFC manuals. *See* International Finance Corporation manuals
- IFRS. *See* International Financial Reporting Standards
- IMS Health Inc./VNU, 123t
- Inamed/Medicus, 123t
- Incomplete contracts, 171
- one-share one-vote principle and, 171
- India
- acquisitions of domestic firms in, 28t
- cross-border M&As in, 51t
- MLs in, 19t, 22t, 23t–24t
- Indonesia
- acquisitions of domestic firms in, 28t
- cross-border M&As in, 51t
- MLs in, 19t, 22t, 23t–24t
- INDSTAT-4, 54, 55
- Industry structure, 110
- Industry target ratio, 55
- summary statistics, 56t
- Industry value added, 55
- regression in, 59, 60t
- summary statistics, 56t
- Information signaling, buybacks and, 12, 259, 264, 265
- InfoUSA, 123
- Institut der Wirtschaftsprüfer*. *See* IDW
- Intellisync/Nokia, 123t
- Internal capital markets, 181
- International Accounting Standards (IAS)
- 1.96, 176, 177n
- 24.16, 176, 176n
- International Country Risk Guide, 34
- International Finance Corporation (IFC)
- manuals, 25
- International Financial Reporting Standards (IFRS), 256
- International Services Association (ISSA)
- database, 18
- International Standard Industrial Classification (ISIC) code, 54, 56t, 67t
- Ireland
- acquisitions of domestic firms in, 28t
- cross-border M&As in, 51t
- MLs in, 19t, 22t, 23t–24t
- effect of, 33t
- squeeze-out threshold for, 208
- Takeover Directive in, 208–209
- ISIC code. *See* International Standard Industrial Classification code
- Israel
- acquisitions of domestic firms in, 28t
- cross-border M&As in, 51t
- MLs in, 19t, 22t, 23t–24t
- ISSA database. *See* International Services Association database
- Italy
- acquisitions of domestic firms in, 28t
- cross-border M&As in, 51t
- MLs in, 19t, 22t, 23t–24t
- ownership in listed companies of, 195t
- squeeze-out threshold of, 208

- J**
Jaarboek Nederlandse Ondernemingen, 139
- Japan**
 acquisitions of domestic firms in, 28t
 cross-border M&As in, 51t
 MLs in, 19t, 22t, 23t–24t
- Jordan**, cross-border M&As in, 51t
- Judicial efficiency**, 54
 alternative test, 62, 63t, 64
 regression in, 59, 60t
 summary statistics, 56t
 test results, 57t, 58
- K**
Kenya, cross-border M&As in, 51t
King Pharmaceuticals, 122
- L**
Lawful interference, squeeze-out right and, 206
- Leverage**
 Dutch firms and, 134, 136, 137, 139, 142t, 158, 159
 free rider problem and, 198
- Leveraged buyouts**, 115
- Lexar Media/Micron**, 123t
- Life sciences market, pharmaceutical and**, 80
 Aventis in, 84–85
- Liquid Audio**, 123t
- Liquidity, control and**, 180–181. *See also* Pyramidal holdings
- Log(GNP per Capita)**
 analysis by industry and, 59
 summary statistics, 56t
 test results, 57t, 58
- Logrolling, corporate**, 182, 183
- Luxembourg, Takeover Directive in**, 209
- M**
Malaysia
 acquisitions of domestic firms in, 28t
 cross-border M&As in, 52t
 MLs in, 19t, 22t, 23t–24t
- Management entrenchment. See** Entrenchment, management
- Management turnover**, 105
 disciplinary mergers and, 105, 106–108
- Mandatory bid rule**, 4, 7t, 194, 202
 breakthrough rule *v.*, 166–167
- Manufacturing sector**, 58, 59t
- Marché libre**, 221
- Marckx judgment**, 205
- Market for corporate control**, 131
 Australian buybacks and, 12, 260, 265–268
 Netherlands and, 131, 132, 158
 U.K. and, 138
- Market reaction model**, 140
- M&As. See** Mergers and acquisitions
- MaxWorldWide**, 121, 122
- MCI/Verizon**, 123t
- Merger Law Quality Index**, 21, 23, 23t–24t, 24
 mandatory premerger notification, 21, 23t–24t
 postmerger notification requirements, 21, 23t–24t
 premerger notification requirements, 21, 23t–24t
 proportional penalties in, 21, 23, 23t–24t, 24
- Merger laws (MLs)**, 16. *See also* merger laws for specific countries' countries'
 enactment dates of, 19t–20t, 22t
 first amendment dates in, 19t–20t
 cross-border mergers impacted by, 6, 32
 cross-sectional evidence in, 32, 34
 regression results in, 34–39
 domestic mergers impacted by, 6, 32
 cross-sectional evidence in, 32, 34
 panel regression results in, 34–39
 merger activity impacted by, 15–41
 purpose of, 20–21
 Tobin's Q and, 15
- Merger laws' impact on merger activity**, 15–41
 horizontal *v.* nonhorizontal mergers in, 36, 37t
 main finding in, 16–17, 39
 merger data in, 25–32
 sources for, 18–21
 merger law quality index in, 21, 23, 23t–24t, 24
 panel regression results in, 34–39
 results summary in, 39
 total merger activity in
 by nationality of acquirer, 36, 38–39, 38t
 by nationality of target firm, 34–36, 35t
- “Merger of equals,”** 83
- Mergers. See also** specific mergers
 ACLs and, 36
 determinations of, 32, 34
 German. *See* German merger practice
 squeeze-out *v.*, 203
- Mergers and acquisitions (M&As), 2. See also** cross-border M&As for specific countries; Cross-border merger and acquisition activity (model)
 announced, by nations, 192t
 cross-border, 51t–52t
 cyclical pattern of, 191
 discipline as motivation for, 104–113
 economic literature on, 192

- incentives for, 17
 increase of, 15
 globalization and, 15
 legal literature on, 192
 literature on, 17–18
 predictions in, 17
 notification requirements. *See*
 Notification requirements
 sellout regulation's impact on, 204t
 squeeze-out regulation's impact on,
 204t
 stock market valuation influenced by,
 17–18
 supermajority requirements for, 133
 takeover regulation's impact on, U.S.
 corporate law of, 125
- Mexican Federal Law of Economic
 Competition, 20–21
- Mexico
 acquisitions of domestic firms in, 29t
 cross-border M&As in, 52t
 MLs in, 19t, 22t, 23t–24t
 effect of, 33t
- Minimum holding buybacks, 261n
- Minority shareholder protection
 Germany and, 243
 sellout regulation's impact on, 204t
 squeeze-out regulation's impact on,
 204t
 takeover regulation's impact on, 7t–8t
- Mirant/NRG Energy, 123t
- Mittal Steel, 191, 260
- MLs. *See* Merger laws
- Molson/Coors, 123t
- MONY/AXA, 123t
- Moran v. Household International*, 117
- MSC Software, 121
- Multi-period valuation problems, CAPM
 and, 250
- Multiple voting rights, EU and, 169,
 170f
- Mylan Laboratories, 121, 122, 123t, 126
- N**
- Natural Resources sector, 58, 59t
- Netherlands. *See also* Acquirer wealth effects,
 during acquisition announcements
 acquisition market within, 131–161
 acquisitions of domestic firms in,
 29t
 auctions in, 260, 261, 261t, 262, 263,
 265, 266, 267, 268. *See also*
 Buybacks
 dividend streaming and, 268–272
 cross-border M&As in, 52t
 firms of. *See* Dutch firms
 market for corporate control in, 131,
 132, 158
 MLs in, 19t, 22t, 23t–24t
 effect of, 33t
 squeeze-out/sellout right in, 214–215
 company types in, 218, 219t–220t,
 221, 240
 conditions for, 228, 229t–232t, 234–235
 financial instruments in, 222
 timing of, 239
 triggering event for, 216, 217t
 triggering threshold in, 224t, 226, 227,
 228
 valuation standards in, 237
- Takeout Directive in, 214, 215
- New Zealand
 acquisitions of domestic firms in, 29t
 cross-border M&As in, 52t
 MLs in, 19t, 22t, 23t–24t
- Nigeria, cross-border M&As in, 52t
- Nonhorizontal mergers, 25
 horizontal mergers *v.*, 36, 37t
- Norway
 acquisitions of domestic firms in,
 29t
 cross-border M&As in, 52t
 MLs in, 19t, 22t, 23t–24t
 effect of, 33t
- Notification requirements
 postmerger, 21, 23t–24t
 premerger, 21, 23t–24t
 mandatory, 21, 23t–24t
 proportional penalties for lack of, 21,
 23, 23t–24t, 24
- Numico, 194
- O**
- OFEX, 213
- Offre publique de retrait*, 233
- OLS regression. *See* Ordinary least squares
 regression
- One-share one-vote principle, 5, 8t
 complete contracts and, 171
 decomposition of, 10, 163, 182–183,
 184
 EU takeover regulation and, 10,
 163–189
 incomplete contracts and, 171
 optimality of, 164, 169–183
 pyramidal holdings and, 10, 163, 167,
 173, 174t, 175, 180–181
 shareholder welfare and, 169
 takeovers and, 178–180
 transaction costs and, 172
- On-market buybacks, 12, 261, 262, 263,
 264, 265, 266, 267, 268, 269, 271.
See also Buybacks
- Open market repurchases, 261, 261t, 262,
 266
 purpose of, 262
- Openness
 analysis by industry and, 59t
 summary statistics, 56t
 test results, 57t, 58

- Opportunistic managerial behavior, 1
takeover regulation for, 196
- Ordinary least squares (OLS) regression, 140
- Ownership
- Belgian listed companies and, 195t
 - British listed companies and, 195t
 - cascaes, 173, 175
 - concentrated, 172–176, 195, 204t
 - one-share one-vote principle and, 172–176
 - control transparency and, 4–5, 7t
 - corporate voting and, 168–169
 - dispersed, 195, 204t
 - economic theory of, 168
 - EU, 173, 174t
 - French listed companies and, 195t
 - German listed companies and, 195t
 - Italian listed companies and, 195t
 - sellout regulation's impact on, 204t
 - squeeze-out regulation's impact on, 204t
- P**
- Pakistan
- acquisitions of domestic firms in, 29t
 - cross-border M&As in, 52t
 - MLs in, 19t, 22t, 23t–24t
- Pareto criterion, 178, 178n
- Parmalat, 177
- Pepsico, 211
- Perry Corporation, 124
- Perry, Richard C., 122
- Peru
- acquisitions of domestic firms in, 29t
 - cross-border M&As in, 52t
 - MLs in, 19t, 22t, 23t–24t
- Pfizer, 100
- Pharmaceutical, and life sciences market, 80
- Aventis in, 84–85
- Pharmacia, 80
- Pharmacoepia/EOS Biotechnology, 123t
- Philippines
- acquisitions of domestic firms in, 29t
 - cross-border M&As in, 52t
 - MLs in, 19t, 22t, 23t–24t
- Poison pills, 6, 103, 104, 133
- description of, 117
- Portugal
- acquisitions of domestic firms in, 29t
 - cross-border M&As in, 52t
 - MLs in, 20t, 22t, 23t–24t
 - squeeze-out procedures in, 209
- Preference shares, Dutch firms and, 133, 135, 158
- PRG-Schultz, 121
- Priority shares, Dutch firms and, 133, 135, 158
- Private equity firms, 104
- hedge fund activism *v.* interventions of, 119, 120–121
- Productive efficiency, 171n
- Property rights, 168. *See also* Ownership
- control of, 205
 - deprivation of, 205
 - interference with, 205
 - squeeze-out right and protection of, 205–207
- Proportionality test, squeeze-out right and, 206, 207
- Providian Financial/Washington Mutual, 123t
- Public buyout offer, 233
- Public interest, squeeze-out right *v.*, 206, 207
- Pyramidal holdings, 180
- one-share one-vote principle and, 10, 163, 167, 173, 174t, 175, 180–181
- R**
- REACH database (Review and Analysis of Companies in Holland by Bureau Van Dijk), 138, 139
- Reciprocity, 191, 192
- Redemption procedure, Spain and, 209, 228
- Règlement Général de l'AMF, 211, 212, 237
- Reparation Law of April 13, 1995, 209
- Review and Analysis of Companies in Holland. *See* REACH database
- Rhône-Poulenc, 71, 77–79. *See also* Aventis
- antidirector rights index and, 87–89, 88t
 - corporate governance structure, 85, 87–89
 - Hoechst *v.* Aventis *v.*, 71, 91–96, 97t–99t
 - key personnel, 79t
 - name of, 79t
 - position of, 79t
 - role in merger for, 79t
 - merger of Hoechst and, 80–85
 - premerger assets, debt, and sales, 78t
 - categories for, 78t
 - net book value, 1998, for, 78t
 - sales by region, 79t
 - shareholder meetings at, 96, 97t–99t
 - unitary system of, 94t
- Risk equivalence, 247
- Royal Decree on Takeovers, 209, 210
- “Rule of law,” 54
- S**
- S & P 500 Gross Domestic Product, 118, 118f
- Sanofi, 80

- Sanofi-Synthelabo, 100
Aventis and, 100
- Seagram, 72
- Sears Holdings, 121
- Securities Acquisition and Takeover Act.
See Wertpapiererwerbs-und Übernahmengesetz
- Securities Data Corporation, 25
- Security market line, of CAPM, 249, 254
- Seita, 72
- Selective buybacks, 261, 262, 263, 264, 265, 266, 267, 268, 270. *See also* Buybacks
- Sellout right, 7t, 11, 191, 192
anecdotal evidence for, 193
arguments for, 198–199
Belgium and, 210, 217t
consequences of, 203, 204t
M&A activity and, 204t
minority shareholder protection and, 204t
ownership structure and, 204t
contractual agreements and, 194
France and, 193, 211–212
Netherlands and, 214–215
rationale for, 193–204
economic, 203
squeeze-out right *v.*
company type in, 218–222
conditions and procedure in, 228–235
financial instruments in, 222–223
legal issues in, 215–239
legal perspective on, 207–239
selected European countries in, 209–215
timing of procedures in, 239
transaction type in, 215–217
triggering threshold in, 223–228
valuation in, 235–239
- Takeover Directive and, 208. *See also* Takeover Directive, EU
U.K. and, 212–213
- SER Merger Code, 214
- Services sector, 58, 59t
- SeverStal, 260
- Share buybacks. *See* Buybacks
- Shareholder democracy, 164–165, 184. *See also* One-share one-vote principle
in EU, 10, 163, 165–167, 184
hostile takeovers and, 165
- Shareholder meetings
Aventis, 96, 97t–99t
Hoechst, 96, 97t–99t
Rhône-Poulenc, 96, 97t–99t
- Shareholder protection, 54
alternative test, 62, 63t, 64
regression in, 59, 60t
summary statistics, 56t
test results, 57t, 58
- Shareholder voting law, 122
- Shocks, industry, 110–111
implications of, 111–113
- ShopKo Stores/Goldner Hawn, 123t
- SIC codes. *See* Standard Industrial Classification codes
- Singapore
acquisitions of domestic firms in, 29t
cross-border M&As in, 52t
MLs in, 20t, 22t, 23t–24t
- South Africa
acquisitions of domestic firms in, 29t
cross-border M&As in, 52t
MLs in, 20t, 22t, 23t–24t
effect of, 33t
- South Korea
acquisitions of domestic firms in, 29t
MLs in, 20t, 22t, 23t–24t
- Sovereign Bancorp, 123t
- Spain
acquisitions of domestic firms in, 29t
cross-border M&As in, 52t
MLs in, 20t, 22t, 23t–24t
redemption procedure in, 209, 228
- Spartan Stores, 123t
- Special purpose entities (SPEs), 176–177
- SPEs. *See* Special purpose entities
- Sporrong and Lönnroth* Case, 205
- Squeeze-out right, 5, 7t, 11, 179, 191, 192.
See also Belgium; France; Germany; Netherlands; Takeover Directive, EU; United Kingdom
arguments for, 198–199
Austria and, 209
consequences of, 203, 204t
M&A activity and, 204t
minority shareholder protection and, 204t
ownership structure and, 204t
Denmark and, 209
divisions *v.*, 203
Finland and, 209
First Protocol of European Convention of Human Rights in, 205–206, 205–207
application of, 206–207
HLGCLE report and, 207
Ireland and, 208
Italy and, 208
lawful interference and, 206
mergers *v.*, 203
minority shareholder protection and, 204t
Portugal and, 209
proportionality test and, 206, 207
protection of private property and, 205–207

- Squeeze-out right (*continued*)
 public interest *v.*, 206, 207
 rationale for, 193–204
 economic, 203
 sellout right *v.*
 company type in, 218–222
 conditions and procedure in,
 228–235
 financial instruments in, 222–223
 legal issues in, 215–239
 legal perspective on, 207–239
 selected European countries in,
 209–215
 timing of procedures in, 239
 transaction type in, 215–217
 triggering threshold in, 223–228
 valuation in, 235–239
 shareholders' return in system with,
 199–200, 201f
 Sweden and, 209
 Sri Lanka, cross-border M&As in,
 52t
 Staggered boards, 103, 133
 Standard Industrial Classification (SIC)
 codes, 25, 140
 Stephan Company, 123t
 Stock lending, 182
 Stock market development, 54
 alternative test, 62, 63t, 64
 analysis by industry and, 59t
 regression in, 59, 60t
 summary statistics, 56t
 test results, 57t, 58
 Stock market valuation, M&As' impact on,
 17–18
 Structured regime, Dutch firms and, 133,
 135, 158, 159
 Suez, 191
 Supermajority requirements
 for charter amendments, 133
 for M&As, 133
 Sweden
 acquisitions of domestic firms in,
 29t
 cross-border M&As in, 52t
 MLs in, 20t, 22t, 23t–24t
 effect of, 33t
 squeeze-out procedures in, 209
 Swedish Competition Act, 20
 Switzerland
 acquisitions of domestic firms in,
 29t
 cross-border M&As in, 52t
 MLs in, 20t, 22t, 23t–24t
 effect of, 33t
 Symantec/Veritas, 123t
 Synergistic mergers, 105, 106, 111
 Synthelabo, 80. *See also* Sanofi-
 Synthelabo
- T**
 Tabacalera, 72
 Taiwan
 acquisitions of domestic firms in, 29t
 cross-border M&As in, 52t
 MLs in, 20t, 22t, 23t–24t
 effect of, 33t
 Takeover(s), 1. *See also* Hostile takeovers
 corporate governance and, 1–3
 one-share one-vote principle and,
 178–180
 Takeover Code, 212
 Takeover defenses
 of Dutch firms, 131, 132–133, 133,
 158–159
 of U.S. firms, 132–133
 Takeover Directive, EU, 11, 164, 167, 184,
 185, 208, 209
 Belgium and, 211
 in France, 211
 in Ireland, 208–209
 in Luxembourg, 209
 in Netherlands, 214, 215
 squeeze-out/sellout right and, 208
 company types and, 218, 219t, 240
 conditions for, 229t–232t
 financial instruments in, 222, 223
 timing of, 239
 triggering event for, 215–216, 217t
 triggering threshold in, 223,
 224t–225t, 227
 valuation standards and, 235–236
 takeover procedures and, 191, 192
 in U.K., 212
 Takeover regulation, 1
 impact of, 7t–8t
 M&A activities and, 7t–8t
 minority shareholder protection and,
 7t–8t
 target shareholder protection and,
 7t–8t
 key aspects of, 3–6
 role of, 1–2
 Target ratio
 defining of, 49
 summary statistics, 56t
 Target shareholder protection, takeover
 regulation's impact on, 7t–8t
 Targeted buybacks, 261, 261t, 262, 266,
 268, 271, 272. *See also* Buybacks
 purpose of, 262
 Targets
 cross-border mergers and, 43, 45, 48, 62,
 64, 65
 performance, 108–110
 Tax CAPM (Tax Capital Asset Pricing
 Model), German, 243, 247–250
 after-tax calculus of, 250, 252, 254, 255,
 257

- after-tax cost of equity in, 247, 248, 249, 257
 capital market equilibrium and, 248, 249
 future research activities and, 257
 importance of, 12
 investor's decision problem in, 248
 multiperiod application of, 250, 257
 Tax equivalence, 247
 TCSI, 121, 122
 Temporary Exemption Regulation for Public Offers, 215
 Texas Genco/NRG Energy, 123t
 Thailand
 acquisitions of domestic firms in, 29t
 cross-border M&As in, 52t
 MLs in, 20t, 22t, 23t–24t
 effect of, 33t
 Thirteenth Directive of European Union on Takeover Regulation, 167
 Thomson Financial Securities Data, 50, 51, 54, 58, 59
 Tobin's Q, 15, 18, 34, 35, 35t, 37t, 38t
 Dutch firms and, 134, 136, 137, 139, 142t, 152t, 155, 156, 157t, 158
 MLs and, 15
 T-Online, 243. *See also* Deutsche Telekom
 Deutsche Telekom and, 243, 250, 252, 255, 255t, 256
 Trade sector, 58, 59t
 Transaction costs, 172
 one-share one-vote principle and, 172
 “Transferring liquidation,” 213, 214
 Transkaryotic/Shire PLC, 123t
 Transparency, 72
 disclosure and, 176–177
 EU, 176–178
 Turkey
 acquisitions of domestic firms in, 29t
 cross-border M&As in, 52t
 MLs in, 20t, 22t, 23t–24t
 effect of, 33t
 Two-tier system, 90–91
 Aventis and, 94t
 Hoechst and, 94t

U
 U.K. *See* United Kingdom
 Unitary system, 89–90
 Rhône-Poulenc and, 94t
 United Kingdom (U.K.), 132
 acquisitions of domestic firms in, 29t
 announced target M&As of, 192t
 Companies Act, 212, 213, 227, 234, 237
 cross-border M&As in, 52t
 market for corporate control in, 138
 MLs in, 20t, 22t, 23t–24t
 ownership in listed companies in, 195t
 squeeze-out/sellout right in, 212–213
 company types in, 218, 219t–220t, 221, 240
 conditions for, 228, 229t–232t, 234
 financial instruments in, 222
 timing of, 239
 triggering event for, 216, 217t
 triggering threshold in, 226, 227, 228
 valuation standards in, 236, 237
 Takeover Directive in, 212
 United States (U.S.), 132
 acquisition market within, 132–133
 acquisitions of domestic firms in, 29t
 announced target M&As of, 192t
 buybacks in, 263
 motivations for, 264
 corporate law, of M&As, 125
 cross-border M&As in, 52t
 EU *v.* ownership in, 173
 EU *v.* stock market performance in, 175t
 MLs in, 20t, 22t, 23t–24t
 takeover defenses in firms of, 132–133
 Unocal Standard, 164, 165
 Upjohn, 80
 Uruguay, cross-border M&As in, 52t
 U.S. *See* United States

U
 Value Act Capital, 121
 Venezuela
 acquisitions of domestic firms in, 29t
 cross-border M&As in, 52t
 MLs in, 20t, 22t, 23t–24t
 effect of, 33t
 Vertical mergers, 25, 26f
 Village Roadshow Corporation Limited (VRC), 267, 268
 Village Roadshow Limited (VRL), 267
 Vivendi, 72
 Vodafone-Mannesmann takeover, 243
 Vote-trading, corporate, 182, 183
 Voting arbitrage, 180
 Voting caps, 173
 Voting trusts, 173, 175
 VRC. *See* Village Roadshow Corporation Limited
 Vrije Markt, 221
 VRL. *See* Village Roadshow Limited

W
 Waves, merger, 110–111
 implications of, 111–113
 Wealth effects. *See* Acquirer wealth effects, during acquisition announcements (Dutch firms); Acquirer wealth effects, during acquisition announcements (U.S. firms)

- Wealth-destructing deals, 134
Dutch firms and, 151–158
likelihood of, 156, 157t–158t, 158
model, 140–141
non-wealth destructing deals *v.*, 151,
152t–154t, 155–156
- Wells Financial, 121
- Wertpapiererwerbs-und Übernahmegesetz*
(*WpUG*), 214
- White & Case's 2003-2004 Edition of
Worldwide Antitrust Merger
Notification Requirements, 18, 21
- White knight shareholder, 260
- Whitehall Jewelers, 121, 122
- Wirtschaftsprüfer* (German legal Certified
Public Accountant), 245
- WpUG*. *See Wertpapiererwerbs-und Über-*
nahmegesetz
- Z**
- Zeneca, 80
- Zimbabwe, cross-border M&As in, 52t