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The Geography of Finance

Corporate Governance in the Global Marketplace

GORDON L. CLARK & DARIUSZ WÓJCIK

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For Ben Fisher and Ania

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Preface

Our book is about the geography of finance—a world in which global financial markets increasingly price national institutions and economic structures whatever their geography and history. In this respect, the book is also about the language of finance, recognizing that the language of market valuation carries with it implications for the social and political economy of regions and nations. The book focuses upon the institutions of finance and in particular the interplay between institutional investors, such as pension funds, with financial markets, and the world of investment opportunities. Consequently, the book is about institutional investors operating in the global marketplace for investment opportunities and the pricing of those opportunities given expectations about global standards of corporate governance. In these ways, the book is about the history and geography of finance seen through the lens of pricing corporate governance.

Note, the book is not a theoretical treatise. We do not intend to produce and justify a theorem or model of investment applicable around the world. Much of the academic literature on finance is focused upon the theory of finance with examples of application relevant to the enormous market for investor practice. Where appropriate, we draw upon this research, although we do so with a critical eye towards its plausibility rather than attempting to reinforce or sustain conventional views about the theory of finance. Here, our goal is to explain how and why the world of finance has developed as it has over the last few decades while showing the special place that institutional investors occupy in relation to the formation and application of global standards. This is not a recipe book for investment practice but a way of thinking about the contemporary world, especially Europe, through our focus on the actions and interests of institutional investors.

As such, the book is a contribution to current research found in a variety of disciplines, fields of study, and analytical logics. So, for example, in

economics and finance recent research has sought to map the structure and performance of financial markets around the world drawing upon deep-seated national traditions and legal institutions. We are intrigued by this mapping exercise and believe that it provides an opportunity for moving beyond simple-minded notions of there being a homogeneous world of markets shorn of ties to the past. Also important in our research has been the debate about regimes of corporate governance. A great deal of research in this field looks beneath the maps of law and finance to the practice of corporate governance at the intersection with local and global financial markets. We are intrigued by this research particularly because of the premium attached to knowledge of how 'local' institutions actually function. Equally important, this book utilizes a set of analytical methods to combine overarching theoretical themes with institutional analysis and econometric analysis.

Notwithstanding the overlap of this book with disciplines such as economics and finance, fields of study such as corporate governance, and analytical logics that include institutional analysis and econometric techniques, we tackle the world of finance using the perspectives and skills of economic geographers. In recent years, economists and geographers have joined together to develop the field of economic geography using techniques aimed at better understanding the evolving economic map of the world and its people. In doing so, the field is loosely joined together around three basic presumptions: the world is heterogeneous in terms of its institutions and economic practices; differentiation is not only the product of history and geography, it is also the product of ongoing market processes of development that reproduce differentiation even if in different ways than in the past, and; disequilibrium is characteristic of time and space notwithstanding countervailing processes that seek to exploit gaps in and between markets and their institutions. These themes or organizing principles are developed in greater detail in a variety of places including, for example, the *Oxford Handbook of Economic Geography*. This is not the occasion to develop the arguments in favour of this research programme so much as indicate that it is an important reference point for this particular book.

It is also important to acknowledge, however, that economic geography is itself quite heterogeneous both in terms of practitioners' commitment to path dependence as opposed to countervailing processes of market pricing and in terms of the methods and techniques used to sustain empirical insights about common theoretical perspectives. We should be clear, from the outset, that this book is not another project justifying empirically

or otherwise the idea of path dependence. Rather, we seek to show that financial markets price path dependence attributing the costs and benefits of such historical commitments to market agents in ways that may put 'in play' the virtues of their home locations. The advantage of an institutional perspective joined with models of market performance is that we can obtain insights about the persistence or otherwise of path dependence from the perspective of market agents. Put slightly differently, this book is about the evolving world of finance recognizing that the past must find a future that is valued by financial analysts whose loyalties to the past are mediated by the risk-adjusted rate of return.

Another virtue of an institutional perspective joined with models of market performance is that we can observe the exercise of power by institutional investors through their investment practice. We argue that there is an emerging hegemonic language of finance that has become a codified set of theorems and applications used by institutional investors and the related financial services industry around the world. Much of it originates in Anglo-American institutions and the market for theory and practice driven by the enormous growth of pension funds, retirement savings, and insurance assets over the past thirty years or so. As these assets have spilled over the borders of Anglo-American markets into Europe, Asia, and emerging markets it has done so carrying with it expectations about how corporations ought to be governed and ought to be responsive to the interests of minority investors. The search for global standards of corporate governance is a search conditioned by institutional investors and their investment protocols.

These are arguments developed through the essays contained herein. But notice, an important aspect of our craft as economic geographers: the fact throughout we begin with the world observed, measured, and articulated whether through interviews or through measured aspects of market performance. For many economic geographers, the litmus test of contributions to the field is the extent to which knowledge of market agents and market processes at the local level can be developed piece-by-piece to create a much broader perspective on the performance of the whole. We do so here for two related reasons. First, we believe a bottom-up approach to understanding the performance of financial markets helps understand the interplay between 'home' institutions and the market for corporate governance. This is a claim about how best to proceed empirically recognizing, of course, that there are other more macro-based methods of proceeding. Second, we believe that a bottom-up approach allows us to interrogate existing theories and accepted perspectives on

regimes of corporate governance, the prospects for path dependence as opposed to the market arbitrage of differentiation, and the persistence of national and regional regimes of accumulation. This is, of course, a vital ingredient in the development of knowledge in any discipline. Here, it is one of the motivating forces in the development of each and every chapter that forms the book.

Our book is arranged in three parts. The first part provides the reader with an overview of the theory and practice of institutional investment in the global economy. The opening essay sets the scene by referencing the evolution of corporate capitalism in Western economies, and in the USA, UK, and Europe. Our argument is framed with respect to contemporary events in the Anglo-American world with important implications for Europe and emerging markets. In the main, our argument in this part of the book combines an analysis of recent European trends in corporate governance with observations about the role of financial markets that many others will recognize from their own experience. It should be noted, of course, that this part of the book is deliberately synoptic and provocative, setting out our perspective on changing circumstances that remain open to question as regards their ultimate implications. It is also important to acknowledge that the role and status of institutional investors as agents leading higher standards of corporate governance is open to the dispute: in play, no doubt, are political forces as much as economic and financial imperatives.

In the second part of the book, we take the reader through a series of empirical chapters devoted to the role of global portfolio managers in the German market for corporate governance. So much has been written about the German model that it has become one of the most important reference points for those who study comparative systems of corporate governance. In play, for many analysts, have been issues such as path dependence and the persistence of different systems of corporate governance in the context of the financial imperatives driving convergence of standards of corporate governance across the world. As we suggest in each chapter that makes up this part of the book, to understand the German model requires looking at the German economy from a bottom-up perspective—from its firms, its regions, and its industries through to the performance of national and global stock markets. It should be recognized, moreover, that we are sceptical about the existence of such a thing called the 'German model'; we demonstrate empirically that global financial institutions combined with the liberalization of shareholding rules and regulations have introduced into the German system incentives

that may re-make piece-by-piece what we often refer to as the German model.

Our research is based upon a combination of insight derived from close dialogue and econometric analysis of stock market performance. In the third part of the book, we utilize our institutional knowledge and access to leading institutional investors and corporations to develop a richer understanding of the formation of global standards. In part, this involves an analysis of the market for cross-listing, and the responsiveness of corporate executives to market incentives at home and abroad. Notice, however, our analysis hardly ever mentions nation-states. This is not because we believe that nation-states are irrelevant; rather, given the choice focus, we have emphasized private agents because we believe that they have important roles to play in the formation of governance standards consistent with either their self-interest or their long-term roles as custodians of the financial system. It is remarkable, in fact, to observe that among some of largest institutional investors there is, or there has been, a sense of responsibility for promoting higher national and global standards of corporate governance. We hasten to add, however, that this kind of responsibility need not be shared by all institutions nor need it be ever-present: in part, responsibility (or otherwise) is the product of contemporary political forces and interests that may hold sway at certain times but not at other times.

In these ways, the book combines our respective talents, our research methods, and our common commitment to understanding a rapidly changing world whose principles and practices have broken free from past moorings in national or regional traditions. But it should be noted that each and every chapter engages with received opinion and its theoretical expression arguing backwards and forwards from the empirical world to the theoretical world so as to better understand contemporary circumstances. In these ways, our book interrogates our theoretical heritage while suggesting ways forward for conceptualizing changing circumstances that, in the end, provides a comprehensive picture of the financial market for global standards in the twenty-first century. From our perspective, it is vital to understand the imperatives driving private agents whether those be financial institutions or corporations towards a global market for corporate governance. By the time we arrive at the final chapter of the book we have produced an argument for the emergence of a global market for corporate governance that has gone well beyond sovereign nations.

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A project like this, involving two researchers and a set of related and overlapping research programmes, inevitably draws upon the resources and materials of a whole range of institutions. Most obviously, we were very fortunate to have the support of the Oxford University Centre for the Environment, University College London, and Jesus College. The University of Oxford was a most congenial and productive environment for our research. Importantly, the research of Dariusz Wójcik was made possible, in the first instance, by the Oxford D.Phil. scholarship programme.

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As the book was going to press, we learnt that Ben Fisher had died; he was a friend and mentor of GLC, someone who challenged and gave encouragement for a 'deeper' appreciation of the role of agency in institutions. This is an opportunity to record GLC's manifold appreciation. As for DW, his love for Ania is recorded.

Gordon L. Clark and
Dariusz Wójcik,
November 2006.

Part I

Global Finance and Europe

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1

The Alchemy of Finance

Over the past fifty years, a remarkable transformation has taken place in Western economies. On one side of the equation, the mass production manufacturing systems so aptly described by Alfred Chandler (1990) among others have been replaced by more flexible and adaptive modes of organization. Often described through the lens of post-Fordism (Amin 1994) and flexible specialization (Piore and Sabel 1984), it is arguable that the transformation of industrial systems has been based on replacing tangible assets such as plant and equipment with intangible assets such human capital and organizational systems (see Corrado et al. 2005). Industries inherited from the first half of the twentieth century have been remade into advanced production systems with very different technological and organizational imperatives involving, for example, the displacement of authority for expertise (Teece 2000).

This is an often-told story, with a vibrant literature across the social sciences distinguishing between national systems of corporate organization focused, in part, on the prospects of competing regimes of accumulation in the context of globalization. But there is another side to the transformation of Western economies over the past fifty years: the rise of financial markets as crucial institutions driving the allocation of capital between firms, between industries and regions, and between whole nations (Froud et al. 2006). For some writers, financial markets have driven corporate and industrial restructuring such that the new world of post-Fordism and flexible specialization reflects the hegemony of global financial interests. Even so, care should be taken not to exaggerate the power of finance. The entrenchment of corporate managers and their alliances with other stakeholders can be taken as evidence of the calculated resistance

of managers to financial imperatives (see Jensen 1993 with Bebchuk 2005).[1]

Other writers are less concerned with the intersection between finance and industry, being focused on the development of finance as a set of institutions distinct from the production of goods and services. So, for example, Clark (2000), Clowes (2000), and Hawley and Williams (2000) describe the development of new kinds of financial institutions outside the banks and insurance companies established over the first half of the twentieth century. By their account, the enormous growth of pension and retirement assets over the second half of the twentieth century encouraged the formation of institutions for managing the flow of those financial resources creating, along-the-way, a global financial industry with its own logic and structure (developed in the final chapter of this book). If tied, sometime in the past, to the income and savings of employees, the creation of these financial institutions shorn of historic loyalties to communities, firms, and industries has produced a global economy based on the flow of financial assets much more than that based on the flow of traded goods and services.

It is sometimes suggested that finance is a world out-of-control; the employment and retirement incomes of workers here, there, and everywhere are at risk to the 'fat fingers' of traders operating remotely and on their account without any sense of responsibility for the consequences of their actions (see Jameson 1997).[2] Simple statistics give shape to fear and loathing: the enormous flows of financial assets around the world on a 24-hour basis only loosely related to the real value of corporations and nations provide politicians on the left and the right of the political spectrum a convenient scapegoat for explaining-away the failure of domestic policies, economies, and institutions. There are political and economic interests at stake when finance is demonized. We argue here that its role and significance must also be seen through the lens of corporate capitalism—its changing forms and functions as reflected in organizations and regulatory institutions.[3]

A second argument advanced in this chapter is that as global finance comes from certain origins, its flows to certain destinations. Given the growth of financial assets and the related financial services industry in the Anglo-American world, the mobilization of those assets through national and international financial markets has prompted flows from those economies to continental Europe. Here, portfolio investors (among others) have not been content to invest in established firms and industries

according to the rules-of-the-game favouring majority over minority stakeholders. In fact, portfolio managers have challenged the privileges of traditional investors arguing for a competitive rate of return against relevant third-party benchmarks. We look at these forces in some detail in subsequent sections of the chapter. Notice, moreover, the implications of this argument regarding the political economy of finance: flows of capital, when brought to ground through the investment process, appear as direct challenges to inherited institutions and customary practices (Blackburn 2002).

Amplifying the political flavour of these issues is the fact that economic agents may come to act on their own interests in responding to the imperatives driving financial markets such that they pull away from past commitments, community loyalties, and the ready-acceptance of local compensation practices in relation to global standards (Clark 2003*a*). While recent debate about the legitimacy of global finance in continental Europe has focused on the disruption of commitments, loyalties, and alliances it is argued that financial markets and imperatives are more than an Anglo-Saxon or Anglo-American political conspiracy designed to suborn European industry. Firms, industries, and whole regions have responded to the incentives offered by financial markets and have attempted to remake themselves to take advantage of the opportunities preferred by global financial institutions. This is not a matter of collusion so much as agents' response to market signals.

The chapter proceeds in the following manner. Section two provides a brief overview of our theoretical predispositions regarding the role and significance of history and geography. This leads onto sections devoted to the transformation of corporate capitalism, thereby providing an analytical reference point for observed changes in the form and functions of modern corporations. Here, the recent history of the Anglo-American world is put in play with a logic more general than particular: the discussion provides significant lessons for the evolution of corporate form and functions across the Western world. This allows us to link the market for corporate governance with the world of finance in a manner relevant to recent research on European financial markets. Thereafter, drawing on subsequent chapters of the book, links are made to observed changes in European corporate governance including the impact of global finance on German industry. In conclusion, implications are drawn for the relationship between global finance and continental Europe.

Institutional Innovation and Evolution

When writing about the evolution of modern capitalism, one is immediately beset with significant theoretical issues. There is considerable debate over whether capitalist societies are, at base, the same the world over and whether one reading of their transformation is a story applicable to all capitalist economies whatever their circumstances. To put the issue in the form of a single question: Is there one capitalism or are there varieties of capitalism that evolve according to that which was inherited and that which can be accommodated within current commitments and future expectations? This question has been asked time and again over the last couple of decades by all kinds of social scientists (see, e.g. Allen and Gale 2000; Hall and Soskice 2001). Importantly, this question is often augmented with a further more difficult question: Is there one model of capitalism which is the most efficient form of capitalism in the sense of dominating other forms of capitalism in terms of long-term economic performance?

There are at least three possible answers to these questions. A simple but nonetheless compelling argument goes as follows: capitalist societies create, build, and destroy institutions in response to economic incentives (positive and negative). Of course, there may be resistance to change just as there may be attempts to affect these incentives such that some institutions and some constituencies are protected, whereas others are left open to the full force of market competition. One implication from this argument is that economic imperatives have a life and significance beyond the circumstances of any time and place. A second implication is that attempts to rein-in those imperatives can only distribute the consequences of change between more or less powerful social actors. A third implication is that attempts at smothering market imperatives may dampen economic performance to such an extent that other jurisdictions more fleet-of-foot in adapting to market imperatives have superior long-term economic performance (measured in terms of employment, productivity, etc.).[4]

A second, more complicated, argument goes as follows: economic imperatives are neither so transparent in terms of cause and effect nor so coherent in terms of their consequences that economic agents can respond to those imperatives in ways that are consistent with their long-term interests and the collective well-being of their societies.[5] Inevitably, economic imperatives must be managed in ways that protect against catastrophic outcomes while ensuring that the positive benefits of

economic growth are distributed in a manner such that individual commitments are reinforced and enhanced. This argument underpinned the Keynesian revolution and is to be found in post-Second World War manifestos on behalf of economic management (Shonfield 1965). One implication is that nation-states are important and can 'manage' the path of development. But there is a 'sting in the tail' of such argument: whatever the uncertainties and inconsistencies of capitalist imperatives, the alternatives are worse (Hahn 1990). There are few virtues in command and control economies, as the experience of central and eastern Europe over the past fifty years has shown.

A third argument, popular at present among (non-economist) social scientists, is as follows: economies are ensembles of reinforcing institutions, social and political commitments, and various capacities (some negative and some positive). Even if capitalist economic imperatives are found the world over (Strange 1997), their full force and consequences are so mediated that societies may be quite different from each other in terms of their response to these imperatives and ultimately their long-term economic structure. Furthermore, path dependence is so significant that any 'reform' of a single element of the inherited ensemble of institutions runs the risk of adding incoherence rather than something positive to the adjustment capacities of society (see Aguilera and Jackson 2003; Gilson 2004). By this logic, societies may be capitalist but they are capitalist in different ways and those differences persist over time by virtue of their reinforcing complementarities. Institutional evolution is crafted out of that which is inherited and that which is possible given current commitments and future (albeit contingent) expectations.[6]

At this stage, we could rehearse the points made for and against each and every argument. Not only are there issues of evidence and profound questions of epistemology that make adjudication difficult if not impossible, there are also issues of geopolitics. For example, those who stand by the first argument often use it as a weapon against those that advocate the virtues of continental European social market ideals. On the other hand, those advocating the third argument do so, in part, to explain how and why continental Europe is as it is while obliquely suggesting that Anglo-American societies are dominated by unsustainable and primitive conceptions of the relationship between individuals and society. By contrast, critics of the second model are suspicious of any a priori presumption in favour of a significant role for the state in economy and society.

Our approach is based on four related propositions. First, capitalism is a set of recognized imperatives shared across many societies but whose

specific form is inevitably shaped by time and place. History and geography matter in that they both structure particular forms of capitalism *and* are the raw material used by 'local' economic agents to create value now and in the future (Mørck and Steier 2005). Second, capitalism is neither as stable nor as benign in effect as many would hope. Those who argue in favour of path dependence and a close relationship between the state and corporate form tend to ignore endogenous market forces and external shocks that disrupt the past. Third, at each moment, there are those who would benefit from a different trajectory of economic growth—opportunism is an ever-present impulse. Fourth, capitalism is in continuous motion: in Baumol's (2002) terms, it is an 'innovation machine'. Even as institutions are created in response to market imperatives, those imperatives continue to evolve (or dissipate) so as to (in part) reinforce those institutions but also, inevitably, undercut their longevity. Therefore, no 'capitalism' is, or can remain, self-contained.[7]

If institutional form and functions were held constant, economy and society could be turned over from within and without (much like central and eastern Europe). Even 'local' economic agents are bound to identify economic advantage in pricing the costs and benefits of inherited institutions, especially if they have limited access to the benefits associated with those institutions. Just as likely, some economic agents may advance their own interests either in opposition to established institutions or by subversion of those institutions, creating competing institutional forms and functions with different capacities and potentials (Clark and Tracey 2004). In a world of continuous motion, inherited institutions may find it hard to adapt, whereas newer institutions formed in reaction to the past may take advantage of changing circumstances and conditions. As inherited institutions grow, mature, and then lurch from crisis to crisis their coherence may (albeit slowly) unravel by the sheer force of market competition.[8]

The Third Industrial Revolution

Reading past commentaries on the nature and structure of modern economies, there is a sense in which many believed that capitalism had found a settled organization form of management and production that would last another fifty years (see Shonfield 1965; Galbraith 1971). Not withstanding the popular acclaim that greeted these assessments, they captured at a point in time a world that was to dramatically change form and functions through the 1980s and 1990s. In fact, the

very form of capitalism inherited from the post-war era was to become the object of corporate and industrial restructuring; in play in financial markets were systems of management and compensation such as defined benefit pensions that had played such important roles in framing labour–management relations. In some cases, these systems took firms and whole industries to bankruptcy (Clark 1993*a*).

Representing this rapidly changing world is quite a challenge. Rather than invent-anew our own commentary, we rely on Jensen (1993: 831) and what he termed the 'modern industrial revolution'. He began arguing 'fundamental technological, political, regulatory, and economic forces are radically changing the worldwide competitive environment. We have not seen such a metamorphosis of the economic landscape since the industrial revolution of the nineteenth century'. He suggested that the modern industrial revolution had parallels with the second industrial revolution of the 1880s that profoundly affected the USA but also Great Britain (the home of the industrial revolution). Of the issues identified by Jensen as crucial to the new industrial revolution, two sets of overlapping drivers were emphasized. On one side, he suggested that investment in technological innovation had driven the organizational transformation of modern corporations. The nature and structure of production systems were transformed turning inside and out the demand for employment.

On the other side of the equation, increased capitalization of production and technological innovation had prompted greater industry capacity. He suggested that the 1970s and 1980s were dominated by an 'investment mania' involving the substitution of capital for labour which inevitably carried with it changes in the unit size of production. Waves of investment added productive capacity as many corporations held-in-place obsolete plant and equipment. Furthermore, technological innovation in related industries changed the demand for inputs and outputs such that production systems became more economical in their use of inputs relative to the volume of outputs. Accentuating these trends, new competitors came to Anglo-American and western European markets with very different cost configurations and technological qualities competitive with established and previously dominant firms. Jensen argued that many firms and industries were slow to respond to excess capacity, carrying large numbers of underemployed workers and enormous legacy costs associated with retiring workers.

Adjustment to these changing circumstances was slow and incremental. In manufacturing industries with significant union presence and historical commitments to defined benefit pensions, retirement systems became

mechanisms for the early retirement of older employees (Ghilarducci 1992). To make that possible, benefits were enhanced for those short of the required age and years of service just as benefits were enhanced for those workers retained in order to buy their cooperation in restructuring.[9] There were three problems associated with this kind of strategy of restructuring: first, on an incremental basis, precedents were set in terms of the likely benefits for those offered early retirement in successive rounds of restructuring; second, management and unions became preoccupied with negotiating games of zero-sum restructuring rather than competitive strategy and global prospects, and; third, accumulating enormous numbers of retirees in defined benefit pension systems threatened the long-term solvency of the corporations themselves (Clark 1993*a*). If anything, the last decade has reinforced these trends (Clark and Monk 2006).

Adding to these trends were related developments in the public ownership and regulation of industry and financial markets. This was most pronounced in the United Kingdom, where dominant firms and industries nationalized in the late 1940s and early 1950s were denationalized in the 1980s and 1990s. Most obviously, this included flagship companies such as British Steel and British Telecom that claimed near-monopolies in domestic UK markets. When denationalized, these firms also claimed a significant place in public securities' markets and attracted institutional and individual investors from the UK, Europe, and the rest of the world. However, they came to market as expressions of Shonfield's 'modern capitalism' rather than of Jensen's 'modern industrial revolution'. Their bureaucratic structures, benefit systems, and pricing practices were revolutionised over the next twenty years so as to be competitive in the global marketplace.

It is arguable that the deregulation of financial markets, especially in London and New York and then, to a lesser extent, in continental Europe, was essential for the legacy costs of denationalized industries to be absorbed by retirement investors. Much has been written about financial deregulation, and the subsequent growth of Anglo-American financial markets (see generally Davis and Steil 2001). What is striking about the development of these markets is the fact that they owe their liquidity, in large part, to the financial assets of domestic and foreign institutional investors (Clark 2000). Without doubt, the growth and development of private savings institutions and pension systems in UK industry after the Second World War created an enormous pool of assets to be invested according to norms and conventions quite different than that which

guided the management of industrial corporations over the same period. Similarly, US institutional investors and pension funds have fuelled the market for corporate control. These same institutions have also fuelled corporate and industrial restructuring in the emerging EU single market (Clark 2003*a*).

Here, then, is a first glimpse of the *deus ex machina* of our book: financial institutions whose commitment to incumbent corporate executives is conditional and subject to competing market-based investment opportunities. Instead of being entwined with clients, in the reciprocal obligations characteristic of banking relationships, these financial institutions have been able to shrug off long-term commitments in favour of the nominal (though rarely directly voiced) interests of third-party beneficiaries and the market in general (Hawley and Williams 2005).

Rethinking Corporate Form and Functions

The firm represented in academic research is large, publicly traded, owes its origins to twentieth century industries, and has a national identity even if it trades in markets around the world (Williamson 1985). But this is not the whole story. To carry our argument further, we now turn to Zingales (2000) who sketched the most important theories of the firm recognizing their underlying principles as well as their limits in terms of providing an adequate empirical representation of contemporary circumstances. For example, he noted that the 'firm as a nexus of contracts' loses some of its sheen when those contracts are implicit, specific to certain sets of tasks and functions, and rely on continuity of relationships within the firm. If contracts were explicit, non-specific, and subject to renegotiation over the short-term he wondered why there would be firms at all.

By his assessment, the archetypal firm is asset-rich and is vertically integrated so as to exploit the available economies of scope and scale. As a consequence, high levels of re-current investment are required to reproduce firms' capital bases and pay for management and coordination. For Zingales, the traditional firm sought 'outside' investors because of the sheer volume of capital needed to reproduce the firm.[10] Given the apparent risks of concentrating investments in small groups of firms and given the hegemony of portfolio diversification (owed to Markowitz 1952), investors have limited their holdings in any firm. Consequently, the agency problem is between managers in control of the corporation and owners who provide the capital to reproduce the firm. Zingales assumed that agency problems between managers and workers having to

do with the coordination of internal constituencies had been solved by the negotiated distribution of current and expected income.

In part, his argument relied on the juxtaposition of the archetypal firm with the new realities of the twenty-first century. While not easy to identify, these 'new realities' are important for the argument of this chapter and in the following chapters. These new realities should not come as a surprise to the informed reader. Nonetheless, like Zingales, we believe that, when confronted by the twentieth century corporation, these new realities have prompted significant innovations in its form and functions. There are important lessons to be learnt about the intersection between corporate capitalism and financial capitalism over the past twenty-five years.[11]

Price competition. One of the observations made about market competition forty years ago was that price competition could be managed either directly through collusion or indirectly through corporate pricing strategies which sought to converge on and maintain a stable market price for offered goods and services. Over the past twenty-five years, however, Anglo-American governments have promoted competition policy and have made consumer welfare measured in terms of the real price of commodity bundles one of the litmus tests of policy effectiveness. At the same time, national markets have become increasingly subject to the discounted pricing practices of competitors located in the rest of the world (especially China). This has been most apparent in North America and in western Europe; Asian competitors based on much cheaper production platforms combined with the low costs of bringing products to market have made a substantial difference to the ability of incumbent national firms to control market prices or maintain their own pricing practices (see Clark 2004).[12]

Market segmentation. Just as market competition has become more important than previously the case, tendencies towards market segmentation have accelerated. In part, market segmentation has been driven by the increasing real incomes of consumers and their demand for differentiation by taste and attributes of otherwise homogeneous products. Even if consumer markets are dominated by well-recognized branded products, for every market-leading product there are overlapping rival products designed to siphon-off consumer loyalty into their own niches. Furthermore, the premium attributed to brand value is vulnerable to the introduction of related but generic products for sale at heavily discounted prices. Whereas large firms use branded products sold at a premium to 'manage' the core value of markets, they may also produce the generic

products sold at a discount into market segments that would otherwise be served by market rivals. This has been made possible by the fact that the optimal scale of production has been declining through technological innovation and the relocation of production to much cheaper sites than those available in Western countries (Clark and Hebb 2005).

Product and process innovation. By this logic, markets are increasingly unstable in the sense that consumer attachment to the market-leading products of the largest firms is more uncertain than ever before (Yankelovich and Meer 2006). One consequence is that the largest firms cannot stand still: not only must they develop a broad array of products that are able to compete across the differentiated segments of Western consumer markets, they must do so in ways that allow for differential pricing for more or less cost conscious consumers. It has proven difficult for single-site production facilities to accommodate this diversity and, in particular, the needed variable market-pricing profiles given stable and homogeneous compensation practices. Another consequence has been heavy investment in maintaining the design qualities of premium-priced consumer products as well as heavy investment in maintaining the quality of the production process consistent with the premium price charged some consumers.[13]

Capital market options and prospects. One of the virtues of conglomerates built on various products and production processes was the opportunity to use excess revenue from one side of the business to sustain investment and growth opportunities in other businesses. This enabled large firms to discount the cost of capital relative to the prices charged by capital markets while holding at bay the scrutiny of capital market analysts. Of course, in companies which nevertheless require enormous volumes of tangible assets, access to capital markets has been a crucial means of sustaining successive rounds of investment. However, over the past ten to twenty years new kinds of financial intermediaries including hedge funds have been developed more specialized in terms of their expertise and more willing to take positions in target firms without requiring an immediate exit option to capital markets. If stock was offered in public markets to discount the power of 'inside' owners, owning just 2–5 percent of outstanding stock may be enough to give ambitious hedge funds 'leverage' over corporate managers if exercised with sufficient publicity.

For many analysts of the modern corporation, the crucial issue remains the agency problem between owners and managers (Jensen and Murphy 2006). Underpinning this literature (and its expressions in public policy) is a belief that the modern corporation described by Galbraith

and Shonfield still controls the distribution of income such that internal claimants are advantaged over external shareholders. Responsiveness to capital market imperatives has become the litmus test of senior executives in a world where managing expectations as regards the current and future flow of revenue has enormous implications for the volatility of stock prices (Lowenstein 1996). But the challenges facing the modern corporation are more profound than capital market expectations; at issue is whether focus on the mechanisms governing the distribution of income is consistent with the necessary adaptation to changing market pressures.

Path Dependence in a World of Change

Working from the second half of the twentieth century has provided us with a corporation of a certain shape and size. The corporation has been undone by a combination of forces some of which have come from the world of market competition while other forces come from global financial markets. By running our argument in this manner, four points have been made. First, the history of the modern corporation is an important reference point from which to assess its changing form and functions. Second, the problems facing the modern corporation are embedded in its past: governance structures resistant to change and inherited configurations of production vulnerable to technological change (important insights offered by Jensen 1993). That the modern corporation is vulnerable on these counts suggests a degree of inevitability to the corporate crisis of the second half of the twentieth century (Schoenberger 1997).

Third, drawing on Zingales (2000), it is apparent that there have been a variety of responses or paths taken by incumbent managers; in some industries, dominant firms have relied on their sunk costs and market position to respond by incremental adaptation; in some industries, dominant firms have been restructured by mergers and acquisitions led by corporate raiders and financed by institutional investors through private equity deals; and, in some industries, dominant firms have been swept aside by new entrants with very different cost structures, governance regimes, and competitive strategies. If the twentieth century corporation is represented by icons such as General Motors, the nature and scope of the twenty-first century corporation will be very different if not yet compressed into an equally salient image. There have been, and continue to be, enormous changes in corporate form and functions fuelled by the financial markets of the Anglo-American world.

Fourth, the modern corporation has become the object of the institutional investment market. It could be argued that investors precipitated the crisis of the modern corporation, and the massive transformation of corporate form and functions thereafter. That some investors arbitrage for short-term gain is obvious; they also rely on investors with an interest in longer-term pay-offs to put in play the ownership of corporations. In part, investment decisions are driven by judgements made about the nature and likely speed of corporate restructuring placing a price on the adaptiveness of internal stakeholders such as unions and management. Investors may place a price on governance and ownership, putting into play the future of the firm as currently conceived. In some situations, the investment decision is focused on the end-game scenario—the expected value of the disassembled firm, its organization, its parts, and its markets. This seems to be one explanation of the current pricing of General Motors.

Just as the corporation has a history, it also has a distinctive geography—apparent in terms of the location of its owners, its productive assets, its markets, and its competitive spheres of influence. The largest corporations have relied on extensive networks of suppliers some of which are local and some of which are global and all of which must be governed within the ambit of the corporation-at-home. While the history of the corporation can be written in terms of its emergence as a national institution, then as a multinational entity, and ultimately as a global corporation, it continues to claim national identity—a paradox of economy and politics not-less-than a paradox of identity and governance. There is an extensive literature devoted to this transition, with considerable debate over whether the corporation can ever be truly global in the sense that can shrug-off its national identity and reciprocal relationships anchored in the past (see Doremus et al. 1998).

Comparing the Anglo-American corporation with the European corporation is a most difficult undertaking. Not only are there differences between the UK and the USA over corporate form and functions, it is arguable there are as many models of the corporation as there are countries of western Europe (Whittington and Mayer 2000). So, for example, Dutch corporations share many features with UK corporations especially in terms of their responsiveness to financial market interests, whereas German corporations are more obviously anchored according to their regional identities. In the literature, great play is made about the fact that corporate form and functions are the product of path dependence: that is, where history and geography are so deeply embedded in the structure of

the corporation that its strategic policies must be explained by reference to the past. While mindful of the significance of path dependence, we are nonetheless sceptical of its explanatory status especially in the context of the imperatives posed by global financial markets. This argument is developed in the next section, and in the chapters devoted to the German corporation.

It is important to acknowledge that the corporation emerged in the context of national rules and regulations as well as less formal social expectations that have their roots in the nineteenth century. As indicated above, the German corporation has as much a regional identity as a national identity affecting its governance structure including the web of interlocking stockholders who come from related institutions in the community. This is an often-told story, one that links corporate governance with labour–management relations, stakeholder concerns, and corporate responsibility (Hopt 1998). In effect, and somewhat unlike the Anglo-American corporation, the community has a voice formally represented in the governance of the corporation as well as in its customary employment practices (among many matters). Corporate identity, interlocking ownership, community expectations, and government regulations have together conspired to assign larger continental corporations a national significance emblematic of certain cultural norms and even linguistic conventions. Being a 'national champion' has many economic and political implications, not least of which is hostility to 'foreign' takeovers (see Gordon 2004).

History and geography have certain advantages. For example, it provides a global corporation with a home market position which may be crucial in terms of sustaining product design and innovation functions. The flow of revenue from a captive market may effectively cross-subsidize foreign ventures. Furthermore, history and geography can provide managers political legitimacy as well as government supporters for its international ventures in multilateral forums and organizations. But history and geography embody certain disadvantages, especially in terms of formulating, financing, and implementing competitive strategies at odds with the past (Schmidt and Spindler 2004).

The costs of history and geography can be illustrated in a number of ways. Some commentators focus on the coherence of the corporation, as it moves from the local to the global level. Recognizing their past, global corporations could be conceived as confederations of businesses brought together under one strategic umbrella but otherwise incorporated

in their 'home' jurisdictions with governance structures to match. This may evolve to the corporation as a hierarchy of resource flows with competitive strategies located at the national level while the corporate 'parent' functions as an investment bank drawing-in revenue to be allocated to national businesses according to the expected rate of return. This may not be sustainable if, as it seems to be increasingly the case, national government regulators demand the same level of accountability and transparency for global strategy and policymaking as they demand for national corporate policy. This is one consequence of the global reaction to the crisis of corporate governance in the aftermath of Enron (Clark and Hebb 2005).

By this logic, evolution in corporate form and functions retains the national core of the firm by adding-on businesses from other jurisdictions. It is an adaptive and incremental strategy of accommodation, based on the 'home' history and geography while subordinating other histories and geographies to the interests of parent company constituencies. But there are limits to this kind of growth strategy, especially in the light of the new competitive realities of the twenty-first century sketched above. Most importantly, such firms may not be able to match the growing scope of competitors if they must simultaneously maintain the loyalty of traditional stakeholders, the commitment of stockholders from related national institutions, and a rate of return on investment consistent with their global peers. One way or another, history and geography may have to be discounted as a constraint on competitive strategy—new stockholders with new sources of finance without past commitments may be the only way forward (Stulz 2005).

Just as large continental European corporations may seek 'outside' investors those investors may also be seeking European investment opportunities. But their expected risk-adjusted rates of return may be far more demanding than the long-term rates of return due to traditional corporate shareholders (who, in any event, are often not accountable to their own constituents for the rate of return). Most importantly, 'outside' investors may bring a set of expectations as regards their status and the proper form of corporate governance at odds with history and geography. Just as history and geography provide corporations competitive advantage and investors' opportunities, as global financial institutions invest they seek to re-make history and geography in ways consistent with their own interests. By this logic, path dependence may be 'ruptured' rather than re-made according to the past.[14]

European Corporate Governance

In response to the debate over the prospects for continental European institutions and especially nation-state models of corporate governance, a series of research programmes have been initiated on this topic paying particular attention to whether convergence or divergence best characterizes the recent history of corporate governance (see Bratton and McCahery 2002). In this section, we foreshadow the findings of subsequent chapters suggesting ways of conceptualizing the issue based on detailed empirical analysis of the pan-European market for corporate governance, recent developments in German corporate governance, and apparent patterns in the cross-listing of large European corporations on Anglo-American markets. The evidence suggests that nation-state traditions are less coherent than assumed, and there is evidence of firms even within Germany departing from historical conventions to join the global financial marketplace (compare Schmidt and Spindler 2004).

On the issue of pan-European convergence in corporate governance, our research has relied on the Deminor proprietary database that scores the quality of corporate governance among Europe's largest firms. Data was provided by colleagues in the Netherlands and especially a group of large institutional investors that rely on the scoring process when managing active investment portfolios. In the first instance, we sought to characterize pan-European corporate governance seeking evidence for country-specific patterns set against industry-specific patterns (a test of La Porta et al.'s 1998 thesis). It was found that over the five-year period from 2000 to 2004 there had been little change in Deminor ratings attributed to the existence of takeover defences (Chapter 2). But it was found that disclosure standards markedly improved, and changes in board composition were such that it could be argued European corporate boards of directors were more responsive to global financial market expectations than hitherto the case. Changes in scores related to corporate governance were most pronounced in countries such as the Netherlands, Switzerland, and to some extent France. There was less evidence of changing scores in Germany although, as noted below, this ignores important changes taking place in smaller firms outside traditional manufacturing industries.

These types of indicators provide measures of convergence at a high level of abstraction even if relevant to the immediate interests of portfolio managers seeking to better understand the governance of Europe's largest firms. In more detail, a set of three studies focused on the interaction between German corporate structure and global financial market interests.

In the first instance, the issue was whether portfolio managers are better placed to pursue a passive index-based global investment strategy or an active investment strategy in German industry (Chapter 3). In part, the issue was whether there is sufficient market information to pursue conventional Anglo-American investment strategies or whether the lack of adequate market information is such that a more active and invasive investment strategy is the best option for grasping the value of German firms and industries. The initial test of this hypothesis correlated the nature of corporate ownership with the volatility in share market prices showing that closed systems of corporate governance were related with more volatile share market prices. This affects certain types of firms, and those firms are concentrated in certain German regions.

Having established that closed ownership structures promote higher volatility in quoted market prices, the next step was to determine whether closed ownership structures attract a market price penalty. That is, the issue was whether traditional forms of German corporate governance that rely on the cross-holdings of a few owners, thereby dominating supervisory boards and excluding minority owners were penalized by portfolio investors. Here, again, the evidence suggests that ownership concentration attracts a market penalty and that this penalty is not only firm-specific but is also region-specific in that German regions can be distinguished from one another according to the dominance of closed systems of corporate governance as opposed to relatively open systems of corporate governance (Chapter 4). In other words, the penalty on closed systems of corporate governance is borne by firm management, shareholders, as well as community stakeholders.

To determine whether these patterns of corporate governance and market pricing are likely to persist into the future, we considered the pattern of entry and exit from German stock markets. At issue was whether certain types of firms, recognizing the penalties associated with traditional forms of ownership, have sought to avoid market pricing and whether firms sensitive to market pricing have entered the market seeking minority investors (Chapter 5). It can be shown that firms come to market from newer kinds of industries and from regions characterized by low levels of ownership concentration and high (relative) levels of transparency with respect to corporate governance. By contrast, firms leaving the market tend to be from more traditional industries and regions characterized by closed systems of corporate governance and subject to the penalties imposed by global portfolio investors. In effect, German financial markets increasingly attract firms whose ownership structures and levels

of transparency are consistent with the imperatives driving global investors.

Much of the research reported here relies on detailed knowledge of corporate ownership structure, stock market prices, and the history and geography of large and small firms. Our research has also looked at the cross-listing practices of large continental European corporations seeking access to Anglo-American financial markets (Chapter 6). Again, we used Deminor data on corporate governance combined with global financial market information for Europe's largest firms. It was found that firms cross-listed between financial markets have improved their governance ratings over the past five years, especially if cross-listed with the New York Stock Exchange (NYSE). Nation-state traditions are important; in fact, analysing the corporate governance scores of cross-listed firms suggests that national traditions provide a base-level score against which cross-listing prompts increases against that score. Nonetheless, it was found that the largest firms anticipating cross-listing had improved their corporate governance scores *before* undertaking the journey across the Atlantic. Corporate governance has become a strategic variable for continental European firms in global financial markets.

We considered instances of corporate engagement by institutional investors seeking to recover market value in the context of well-publicized crises of corporate governance. For example, our research on Ahold NV indicated that institutional investors can play significant roles in prompting changes in senior management as well as changes in governance procedures and the reporting of market sensitive information to minority investors (Chapter 7). In these cases, corporate engagement by global portfolio managers is a deliberate and intrusive strategy of change aimed at driving the reform of firm-specific corporate governance practice recognizing that these investors may not wish to directly affect nation-state corporate governance standards. Nonetheless, because of the benefits of cross-listing as well as the benefits of attracting global portfolio investors, some of Europe's largest firms have led the way to protect the interests of minority investors. One way or another, large continental European firms have become more like their Anglo-American rivals than hitherto appreciated.

Our analysis does not, however, suggest that cross-listing is an unproblematic way of transforming corporate governance in Europe and elsewhere. Exposure to international capital markets creates both opportunities and threats. One major threat is that geographical and institutional dispersion of shareholdings can weaken the control exercised

by shareholders over the management of the company, thus increasing the potential for managerial abuse. This risk is particularly severe if the dispersion of shareholdings takes place over a short period and is not compensated for with other mechanisms disciplining managers. We illustrated this issue with the crisis preceding corporate governance reform at Ahold, indicating that the risk accompanying a shift to dispersed ownership structure can be one of the major challenges in the transformation of European corporate governance.

Of course, the responses of Europe's large and small firms to market imperatives are set against what has been inherited from the past as well as the compromises that must be made in the present to accommodate the interests of global investors. By this logic, we have not expunged history and geography so much as recognized that it sets the stage for those agents wishing to accommodate investors' engagement strategies. Most importantly, we have been able to show that corporate response to global investors is framed as much by their industry affiliation as by their home jurisdiction. That these responses have an obvious global reference point in market competition for investment resources suggests a gap is emerging between the interests of firms and their stakeholders in being market-responsive *and* those domestic political interests that wish to protect the past.

Political Economy of Global Finance

Our research suggests that private interests shorn of traditional constraints on market strategy can adapt to meet the imperatives of global financial markets. The issue, however, is whether private interests are consistent with public interests in the continuity of inherited institutions, relationships, and the division of income between stakeholders in society. This is, we believe, where the debate about the costs and benefits of global finance with respect to continental European traditions is most contentious. It brings together those that stand to benefit and loose from corporate restructuring with political interests on the left and right who have an interest in claiming national pride and power.

We could take sides with those committed to national traditions, set against the 'barbarians' of Anglo-American finance. We could agree with critics of global finance that it does not respect the past, imposing the costs of restructuring on workers and communities while distributing its benefits to clients (Jameson 1997). We could take sides with those

who see global finance as a combination of short-term opportunism and hubris masquerading as commitment to shareholder value. Indeed, we could take sides with those who seek to protect established interests in banking institutions that appear to need protection from the principles and practices of global finance. In doing so, we would join with critics on the left and right of global finance who, for different reasons, believe that history and geography must be protected from the imperatives of market capitalism.

If we are to take sides on this issue, we need to be clear about what is at stake now and in the future of continental Europe. Looking back to the 1970s and 1980s, it was argued that Germany and France were successful models of economic growth and development rivalling that of the USA and Japan (Dore 2000). Looking forward, it could be argued that past success can be recaptured through the EU, the single market, and a reinvigorated pan-European commitment to innovation through national champions. In fact, the present and likely future is much less appealing than such a simple story would suggest. Current levels of economic growth are lower than hoped with important implications for unemployment, employment, and the labour force participation rates of the young and the old. In many industries, there is chronic overcapacity (judged against global capacity utilization rates) and incipient tendencies towards Balkanization of the European single market to protect incumbent national firms. While savings rates are high compared to Anglo-American countries, rates of return on capital investment are low.

If continental Europe is rich, there is a significant premium on short-term growth and long-term global competitiveness. As for the former, low rates of economic growth have effectively excluded many young and minority residents from the labour market. Low rates of economic growth have also excluded older workers and especially women wishing to return to the labour market for fulltime paid work. This has contributed to social dislocation and the rise of political opportunism on the left and right of the spectrum. This has also brought forward the costs of retirement of an ageing population adding to the burden placed on existing workers funding pay-as-you-go pension and retirement income systems (Clark 2003*b*). This tax burden has had significant implications for the cost of labour and consequently the global competitiveness of continental firms prompting two kinds of strategies: either low rates of hiring or the relocation of productive assets to the low cost margins of continental Europe. Most importantly, forgone tax revenue implies discounted future welfare benefits and gathering pressure on nation-state fiscal capacity and

EU monetary policy at a time of increasing budgetary burdens due to the costs of ageing.

As for long-term competitiveness, low rates of return on capital invested combined with chronic overcapacity suggest that firms captured in this vice may be less able to innovate and contribute to long-term growth (maintaining high rates of unemployment, low rates of employment growth, etc.). Low rates of return on investment, and an unwillingness to restructure the inherited configuration of production may also prompt capital flight: that is, the shift of capital from company-based productive assets to financial assets placed in global finance markets in the hope of reaping a rate of return consistent with the interests of investors seeking to maintain their own positions in the European and global market for investment. Continuing low rates of return have tested the patience of corporate stockholders, even those bound by the elaborate cross-holding networks, and the loyalty of banking interests facing competition from within and without Europe. In this context, it is not surprising that continental European corporations are increasingly challenged by global financial interests able to price and willing to trade on the perceived benefits of restructuring.

The larger issue, then, is whether existing continental European financial institutions are capable of initiating and sustaining corporate restructuring in continental Europe at a level consistent with the collective interest in a more competitive economy. Posing the issue in this manner challenges the terms of the debate about the relative merits of Anglo-American financial institutions (the 'barbarians' of popular media fame) in relation to traditional bank-led systems of investment and corporate governance. It also challenges often-made simplistic assumptions concerning the efficiency and long-term commitment of traditional financial institutions, and especially those that have benefited from implicit subsidies from the public sector.[15] In doing so, the revised terms of debate include financial functions going beyond the maintenance of financial stability and the management of flows of income to include the promotion of corporate innovation, economic growth and development.

Some theorists argue that the institutional structure of economy matters much less than macroeconomic conditions; that is, it is the rate of savings that determines the level of investment while the rate of return on investment is, in part, a function of labour productivity which in turn is a function of human capital and capacity utilization. By this logic, the form of financial intermediation (bank-led or otherwise) makes little difference to countries' economic potential. This argument is increasingly disputed

in the literature, with some theorists arguing that the mobilization of savings for investment and the rate of return on investment are significantly affected by the form and functions of different kinds of financial institutions.[16] We have come to accept the latter argument rather than the former principally because of what we have observed in the performance of continental European financial institutions. Many of these institutions have been protected from global capital markets, entrenching their privileged positions at the cost of the market for corporate control.

Banks and other institutions with significant cross-holdings between corporations are able to protect their own interests in a predictable, albeit, low rate of return on investment such that the costs of investment are borne by others, including workers, communities, and the state institutions sponsoring financial institutions. This is what we would term as the *self-interest constraint on capital market efficiency*. In any event, these institutions may have such a mixture of loyalties including a commitment to their 'home' region requiring the balancing of economic objectives with social objectives such that they may willingly assume a lower rate of return in exchange for political legitimacy. This is what we would term as the *confusion of objectives constraint on capital market efficiency*. Most importantly, these institutions may have neither the range of advanced financial skills nor access to the leading-edge of financial market innovation such that their risk management techniques limit the range of opportunities client corporations can plausibly utilize. This is what we would term as the *parochical constraint on capital market efficiency*.

More generally, there are a set of incentives encouraging banking institutions to reinforce investment in past commitments rather than judging them against competing market opportunities or for that matter the benefits of profound structural change. In the first instance, there is an apparent temptation to follow prior commitments using current investment to underwrite the performance of past investment beyond that justified by independent valuations of expected rates of return. In the second instance, there is a temptation to rely on inside knowledge from client corporations and partners regarding potential rates of return ignoring information that would discount the expected value of investment. In part, this may be explained by myopia but it could also be explained by reciprocal benefit across a range of related investments with the same partners. In the third instance, there is a temptation to treat investment as an incremental decision relying on past commitments reinforced by a positive value attributed to sunk costs. In sum, investment strategy is long-term in *nature* and *path-dependent* in effect but in a losing cause.

Not surprisingly, the continental European market for 'outside' investment banks, including institutional investors, has grown strongly over the past decade. They bring to market independence and valuation methods that price the past and discount expectations for the future. They also bring rather different kinds of investment functions such as private equity deals (that buy-out entrenched interests), mergers and acquisitions (that rationalize capacity), venture capital and the prospect of initial public offerings (that bring to market new firms and new products), corporate engagement (that challenge corporate managers on shareholder value), and a willingness to discount convention and diplomacy should none of the above succeed (including open contests for power over corporate strategy).

If widely perceived as short-term in orientation and antithetical to established interests, the alchemy of finance is its capacity to price the past in relation to the future. It is arguable that this function is essential for future European growth and development. That 'outsiders' are willing to provide such functions is a reflection of the conservatism of entrenched interests.

Implications and Conclusions

In previous sections, it was argued that the modern corporation is undergoing a profound long-term transformation of form and functions. In part, this has been prompted by the costs of nation-state systems of corporate governance and the limits of inherited production systems (in the face of globalization and technological change). This transformation is not simply an Anglo-American phenomenon: it has wide-ranging implications for continental European economies and the emerging economies of Asia and Latin America. Note, moreover, this transformation is taking place at the interstices of finance and production. The growth of financial institutions fuelled by retirement savings in the Anglo-American world has added third-party agents to the market for corporate form and functions distinct from the banking institutions that once owned large blocks of corporations. These financial institutions have a fiduciary duty to the welfare of beneficiaries and this has driven a wedge between investors' interests and managers' interests (Clark and Hebb 2004).

The incursion of global portfolio managers into European stock markets has had significant effects on corporate governance. This does not mean that European traditions have been over-turned pell-mell to become pale

imitations of Anglo-American conventions. There remain significant differences between the various national regimes of industry organization and corporate governance. However, the evidence also suggests that some firms in some industries and regions are responsive to the imperatives of global finance. The pricing of corporate governance in German industry has had a positive response by some corporate managers seeking to avoid the market penalties of closed governance regimes. And new kinds of firms have come to market to take advantage of the pricing practices of portfolio financial institutions. Some of Europe's largest corporations have responded to investor activism with fundamental changes in corporate governance so as to be more consistent with the expectations of global financial markets.

Three lessons can be drawn from these observations. First, where global finance intersects with European industry, there is evidence of market pricing of the ownership systems inconsistent with the interests of minority owners. In effect, history and geography (path dependence) are being priced and discounted accordingly. Second, where global finance intersects with European industry, there is evidence that private agents have come to market with corporate form and functions increasingly consistent with portfolio investors' expectations regarding the rights of minority investors. This has occurred under the umbrella of nation-state regimes of corporate governance, representing market-led innovation in form and functions. Third, where global finance intersects with European industry, there is evidence that private agents can be quite adept and fleet-of-foot in responding to the expressed interests of large financial institutions. Whatever the history and geography of the modern corporation, financial institutions can elicit response and adaptation to market imperatives inconsistent with those that hold to a strong version of path dependence.

It is arguable that traditional banking and financial institutions have been by-passed by Anglo-American financial intermediaries, driven by short-term interests in reaping the value of corporate restructuring rather than long-term commitments to regional and national economic growth. And yet this argument belies the extraordinary forces of global integration affecting Western economies' corporations through intra-industry and inter-industry competition. One of the advantages of third-party Anglo-American financial institutions is their lack of association with past commitments and current reciprocal obligations. Critics of traditional continental banking institutions point to myopia and the escalation of commitment as significant impediments to change in European corporate governance and hence corporate form and functions. Most

importantly, there is a collective interest in improving corporate and industrial competitiveness given the short-term employment costs of stagnation and the looming long-term social costs of inertia.

By this account, whatever the short-term costs associated with the incursion of Anglo-American financial institutions into continental European industry these costs are preferable to the costs of inertia. This conclusion is open to argument and dissent; few analysts would contend, in any event, that the short-term and long-term pricing practices of Anglo-American financial institutions are free of their own forms of myopia and mis-pricing. And detailed studies of institutional investor pricing policies suggest that the language of finance that dominates the financial industry carries with it significant cultural and ideological expectations of the relationships between markets, states, and societies. The political economy of finance is not only about the winners and losers of market pricing, it is also about the winners and losers of the global competition for power and influence among corporations and their home institutions (Pagano and Volpin 2001). That finance and its various forms are at the leading edge of this geopolitical process is one explanation of the strongly held views associated with the pricing of domestic corporations (among other entities).

But it is not just geopolitics. The apparent role of Anglo-American financial institutions in continental Europe is important for the future of European economy and society. The revolution in corporate form and functions is ongoing, global in scale, and all-enveloping in terms of its focus. In this sense, there is an apparent demand for financial institutions that can step outside history and geography while bringing to bear different financial instruments and products that can attract global investors. This has been recognized by EU economic policymakers, particularly with respect to the role that financial innovation can play in technological innovation. It has also been recognized by some of Europe's largest financial institutions, as they seek opportunities to re-make themselves in a manner consistent with these opportunities across the world. In this sense, re-making history and geography is a deliberate strategic issue with an inevitable re-alignment of economic and political powers within and between European financial centres.

Notes

1. Corporate managers may be resistant to the interests of financial institutions but, at another level, they may value very highly indeed compensation

practices that price leadership in ways designed to make them wealthy now and in the future. See Bebchuk and Fried (2004) and Jensen and Murphy (2006) on the current debate over executive compensation.

2. This refers, of course, to the trading error made in 2005 by a Mizuho (Tokyo) employee wherein stock in a company was offered at massive discount to the market price and knowing trading houses took advantage of the error to reap an 'immoral' Y406 billion profit. Only half of the profit was returned by institutions shamed by government officials—mostly by foreign investment banks rather than domestic institutions.
3. Our approach is informed by Merton and Bodie (2005) who argued for greater sensitivity to the interaction between economic imperatives, institutional formations, and behavioural responses. By this account institutions have a history and a geography as well as a functional logic—the former is not sufficient if the latter is systematically albeit relatively inefficient. Unlike Merton and Bodie, we are not convinced that there is an optimal institutional form. Capitalism is in perpetual motion, creating the future and destroying the past without an overriding blueprint for long-term economic efficiency.
4. This is a classic argument found in most introductory textbooks in which government intervention is deemed inevitably inefficient in the face of market efficiency. Those seeking a ready-reference to the argument in all its glory should see Posner (1977).
5. This argument has been given salience through the research agenda on stock market bubbles. More generally there is a growing literature following Kahneman and Tversky on aberrant patterns of market behaviour (see generally Shleifer 2000; Shiller 2000).
6. On corporate governance and the prospects for convergence (or lack thereof) to global best-practice, see Bebchuk and Roe (1999), Hansmann and Kraakman (2004), Clark (2006), and Dore (2000).
7. Presumably, few analysts would dispute these claims. They have a long heritage in the history of economic thought, including Adam Smith, Karl Marx, and Joseph Schumpeter. William Baumol's version (2002) is but the latest installment.
8. We do not mean to suggest that this is easily done, unimpeded by the social and political commitments that claim the loyalty of those who count as a jurisdiction's citizens. On the other hand, we are uncomfortable with arguments that presume path dependence is omnipotent as if history and geography once made must always overwhelm subsequent changes in intention and motivation (Bratman 1999 represents the epistemological point we seek to make).
9. In this section, we cannot do justice to the complexity of negotiations involved in the rationalization of United States and UK industry over this

period. See, generally, Blackburn (2002) on related issues in the UK and Ghilarducci (2006) for a broad perspective on the interaction between unions, pensions, and management. Jensen (2000) is largely antagonistic to the idea of 'negotiating' with stakeholders over the changing form and functions of the modern corporation.

10. There is surprisingly little research devoted to this topic, especially given the current vibrant market for equity-buyouts by private investors seeking to withdraw listed companies from public markets. Perhaps as important as the need for large volumes of capital is the interest of corporate managers in discounting the control of 'inside' owners (Roe 1994). Minority outside owners are almost always less able to control mangers—this theme is developed with reference to the cross-listing phenomenon in latter sections of the chapter and the book.
11. The distinctions drawn here between the twentieth century corporation and its evolving form are widely discussed across the social sciences. Some analysts use a distinction between Fordism and post-Fordism to sustain distinctions, some emphasize mass production as opposed to flexible accumulation, and others refer to globalization (among many logics). Along these lines Roberts (2004: ch. 2, tables 1 and 2, pp. 48–9) provided a useful summary of the differences between mass production and the modern firm.
12. Another expression of globalization has been outsourcing by incumbent producers, using spatially elongated production networks to sustain their competitiveness in home markets by matching the price structures of competitors from outside those markets (compare Grabher 1993 with Clark 1993*b*).
13. This kind of investment requires as much human capital (intangible assets) as it requires tangible assets such as plant and equipment. Moreover, human capital may come at a premium price, resistant to the conventional systems of control through the hierarchies of tasks and functions that characterized the corporation forty years ago.
14. Schmidt and Spindler (2004) are sceptical of any systemic process of national convergence to 'best practice' in corporate governance. They argue for incremental adaptation even if the end result is more likely to be the accretion of inefficiency and myopia than wholesale transformation. In part, we agree—as suggested theoretically (above) and empirically (below), the process of change is more likely at the level of the firm than the region or the nation. This may result, no doubt, in greater incoherence. In part, we disagree—the accretion of 'firm-specific' solutions to the crisis of corporate governance is bound to have profound consequences for the whole (see below).
15. See, e.g., criticisms made of German banking institutions and especially their inability to respond to market volatility and heightened uncertainty. Carlin

and Mayer (2002) raise these issues (and more) in their survey of the relationship between financial systems and economic performance.

16. This argument is explored by King and Levine (1993) in a series of publications demonstrating a positive relationship between economic growth and measures of financial development. While their work is less about the contribution of different types of financial intermediation to economic growth, more recent studies, including those by La Porta et al. (1997, 1998, 1999) go on to suggest that the nature and depth of financial market liquidity is a significant element in the path of economic growth albeit determined by history and geography (if looked at cross sectionally).

2

Convergence in Corporate Governance

In Chapter 1, we set out our agenda on global finance based on a theoretical perspective combining political economy and economic geography with our interest in corporate governance. The objective of this chapter is to launch our empirical project by focusing on the convergence in European standards of corporate governance. Using a unique and comprehensive proprietary data-set on corporate governance for the largest 300 publicly traded European companies, the following research questions are addressed: What was the state and structure of European corporate governance in 2004 as a whole and how did it compare across countries and industries? What has changed in the state and structure of corporate governance between 2000 and 2004, and how did such changes compare across countries and industries? Has there been any convergence in European corporate governance as a whole, or within individual countries and industries? Of course, the largest 300 publicly traded companies are only a small portion of European economies made up of millions of enterprises.[1] Nonetheless, their relevance for the understanding of corporate governance in European economies is discussed in the concluding section.

To do so, we must disentangle the complex concept of corporate governance, demonstrating the relevance of the corporate governance debate for an economic geography of corporate change. According to Shleifer and Vishny (1997: 738) 'corporate governance deals with the ways in which suppliers of finance to (the) corporation assure themselves return on their investment'. Using a broader definition, the OECD (1999: 1) described corporate governance as 'a set of relationships between a company's board, its shareholders and other stakeholders'. According to yet another definition, corporate governance 'is concerned with the institutions that influence how business corporations allocate resources

and returns. Specifically, a system of corporate governance shapes who makes investment decisions in corporations, what types of investments they make, and how returns from investments are distributed' (O'Sullivan 2001: 1). Research in financial economics applies a narrow definition of corporate governance—perhaps because it can be modelled more easily. Much of the corporate governance literature, however, stresses the broad concept of corporate governance (compare Jensen and Meckling 1976 with Monks and Minow 1995 or Mallin 2004). Recognizing the complexity of the concept, the debate over corporate governance intersects with the economic geography of the firm wherein 'the firm is indeed a messy constellation of multiple identities, contestation of power, and shifting representations' (Yeung 2003: 451).

What are the benefits of insights from corporate governance in relation to economic geography? Knowledge of corporate disclosure policies tells us how firms present themselves to the public. Board structure and functioning, as well as the rights and duties of shareholders, reveal the distribution of power including gender relations. Put differently, the building blocks of corporate governance are as much about communication, conversation, and discourse as they are about the financial bottom line of corporate performance, that is profit and the rate of return to shareholders (see Schoenberger 1994; Thrift 1996; O'Neill and Gibson-Graham 1999). Research on corporate governance is of great value to economic geography because 'the institutions and processes of governance—the sets of institutions, rules, and conventions that form the regulatory context of industrial systems, firms, and territories—pervade all aspects of the firm–territory nexus' (Dicken and Malmberg 2001: 347).

Economic geographers share many of the basic principles of the firm with corporate governance researchers. Theorists including Ronald Coase and Oliver Williamson are crucial to the intellectual development of research on corporate governance, and their works have been discussed thoroughly in economic geography (see Jensen 2000 with Scott 1983). Corporate governance is also addressed in research on power and gender relations within companies, the 'local' roots of transnational companies, and the governance of financial institutions (see Barnes and Sheppard 2000; Clark, Feldman, and Gertler 2000). But economic geographers often discuss corporate governance without mentioning the term or referring to corporate governance research despite the potential benefits of doing so. In the light of current research on corporate governance, the time is ripe for economic geography research to examine corporate governance concepts and literature more explicitly (Wójcik 2003).[2] This chapter addresses

developments in corporate governance with a focus on convergence, a major preoccupation of economic geographers in the European context, although principally from the vantage point of economic growth and institutional development (see Martin and Sunley 1998; Rodríguez-Pose 1998; Martin 2001; Clark 2003*a*).

The rest of the chapter is structured as follows. The next section discusses arguments for and against convergence in European standards of corporate governance. Thereafter, a section is devoted to data and methodology, with subsequent sections presenting empirical results relating to each research question: the map of European corporate governance in 2004, changes between 2000 and 2004, and evidence for and against convergence. The final section concludes the chapter with reference to the following chapters of the book.

Convergence in European Corporate Governance

Debate about convergence is almost always focused on an idealized model of Anglo-American standards rather than a 'universal' model of corporate governance. Anglo-American standards claim centre stage in the theoretical and empirical literature on convergence in corporate governance. In any event, the tool we use to measure corporate governance in firms, as discussed below, captures convergence to, or conformity with an idealized Anglo-American model. The term 'idealized' instead of 'ideal' stresses the positive character of the chapter. Our objective is not to evaluate Anglo-American corporate governance or judge whether convergence in the standards of corporate governance is good or bad. As noted in Chapter 1, these normative issues are well represented in the book. Here, we need a baseline to judge current circumstances including a definition of Anglo-American model and a summary of the arguments as to why we should or should not anticipate convergence.

Concepts and Theories

A distinction is commonly made between two generic regimes of corporate governance in developed economies (Shleifer and Vishny 1997). In a regime of 'closed governance', corporations have concentrated ownership with controlling owners (mostly wealthy families, the state, or banks) 'disciplining' management of the firm through direct engagement. In an 'open' regime, ownership of corporations is dispersed with arm's-length relationships between shareholders and managers whose interests

are aligned with the interests of shareholders through stock market-based compensation. In addition, in an open regime managers are 'disciplined' by the threat of takeover rather than direct engagement. Consequently, the public market for corporate stock influences firms in an open regime to a greater degree than in a closed regime. An open regime is said to prevail in the USA and in other Anglo-American economies; closed regimes are evident in most developed economies including continental Europe except the UK and Ireland (La Porta et al. 1998). This is a crude but important distinction—the convergence debate is all about the alleged shift from closed to open regimes.

The driving forces and barriers to convergence are subject to heated debate (see, e.g. O'Sullivan 2003). The view rooted in neoclassical economics begins with the premise that enhanced global product and labour market competition combined with financial integration leads firms to converge on a set of 'best practices' in corporate governance.[3] Best practice is, more often than not, defined as a perfected version of Anglo-American corporate governance, with its primary objective of maximizing shareholder value, improving access of savers to investment opportunities, and firms' access to external funds (see Jensen 2000; Hansmann and Kraakman 2004). In contrast, the 'varieties of capitalism' perspective claims there is no best way to organize an economy. The forces of competition and financial integration are significant but before they impact on corporate governance in a specific place they are 'filtered' through existing, mostly nationally based, institutions. As noted in Chapter 1, it is supposed that while specific configurations of institutions respond to these forces, corporate governance continues to differ according to the institutional context in which it is embedded (see Hollingsworth and Boyer 1997; Hall and Soskice 2001).

The political theory of corporate governance provides another source of scepticism about convergence wherein claims are made to the effect that we cannot understand the evolution of corporate governance without acknowledging the central role of the state. According to Roe (2002), the dispersed ownership structure of large US companies resulted mainly from popular debate and political decisions designed to prevent the concentration of power in financial conglomerates.[4] The conclusion of political theory is that any major change in corporate governance is determined, in the first instance, by political forces deeply embedded in the nation-state. Combining these two threats of argument, the theory of path dependence suggests that as a necessary condition for convergence to an open regime, the potential benefits of such a shift have to outweigh the actual benefits

of control accruing to controlling owners and their formal and informal political partners (see Bebchuk and Roe 1999; Mørck and Steier 2005). To the current stock of theories and predictions, we would add the proposition that convergence to the Anglo-American system is not necessarily reliant on its purported superior microeconomic efficiency. Jeffrey Gordon (2003*a*) suggested that regimes of corporate governance with few barriers to hostile takeovers could contribute to the European integration project because of the opportunities provided to corporations competing across national boundaries.

A shift to a model of corporate governance that maximizes shareholder value involves a transfer of power from alliances of corporate and political insiders to public shareholders, with the corollary of larger and deeper public stock markets. The potential impact of such changes in corporate governance, of course, could be extensive. Christopherson (2002) indicated that there exist important complementarities between corporate governance regimes, firm networks, and local labour markets. Comparing the US and the German regimes, she claimed that in the former strategic alliances among firms are short-term in nature and corporate expansion is based more on hostile than friendly takeovers. Likewise, Allen and Gale (2002) suggested that longer-term tenure of employment is more compatible with a closed than with an open regime of corporate governance. Elsewhere, Gertler (2001) listed mergers and acquisitions as one of the major channels of international convergence in management practices. As an example, he referred to research by Leyshon and Pollard (2000) indicating how similarities in corporate governance environments facilitated the transposition of organizational and technology innovations pioneered by US banks to UK banks. Accordingly, convergence in corporate governance may facilitate convergence in the organization and management of the firm.

Empirical Evidence from Europe

Since this book has as its central theme changes in the landscape of European corporate governance, we need to take a number of 'first-steps' in establishing the terms of our approach. This is apparent, first, in relation to the concept of 'convergence'. Here, we distinguish between *de jure* and *de facto* convergence. Regarding *de jure* convergence, Mallin (2004: 207) suggested 'there does seem to be convergence on certain common core principles based usually around the OECD Principles of Corporate Governance'. Focusing on Europe, Wymeersch (2002: 244)

identified indicators of *de jure* international convergence including the spread of similar corporate governance codes, similarities in current and forthcoming legislation, and progress on the European 13th Company Directive. Considering de facto convergence he concluded 'whether these developments also mean that more fundamental changes have occurred, and that the patterns of the business firms have come closer to each other, remains doubtful'.

This chapter emphasizes de facto convergence for which we can distinguish several groups of studies. One group focuses on the evolution of ownership structures and demonstrated a declining level of ownership concentration in major European countries (van der Elst 2000; Wójcik 2003). A second group treats corporate governance more comprehensively using case studies from individual countries. For example, research on corporate governance in Germany demonstrates convergence towards some of the parameters of the Anglo-American model (see Höpner 2001; Vitols 2003). O'Sullivan (2003) documented changes in corporate governance in Germany and France linked with the growing influence of the stock market in both countries. A third group of studies uses cross-country data to demonstrate a high level of diversity and country-specific characteristics of corporate governance. These studies are mostly static in character, falling short of testing the degree of convergence (see Pedersen and Thomsen 1997; Doremus et al. 1998; Khanna et al. 2002; Doidge et al. 2004*a*).

Studies of the diversity of corporate governance across *industries* are also inconclusive as regards the nature and process of convergence. At a theoretical level, Becht and Mayer (2001) suggested that sectors where investment projects are longer are better served by management that is stable and not constantly threatened by takeovers. Hansmann and Kraakman (2004) proposed that young companies, operating in industries characterized by rapid change, are more likely to embrace the Anglo-American shareholder model. The latter proposition is based on an assumption that there is now a consensus on the superiority of the Anglo-American model. Companies created after this consensus was reached are likely to respond to its logic while older companies, established under different regimes are likely to face the imperatives of change (see Chapter 5 in this volume). Empirical evidence on the influence of industrial sector on convergence hardly exists, and the few exceptions focus on ownership structures or case studies of individual industries in selected countries.

From the empirical and theoretical literature, we would expect to find a limited degree of convergence in European corporate governance.

Although this follows the findings of the majority of empirical studies, its conceptual motivation requires some elaboration. One reading of the political theory of corporate governance would support the likelihood of convergence in Europe. The project of European Economic and Monetary Union and the nearly completed privatization of state-owned industries could be viewed as elements of an unfolding political transformation facilitating the integration of corporate governance with global financial markets. Both processes have enabled European companies to broaden their capital base on an international basis. A growing section of European societies have become shareholders requiring more rights and demanding more transparency of corporate governance (FESE 2002). Whether shareholders own shares directly or through institutional investors such as insurance companies, mutual funds, or pension funds, it is entirely plausible that their increasing significance has increased the relevance of the Anglo-American model of shareholder primacy.

Such a hypothesis does not imply that a linear scale, from Anglo-American minority shareholder friendliness to continental European minority shareholder unfriendliness, is the ideal basis for studying change in corporate governance. It does, however, offer a practical basis for analysing the direction of change in corporate governance. Such changes probably involve the mixing and recombinating of elements from different systems that are so complex that corporate governance ratings systems may not be able to capture their scope. Even so, the objective of this chapter goes beyond deciding whether convergence in European corporate governance has begun or is taking place. We also address the deficit of empirical evidence on European corporate governance and especially the patterns of diversity, change, and convergence across countries and industries.

Data and Methodology

The chapter uses proprietary data on corporate governance ratings of the largest European companies in 2000 and 2004 provided by Deminor Rating SA (now part of the Institutional Shareholder Services), a corporate governance rating agency located in Brussels with offices in major European cities. This section describes how ratings are constructed, presents the sample of companies covered by Deminor, introduces the approach used to measure convergence in corporate governance ratings, and, finally, discusses the positive, in contrast to normative, character of

the chapter. As we see, this proprietary data base re-appears in a number of chapters through the book (as in Chapters 6 and 7).

Corporate Governance Ratings

The objective of Deminor ratings is to provide information to institutional investors about a company's corporate governance standards and practices. Selected aggregate Deminor ratings are available in the public domain through published reports and their website, while the details are available on subscription. The main users of Deminor ratings are institutional investors, both European and non-European, who use the data to inform investment decisions. Deminor's customers are mostly institutions that invest money on behalf of millions of individual small shareholders.

Deminor distinguishes four building blocks of corporate governance, referred to as categories. The first category, 'shareholders' rights and duties' captures the extent to which shareholders, including small ones, may affect corporate decisions. The second category, 'takeover defences' assesses if the company concerned has barriers against potential hostile takeovers, thereby sheltering management from the threat of replacement. 'Disclosure' measures the availability and quality of information on corporate governance. The fourth category, 'board structure and functioning' evaluates criteria such as the independence of board members and their remuneration. Each category consists of subcategories based on over 300 criteria described in Appendix 2.1. Deminor analysts exclusively use publicly available information with corporate websites, stock exchange announcements, and press articles as the main sources of that information. For each category, a company scores between 0 and 10 points and the sum gives the total corporate governance score. On the basis of the scores, Deminor assigns a rating from 1 to 5 for each category. In this chapter, we use these detailed scores (notations) since they provide the finest detail. Because notations are an intermediate step in the rating process, to avoid unnecessary confusion, throughout the chapter we refer to them as ratings.

Deminor ratings are prepared annually, the first in its current format being produced in 2000. This is the benchmark rating we use in conjunction with the 2004 rating. The year of the rating stands for the year of its preparation. Thus the ratings used in this chapter and the book refer mostly to corporate information for the first half of 2000 through to the first half of 2004.

Sample of Companies

Deminor aims to rate all companies that are constituents of the FTSE Eurotop 300 index. The index consists of the largest 300 European companies according to market capitalization (MC) (the stock market price multiplied by the number of outstanding shares).[5] In some cases, for example when a company undergoes a merger or acquisition, Deminor is unable to obtain sufficient information to rate a company. The ratings for 2000 cover 259 companies, and the ratings for 2004 cover 296 companies. We analysed companies according to the country of incorporation and industry, using the Industry Classification Benchmark prepared by FTSE in collaboration with Dow Jones. This comprised 10 industries, 18 super-sectors, 39 sectors, and 104 subsectors. Given the size of the sample of companies, in this chapter we restrict ourselves to the aggregate industries.

Many companies in the sample operate in more than one country, including countries outside Europe. Although this could affect corporate governance, the features covered in the ratings focus on the central institutions of the company. A multinational company has one set of shareholders irrespective of the number of branches, one board of directors, one set of consolidated financial statements, and usually a common disclosure policy. Therefore, assigning a multinational company to its home country in analysing corporate governance is entirely appropriate (and recognized as such in the literature).

Measures of Convergence

Measures of convergence originate from the literature on economic growth (see for a review, Islam 2003), though their application has spread beyond economics. There are many variations of convergence models, but the basic measures are beta- and sigma-convergence. So, for example, beta-convergence measures the relationship between the initial income level and the subsequent growth rate across territories. If there is convergence, the relationship (captured usually through regression analysis) should be negative with territories of a lower income level growing faster. Quah (1993) and Friedman (1994), however, pointed out that a negative beta does not necessarily mean a reduction in the dispersion of cross-sectional income distribution. This has led to the concept of sigma-convergence, understood as the reduction in the standard deviation of the cross-sectional distribution of income level or growth rate.

In this chapter, we use both concepts of convergence: beta-convergence, by analysing the relationship between a company rating in 2000 and its absolute change between 2000 and 2004; and sigma-convergence, by comparing the absolute and relative standard deviations of ratings between 2000 and 2004. We apply the measures of convergence to the whole sample but also to individual countries, groups of countries, as well as individual industries.

To complete discussion of the methodological issues, we should stress the positive character of the chapter which claims neither that corporate governance convergence is *good* nor suggests what good corporate governance *is*. Throughout the chapter, we refer to 'good' corporate governance rating instead of 'good' corporate governance. No corporate governance rating is neutral, and a Deminor rating is no exception being addressed mainly to institutional investors. Our strategy is to make the criteria of Deminor's ratings clear and explicit (see Appendix 2.1) and use this benchmark accompanied with a data-set to describe the scope of convergence. Finally, it should be acknowledged that financial institutions, including rating agencies, are underused as a source of information in social science research including economic geography and corporate governance.

Mapping European Corporate Governance (2004)

Analysis of European corporate governance begins with Deminor corporate governance ratings for 2004. The upper part of Table 2.1 presents the median values of ratings by country revealing a high degree of diversity.[6] Sample companies in the UK and Ireland (also referred to as the British Isles) lead with the median total score of 32.1 and 30.4, respectively, compared with only 19.9 in the rest of Europe (referred to as the continent). Apart from the leadership of the British Isles, sharp differences exist within the continent, with leaders in total ratings scores including companies from Sweden, Finland, the Netherlands, France, and Switzerland, and with laggards including firms from Portugal, Greece, Luxembourg, and Denmark.

More insight into the diversity of corporate governance can be gained by examining the four rating categories. The scores are lowest for takeover defences, highest for disclosure, with shareholders' rights and duties, and board structure and functioning in the middle. British and Irish corporations are leaders in all four categories, but their dominance

Table 2.1. Corporate governance ratings in 2004 (median values)

Country/Industry	N	Total	Shareholders' rights & duties	Takeover defences	Disclosure	Board structure & functioning
Austria	2	19.1	6.7	2.6	6.0	3.8
Belgium	9	18.7***	6.1**	1.0**	5.8***	5.0**
Denmark	5	17.8**	6.7	1.0**	6.2	3.6
Finland	5	22.6	7.5	1.0	7.0	6.7**
France	42	21.3*	6.5***	1.0	6.9**	6.0
Germany	32	19.6*	6.9	1.0***	6.7**	4.5*
Greece	6	17.3**	6.7	1.0**	5.3**	3.7**
Rep. of Ireland	7	30.4***	7.8	9.0***	7.6	7.0*
Italy	25	18.6***	5.7***	1.0***	6.6	5.1***
Luxembourg	2	17.8	6.2	1.3	5.6	4.8
Netherlands	21	22.6	5.5**	3.8	8.1	6.6**
Norway	5	20.3	7.7**	1.0	5.9**	5.2
Portugal	4	16.9**	4.9	1.0**	6.6	4.6**
Spain	17	19.8**	6.8	1.0***	6.5**	5.1*
Sweden	16	23.8	6.2	5.1	6.8**	5.2**
Switzerland	17	21.1	7.0	1.0	5.9***	5.7
UK	81	32.1***	8.0***	9.0***	8.1***	7.3***
Total	296	22.4	7.0	2.7	7.2	5.8
Industry—The British Isles						
Oil & gas	3	32.7*	8.0	9.0	8.3*	7.3
Basic materials	7	32.6	8.0	9.0	8.4	7.3
Industrials	9	31.4*	8.0	9.0	8.0	7.0**
Consumer goods	11	31.3	8.0	8.0	8.2	7.4
Health care	4	32.4	8.0	9.0	8.0	7.2
Consumer services	21	31.7	8.0	9.0	7.9*	7.1
Telecommunication	4	33.1	8.0	9.0	8.4	7.5
Utilities	6	32.8**	8.0	9.0	8.2	7.5
Financials	23	31.8	8.0	9.0	8.0	7.1
Total	88	32.0	8.0	9.0	8.1	7.3
Industry—Continent						
Oil & gas	7	22.4	6.1	1.0	7.1	6.1
Basic materials	15	22.4	6.4	3.6**	6.6	5.2
Industrials	28	22.0**	6.7	3.0**	6.9	5.4
Consumer goods	31	19.7	6.8*	1.0	6.5	5.1
Health care	12	19.4	6.6	1.0	6.8	5.2
Consumer services	19	21.3	6.5	1.0	6.5	6.6*
Telecommunication	18	19.9	6.6	1.0	6.8	5.0
Utilities	12	19.6	6.2	1.0	7.0	5.0
Financials	60	19.2*	6.3*	1.0	6.6	5.1
Technology	6	19.6	6.5	1.0	6.7	5.3
Total	208	19.9	6.4	1.0	6.7	5.2

Note: Significance at 10%(*), 5%(**), and 1%(***) level—for details of the test see n. 6.
Source: Authors, based on data from Deminor and FTSE.

over continental firms varies considerably. It is strongest in terms of takeover defences, where British and Irish firms reach a high median rating of 9 while companies from continental countries typically score 1. Their ratings are weakest in the remaining categories with Finnish and

Dutch firms not far behind in terms of disclosure as well as board structure and functioning, and with Finnish and Norwegian companies similar in governance quality in terms of shareholders' rights and duties.

Given that the British and the Irish Deminor companies command systematically higher ratings than firms from the rest of Europe, we conducted an analysis of corporate governance by industry separately for the British Isles and the continent. Without this division, the distribution of company ratings within each industry is likely to have wide ranges and similar median values. Potential differences between industries would thus be blurred. This method also enables comparison of differences between continental industries with differences in the British Isles. Due to the small size of the sample, a more detailed analysis of industries within individual countries is not possible.

The lower part of Table 2.1 presents median corporate governance ratings by industry for the British Isles and the continent. It is difficult to distinguish any industries that are leaders or laggards in corporate governance. Indeed if the significance level were set at 1 per cent, no single industry median is significantly different from the median of other industries. The medians are also similar in the British Isles and on the continent. This observation holds for all Deminor categories, with the exception of takeover defences, where utilities lag in the British Isles and basic materials and industrials lead on the continent. Differences between countries are thus more pronounced than between industries. Every continental industry has a median score for board structure and functioning between 5.0 and 6.6, while for continental countries it varies between 3.6 and 6.7. Furthermore, every continental industry has a median rating of disclosure between 6.5 and 7.1, while for continental countries it differs from 5.3 to 8.1. Similarly, the median shareholders' rights and duties rating of continental industries falls within the narrow band of 6.1 to 6.8, while for countries it stretches from 4.9 to 7.7.

To go further in examining the significance of industries, we ranked them in the British Isles and the continent according to their median rating, comparing the rankings between the continent and the British Isles. The results show few traces of similarity. In terms of total ratings, for example, industrial companies perform well on the continent but lag behind on the British Isles. We calculated Spearman's rank correlation, also known as *rho* correlation, between the industrial ranking in the British Isles and the continent and found no significant correlations for any corporate governance category. In conclusion, there is no sign of an

industry effect on corporate governance holding across the North Sea and the English Channel.

The foregoing analysis paints a picture of diversity. If there has been convergence, it has not yet made corporate governance in large European firms similar across countries. These results confirm research findings on the difference between the Anglo-American model of corporate governance, with the examples of the UK and Ireland, compared to the continent (see La Porta et al. 1998; Barca and Becht 2001). In addition, our findings show a complex diversity of corporate governance within the continent. While companies from southern European countries record lower ratings than those from northern countries, there is no simple geographical pattern. Within Scandinavia, for example, there is a full range of ratings, from high in Sweden and Finland, through average in Norway, to low in Denmark (see also Wójcik 2002*a*). Overall, the 2004 map of European corporate governance revealed a high level of diversity driven by country-specific factors, the significance of which is underscored by the lack of significant differences between industries.

Change in Corporate Governance (2000–4)

In order to account for change in the composition of the sample between 2000 and 2004, the database was divided into three groups of companies. The first group (the core) consisted of firms included in the sample in 2000 and 2004. The second group (dropouts) represented companies included in the sample in 2000 but not in 2004. A company can disappear from the sample due to delisting, takeover by another company, or bankruptcy and, most likely, its exclusion from the FTSE Eurotop 300 index as a result of a relative decrease in market value. The third group consisted of 'novices', that is companies that appeared in the sample after 2000 most probably due to an increase in relative market value. As Table 2.2 shows, over four years companies in the core improved their scores considerably while the median total ratings of dropouts and novices did not differ significantly from the ratings of the core in 2000 and 2004 respectively.

Focusing on the structure of change, median scores for shareholders' rights and duties and for takeover defences did not change significantly, leaving change in the total score driven by an increase in the ratings score for disclosure as well as board structure and functioning. The second part of Table 2.2, presenting the median absolute change in ratings by country, confirmed that ratings for takeover defences hardly changed reflecting the high level of ownership concentration on the European continent

Table 2.2. Change in corporate governance ratings between 2000 and 2004 (median values)

Country/Industry	N	Total	Shareholders' rights & duties	Takeover defences	Disclosure	Board structure & functioning
Core in 2000	190	17.7***	6.3**	2.0	4.7***	3.9***
Core in 2004	190	23.2	6.7	3.7	7.4	6.2
Dropouts	69	18.9	6.9*	4.0	4.6	3.5
Novices	106	20.9*	7.3**	1.0*	6.6***	5.4**
Country						
Belgium	8	2.6	−0.2***	0.5	1.7**	0.5
Denmark	3	7.9	0.4	0.0	2.9*	1.8
Finland	3	2.7*	−0.2	−3.2	1.6	2.9*
France	30	4.3	0.1***	1.0	2.3	1.4
Germany	22	3.0***	−0.2***	−1.6**	3.1***	1.7
Greece	1	−8.7	−0.3	−9.0	0.8	−0.1
Rep. of Ireland	3	2.2*	0.7	−1.0	1.5*	1.0*
Italy	15	3.9	−0.6***	1.0	1.9	1.5
Netherlands	17	10.7***	1.8**	1.0***	3.2***	3.3***
Norway	1	6.4	1.9	−0.8	2.6	2.7
Portugal	3	7.7*	0.7	1.0	4.3*	2.5*
Spain	9	6.7	1.2	1.0	3.4**	1.1
Sweden	12	3.7	0.8	−1.4	3.3**	1.8
Switzerland	11	6.0***	1.1*	0.0	3.5***	3.4**
UK	52	4.5	1.1***	1.0***	1.5***	1.1***
Total	190	4.6	0.6	1.0	2.3	1.5
Industry—The British Isles						
Oil & gas	3	12.4	1.1*	8.4	1.7	1.2
Basic materials	4	7.0	1.2	2.5*	1.2	0.9
Industrials	6	4.6	1.2	1.0	1.4	0.8*
Consumer goods	8	4.2	1.1	0.5	1.5	1.6
Health care	3	5.3	1.9*	1.0	1.7	1.2
Consumer services	10	4.0***	0.6*	1.0	1.6	1.2
Telecommunication	3	13.9	2.8	9.0	1.6	0.9
Utilities	5	14.2	3.0	9.0	1.7	1.3
Financials	13	2.3	0.7	−0.4	1.3**	0.5**
Total	55	4.4	1.0	1.0	1.5	1.1
Industry—Continent						
Oil & gas	4	4.1	0.5	1.0	2.2	1.1
Basic materials	12	4.1	0.5	−0.4	2.6	1.6
Industrials	13	2.5**	0.2	−1.5*	3.2	1.3
Consumer goods	21	5.0	0.2	1.0	2.5	1.6
Health care	6	5.1	0.2	0.0	3.5	2.6
Consumer services	14	6.1*	0.4	1.0*	2.7	2.0
Telecommunication	12	6.4*	0.4	1.0***	2.7	2.0
Utilities	8	6.1	0.9	0.0	3.5	1.3
Financials	41	3.6	0.0	0.0	3.0	1.8
Technology	4	7.3**	0.3	1.0	2.9	2.3
Total	135	4.8	0.2	0.0	2.9	1.8

Note: For the four groups of firms at the top of the table the equality of medians was tested for the following pairs:

Core 2000 and Core 2004, Dropouts and Core 2000, Novices and Core 2004;

The results for countries and industries are for core companies only;

Significance at 10%(*), 5%(**), and 1%(***) level—for details of the test see n. 6.

Source: Authors, based on data from Deminor and FTSE.

which acts as a barrier to hostile takeovers, as well as the stalemate in European takeover regulation (Ferrell 2003). In contrast, shareholders' rights and duties did change in individual countries, but the changes tended to cancel each other out at the aggregate level. In every country except Greece ratings for board structure and functioning increased and disclosure ratings increased by at least 1 point. The improvement in these categories was consistent—with the exception of Greek sample firms. The median total corporate governance rating increased in every country with the Dutch and Swiss sample firms in the lead. The level of increase in disclosure and board ratings on the continent was nearly double that in the British Isles. Regarding the differential pace of change by country, these results support the qualitative findings of O'Sullivan (2003) who claimed that changes towards the parameters of the Anglo-American corporate governance were more advanced in France than Germany.

The lower part of Table 2.2 reports the median absolute change in ratings by industry. Since the values are quite similar between industries both in the British Isles and on the continent it is more difficult to find significant differences between industries than between countries. Nevertheless, if we rank the industries according to the median absolute change in ratings for shareholders' rights and duties, the ranking obtained is similar between the British Isles and the continent with a Spearman's *rho* correlation coefficient of 0.61 (significant at 5% level). On the continent and the British Isles industries that improved the most included utilities; those that improved the least included financials. Interpretation of this pattern requires more detailed research (see below).

To summarize our findings, although high levels of diversity (2004) suggest scepticism about convergence in European corporate governance, the rate of recent changes in scores (2000–4) suggests that convergence may be at work. As Table 2.1 shows, there were large differences between the British Isles and the continent. Nonetheless, Table 2.2 also shows that the latter has narrowed the gap, particularly in terms of disclosure as well as board structure and functioning.

Convergence in European Corporate Governance

This section assesses whether there has been any convergence *within* the continent and within the British Isles. As a proxy of beta convergence, Spearman's rank correlation was used to measure the relationship between the starting rating of company corporate governance in 2000 and its

absolute change between 2000 and 2004.[7] The coefficients presented in Table 2.3 are negative and highly significant for all categories for both the continent and the British Isles indicating that companies that performed relatively poorly (in ratings) in 2000 were catching up. Even so, the correlation coefficients are higher for the British Isles than for the continent suggesting stronger convergence within the UK and Ireland than within the rest of Europe.

Turning to sigma convergence, the standard deviation of corporate governance ratings as well as the coefficient of variation was compared between 2000 and 2004. The results presented in Table 2.3 show similarities and differences between the continent and the British Isles. On the continent, the standard deviation in absolute terms decreased for each category with the exception of board structure and functioning and the coefficient of variation fell for all categories. Ratings for disclosure exhibited the highest level of sigma convergence with the standard deviation falling from 29 to 15 per cent of the mean rating. In the British Isles, coefficients of variation halved for each category. Both the absolute and relative declines in the standard deviation of ratings in the British Isles were much higher than on the continent, confirming a strong convergence within the British Isles compared with a weaker convergence within the continent.

In calculating beta and sigma convergence, we used data for core companies. But the results are similar if calculations use the full sample of companies for both 2000 and 2004. Table 2.4 presents the absolute and relative change in standard deviation of total corporate governance ratings by country and industry. The absolute standard deviation of total ratings decreased for sample firms within the UK, Germany, France, and Italy as well as in eight out of nine sectors in the British Isles and in six out of ten on the continent. This is consistent with the weaker level of convergence found within the continent in relation to the British Isles. When we express the standard deviation in relation to mean, however, the proportion of industries on the continent with evidence of convergence rises to eight out of ten. Comparison of the strength of sigma convergence between industries on the continent and in the British Isles yields mixed results. Telecommunication firms are leaders of convergence on both the continent and the British Isles; on the other hand, health care companies are leaders on the continent but laggards on the British Isles.

To summarize, there is significant evidence of beta and sigma convergence within both the British Isles and the continent. Convergence within the British Isles is strong, while within the continent it is weaker

Table 2.3. Corporate governance convergence

Category	Continent					The British Isles				
	Spearman's rho	St.dev. 2000	% of mean	St.dev. 2004	% of mean	Spearman's rho	St.dev. 2000	% of mean	St.dev. 2004	% of mean
Total	−0.63	4.70	28	4.26	20	−0.80	4.87	19	3.15	10
Shareholders' rights and duties	−0.65	1.41	24	1.11	18	−0.84	1.15	18	0.65	8
Takeover defences	−0.78	3.49	114	2.62	90	−0.79	3.62	55	2.53	32
Disclosure	−0.58	1.20	29	1.00	15	−0.78	0.44	7	0.32	4
Board structure and functioning	−0.47	1.12	31	1.17	21	−0.73	0.60	10	0.45	6

*N*ote: Spearman's rho correlations are calculated between a company rating in 2000 and the change in the rating between 2000 and 2004; all correlation coefficients are significant at 1% level.

Source: Authors, based on data from Deminor.

Table 2.4. Convergence of total ratings by country and industry

Country/Industry	1	2	3	4	Change in standard deviation	
	St.dev. 2000	% of mean	St.dev. 2004	% of mean	Absolute (3−1)	Relative (4−2)
Belgium	1.50	10	2.43	13	0.93	4
Denmark	3.59	29	1.29	7	−2.30	−21
Finland	4.44	19	3.69	14	−0.76	−5
France	4.54	25	3.71	16	−0.83	−9
Germany	4.40	24	3.02	15	−1.38	−10
Rep. of Ireland	0.83	3	0.77	2	−0.06	0
Italy	3.79	22	2.65	14	−1.14	−8
Netherlands	3.37	25	3.98	17	0.60	−9
Portugal	1.02	12	0.46	3	−0.56	−9
Spain	1.55	11	3.60	17	2.05	6
Sweden	5.13	28	4.41	19	−0.72	−8
Switzerland	5.74	39	6.62	29	0.88	−10
UK	4.88	19	3.23	10	−1.65	−9
Total	6.21	33	5.85	24	−0.36	−8
Industry—The British Isles						
Oil & gas	5.58	25	0.55	2	−5.03	−24
Basic materials	2.74	10	1.92	6	−0.81	−4
Industrials	5.57	23	4.98	17	−0.59	−6
Consumer goods	5.41	22	1.14	4	−4.27	−18
Health care	0.07	0	0.45	1	0.38	1
Consumer services	4.75	19	4.73	17	−0.02	−2
Telecommunication	7.66	34	1.12	3	−6.54	−31
Utilities	5.89	27	0.47	1	−5.42	−25
Financials	2.53	9	0.97	3	−1.56	−6
Industry—Continent						
Oil & gas	2.61	16	4.08	18	1.47	2
Basic materials	4.78	26	4.52	21	−0.26	−5
Industrials	3.50	16	3.74	15	0.24	−1
Consumer goods	4.60	31	4.02	19	−0.58	−11
Health care	4.07	27	1.06	5	−3.01	−21
Consumer services	5.03	31	4.54	20	−0.49	−12
Telecommunication	5.37	36	3.46	17	−1.91	−20
Utilities	4.11	29	3.45	17	−0.65	−12
Financials	4.19	25	4.86	23	0.67	−2
Technology	1.36	11	3.38	16	2.02	6

Note: All figures are rounded, and so the rounded differences (3−1 and 4−2) may not equal the differences between the rounded figures (1, 2, 3, and 4).

Source: Authors, based on data from Deminor and FTSE.

although it occurred within all major countries. The pace of convergence differs between different aspects of corporate governance, and is highest with regard to disclosure (an issue most important to portfolio managers). Industries exhibit no clear pattern in differences either in terms of the absolute level of corporate governance ratings or in terms of their change.

Implications and Conclusions

The objective of the chapter was to assess convergence in the map of European corporate governance, addressing the deficit of empirical evidence on the patterns of corporate change. To meet this objective, we used proprietary data on the corporate governance ratings of nearly 300 of the largest European companies between 2000 and 2004. The data provided by Deminor Rating SA offers an insight into the structure of corporate governance, with its building blocks comprising shareholders' rights and duties, takeover defences, disclosure, as well as board structure and functioning. The analytical steps undertaken to measure convergence in ratings focused on the state of corporate governance in 2004 and its change between 2000 and 2004 across countries, groups of countries, and industries.

From this analysis, it was observed that there has been convergence in European corporate governance. Between 2000 and 2004, almost all sample companies improved their ratings even if the rate of change has been uneven both across countries and across the building blocks of corporate governance. Most importantly, continental European companies improved their scores more than their counterparts in the British Isles with Dutch, French, and Swiss corporations as the leaders of change on the continent. The structure of change was different between the British companies and the continent. While British companies improved their ratings for shareholders' rights and duties, on the continent the latter did not improve consistently and ratings for takeover defences did not change at all. The categories that improved in a spectacular way, and in all countries, were board structure and functioning, and disclosure. In addition to continental European companies making a step towards Anglo-American corporate governance, there is evidence of convergence within the continent and within the British Isles. In the UK and Ireland, companies with lower ratings in 2000 caught up quickly particularly in terms of disclosure. On the continent, disclosure also exhibited the highest degree of convergence although the overall pace of convergence was much slower than in the British Isles. Nevertheless, evidence for convergence was found within every major European country.

A second conclusion was that countries do matter, as reflected in the diverse 2004 map of European corporate governance. British and Irish companies led with high ratings in almost every category of corporate governance. This finding is consistent with existing research on the divide

between the Anglo-American and the continental European regimes of corporate governance. Nevertheless, our research demonstrates that diversity among companies within continental Europe is pronounced, including systematic differences between countries. In contrast, diversity of corporate governance ratings across industries is strikingly small. It is possible that a classification of only ten sectors is too shallow to capture differences, and any industry classification is inadequate for large companies with activities covering various industries. It is also possible that sectors differ in their influence on corporate governance from country to country. Notwithstanding the methodological issues, the evidence suggests that country-specific factors affecting corporate governance and its evolution overwhelm industry sector-specific factors.

Considering factors driving convergence, it is worth considering the role of corporate governance ratings. Their existence reflects a demand for metrics or standards. Rating agencies rarely put pressure on rated companies to change corporate governance practices—but their customers, and particularly institutional investors, do. Indeed, there is evidence of institutional investors exercising such power. In chapter 7, on cross-listing and the inter-market arbitrage of stock market prices, we show that institutional investors directly intervened in the governance of Ahold to drive up disclosure standards. Likewise, Hebb (2006) showed how institutional investors have prompted firms to adopt higher transparency standards. These findings are consistent with the evidence of this chapter showing the significance of countries, and highlighting disclosure as the standard which is most in play in the convergence of corporate governance in Europe.

While this chapter focuses on the largest European corporations, there are two ways in which the results are indicative of broader processes of change in European corporate governance. The first has to do with the evolution of companies. As smaller companies grow and consider accessing to public capital markets and international investors, they are likely to model their corporate governance on the practices of larger companies. In effect, as they grow firms become increasingly responsive to the global forces already affecting larger companies. Secondly, legal, accountancy, and audit firms provide companies with many services including those related to corporate governance. There is, no doubt, a highly differentiated European and national market for such services. But as firms grow and shift towards larger firm service providers they also must adapt to their expectations. Audit requirements apply to tens of thousands of European firms, not only the publicly traded firms (for example). As the

Big Four companies increasingly dominate the market for audit services they also impose the expectations of global financial markets.

One implication of this chapter, and simultaneously a challenge facing economic geography, is the importance of global financial processes in the study of 'local' corporate transformation. For the sake of illustration, let us use the framework of the bargaining relationship between transnational companies and host countries, applied to conceptualize the territorial structure of firms (see Dicken 2003). Inevitably, this means accounting for the power relations within the firm, and in particular the bargaining power of shareholders. This is a complex matter since governments can represent shareholders, while shareholders invest mostly through institutional investors often large and transnational in scope, able to bargain with governments. Nevertheless, this kind of complexity is increasingly the case as the power of dispersed shareholders and global institutional investors rises relative to conventional majority blockholders (see Chapter 8 in this volume).

The significance of corporate governance for the understanding of corporations and the rise of shareholder friendly corporate governance in Europe have important implications not only for the theory, but also for the practice of economic geography. In researching firms, and the actors associated with firms, economic geographers have traditionally focused on top managers and employees. Corporate governance research, developed mostly at the intersection of law and economics, stresses the relationship between owners and managers without privileging one or the other as the subject of research. This is not to say that economic geographers researching the strategy of a particular company should interview shareholders instead of interviewing managers. Rather, we should acknowledge the growing impact of shareholders on the development of particular companies and the whole corporate world.

The chapter draws a picture of an undeniable shift of large European corporations towards corporate governance standards more consistent with the expectations of global investors. There are, nevertheless, limits to how much we can learn by studying synthetic indicators of corporate governance regimes within and across countries. Time series data on four major aspects of corporate governance cannot capture the complex and multifaceted character of phenomena taking place in different firms and places. In order to uncover the richness of processes involved in the emerging global marketplace for corporate governance, the second part of the book explores the dynamics of corporate governance in Germany. As indicated in here, large German corporations had corporate governance

scores below European averages, and have improved those at a rate which, at best, can be called *average* by European standards. How do the forces of convergence and resistance to convergence operate, and through what channels? How have they influenced, or not, different regions, sectors, and firms within Germany? These are fundamental questions that are dealt with in Part II of the book.

2.1 Appendix

Major criteria considered within the Deminor Rating SA corporate governance rating categories (based on Deminor Rating 2003).

Shareholders' Rights and Duties

The major criterion concerns the one-share one-vote one-dividend principle, the violation of which implies that some shareholders are privileged over others. It is also important whether there are procedures in place to make voting easy for shareholders. In addition, shareholders should be able to file items on the agenda before and during the General Meeting. High attendance rates at the Annual General Meetings are also interpreted as signs of good corporate environment for shareholders. Further, according to Deminor's standards, the pre-emptive rights of existing shareholders should be guaranteed to ensure that their voting power cannot be diluted without their consent. In other words, existing shareholders should be offered new shares before they are sold to new investors.

Takeover Defences

Involves the presence and the strength of devices that can be used to protect the company from a hostile takeover. According to Deminor's rating standards, incumbent management should not be able to block a takeover attempt at the expense of shareholders. Some anti-takeover devices result from the ownership structure. A majority shareholder, for example, can make a hostile takeover impossible, irrespective of the interests of minority shareholders. Other devices making a takeover impossible or unattractive to a hostile bidder can usually be found in the company's statutes and include management or board members making themselves impossible to dismiss (board and management insulation) or dismissible only after a hefty payment (golden parachutes).

Disclosure

This category addresses the question whether shareholders are able to obtain convenient and comprehensive information about the company's financial matters as well as its governance characteristics. To comply with Deminor standards documents available online, and in English, should include: annual, half-year, and quarterly reports; articles of association, agenda and minutes of the last general

meeting, board code of conduct, environmental report, and corporate governance statement. Financial statements should be prepared according to widely accepted accounting standards, and there should be an investor relations department assisting shareholders with questions and requests. In addition, the company should provide information about its board (who are the members, how frequently they meet, and how much they earn), the structure of shareholders, as well as internal and external auditors.

Board Structure and Functioning

The major factor refers to the composition of the board of directors. The board should include members who are independent from both the company management and major shareholders. Board as a whole should be diverse in composition in terms of gender and background. The same person should not take the positions of the chairperson of the board and the CEO. Board members should meet frequently; the board should have separate audit, appointments, and remuneration committees, and a code of conduct. While compensation of directors with executive positions should be linked to financial results, the remuneration of directors with purely supervisory roles should rather be linked to attendance rates.

Notes

1. The estimated employment of the largest 300 publicly listed European companies is about 15 million people based on data from *Financial Times* 500.
2. Consider the geographical spread of research on corporate governance, which started in the earnest in the USA in late 1970s following Jensen and Meckling (1976). In late 1980s, it had moved to other leading developed economies: Germany, Japan, and the UK. Only in the late 1990s, had it become a worldwide research programme including the emerging economies.
3. One of the arguments for the superiority of the open regime is that dispersed ownership mean shareholders' wealth depends on diversified portfolios of investments (held directly or through institutions such as pension funds and mutual funds). Since the risk of a diversified portfolio is lower, shareholders require lower return relative to the risk. This in turn lowers the cost of capital faced by corporations, and makes capital for more risky ventures more available (see Errunza and Losq 1985; Rajan and Zingales 2001).
4. According to Roe (2003: 594), political factors have affected the concentration of USA incorporations into Delaware. Incorporations mean tax revenues and a booming corporate law business, both important for this tiny state with few other industries or services.
5. Strictly speaking, the index consists of the largest 300 eligible European companies. To be eligible a company must either have a free float of at least 15% or have a free float above 5% and market capitalization greater than

US$ 5 billion (US$ 2.5 billion if it is incorporated in an emerging market country). For details of this and other European FTSE indices, see FTSE (2004).

6. As the distribution of ratings is not normal and symmetric, we used a non-parametric median method testing the null hypothesis that a given country or industry has the same median rating as the rest of the sample, i.e. all other countries or industries. This test does not require any assumptions about the distribution of the variable. Based on calculated χ^2 values, asymptotic significance is calculated which tells us how often we can expect a χ^2 value at least as large as that calculated in similar repeated samples if there is no relationship between the medians. Simplifying, an asymptotic significance of 0.04 tells us that the chance that the medians are equal is 4 out of 100.
7. Considering that ratings are defined over a closed number system, we have performed alternative calculations of beta convergence. First, we removed from the sample all companies with rating 10 in any subcategory in 2000. Second, we used square ratings (and differences between square ratings) instead of straight ratings. In both cases, the results led to conclusions similar to those based on calculations using straight ratings for all companies, including those with ratings of 10 in 2000.

Part II

German Model(s) in Play

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3

Portfolio Investors and the German Model

European economic integration, the formal and not so formal incorporation of central and eastern Europe into the EU, and the promotion of a single market designed to rival North America challenge assumptions of persistent difference. There is little doubt that European nation-states are increasingly vulnerable to European and global capital markets; the pricing of the euro on foreign exchange markets represents an important instance of accelerating capital market integration even if there may be widespread disagreement about the euro's underlying value and its survival against other currencies. If it were simply an issue of currency trading, economic geographers would have less to say than other specialists about the matter. But there are important issues that deserve attention, most notably the geographical foundations of global capital markets. Institutional investors around the world are confronted time and again with a basic question: should investment strategies be based on countries (assuming the continued segmentation of capital, labour, and commodity markets) or sectors (assuming that sectoral integration across borders now dominates the past)? The answer to this question has enormous implications for whole nation's systems of corporate governance and welfare.

Proponents of sector-based investment strategies believe stock prices are now (or at least will be soon) determined largely by factors common to a company's industry rather than by the factors of a company's origin or listing. For instance, the stock price of FIAT should behave more like the prices of other global car manufacturers than those of Italian non-auto companies. This view assumes that companies engaged in the same type of activities are subject to European and global competition which transcends borders. In fact, it is arguable that neither sector- nor

country- nor even company-specific information can improve investment performance: all information affecting a stock price is (or should be) built into quoted stock market prices; that is, capital markets are presumed to be informationally efficient. The implications of this theory of market performance for investment management are far-reaching—instead of collecting 'local' information to beat the market, investors should use passive index-based strategies to obtain the average market return (at the national and global scales). As soon as we consider the role and status of geography in global finance, we must also confront difficult questions about the structure and efficiency of capital markets themselves.

In this chapter, we combine financial data with research on the geography of the German capital market in order to assess the relationship between corporate governance and stock price volatility. We argue that the informational efficiency and integration of European capital markets are low. Information on corporate affairs is far from ubiquitous. Professional investors benefit from searching for information, locating themselves close to the sources of information, and analysing information intensely. Evidence from Germany shows that countries' borders *and* regions matter for market transparency and efficiency: nation- and region-specific financial alliances and institutions (systems of corporate governance) have a profound effect on the functional structure of European capital markets. What is more, the inefficiency of European capital markets is reflected in the structure of the investment management industry with an overwhelming majority of European funds being actively managed.

In the next section, we present our argument in the light of the existing research on the geography of finance. The third section introduces basic issues of investment theory such as market efficiency and its relationship with integration. It also outlines the effects both of these phenomena can have on investment strategies. In the fourth section, we present evidence on the factors affecting market integration and efficiency in Europe, focusing on the role of information and market transparency. The fifth section analyses in detail the structure and performance of the German stock market. The implications of our findings for the current state of investment management in Europe are noted in the penultimate section. The final section summarizes our findings and links the results to recent debate about path dependence.

Geography of Finance

There is a massive and growing literature devoted to global finance. Much of this literature is to be found in the cognate disciplines of economics, finance, and comparative corporate governance (Barca and Becht 2001). In geography, the topic has been less studied in detail than it has been critically discussed, although this is changing as is evident in the proliferation of articles and papers in the relevant journals. See, for example, papers by the Laulajainen (2001) on the implications of global electronic trading platforms for nation-state stock markets, and Clark and Wójcik (2001) on the role of local knowledge in driving the London stock market's adjustment to global financial crisis. For economic geographers, the presumption is that geography matters; the trick, however, is to show how and why this claim is true given presumptions commonly broadcast in the media and elsewhere that geography has evaporated in the face of global financial imperatives.

Of the many ways of approaching the topic, we emphasize three relevant to geography. One way to proceed would be to document the flow of finance around the world through time and space. We could create an atlas of flows drawing on official data available from institutions, such as the Bank For International Settlements and the World Bank, just as we might link those flows to the 24-hour trading clock and the role of global markets such as Tokyo, London, and New York (in that temporal order). Time and space, flows and trades, and moments of overlap and accountability within and between financial institutions across time and space are essential points of reference in understanding financial flows (Clark and Thrift 2005). These are also essential points of reference for corporations and regulatory institutions as they monitor the actions of individuals and their trading partners (witness acts of subversion by so-called 'rogue traders' located in firms such as Barings-Singapore, Allied Irish Bank-Baltimore, and so on). The geography of time is a fitting complement to this kind of financial analysis (Clark 2005*b*).

Another way of proceeding would be to focus on the role and significance of borders in segmenting financial systems. For instance, we could emphasize the distinctive legal traditions that divide the world into very different regulatory and financial systems (see the work of La Porta et al. 1999). At issue here is the extent to which national borders are deeply embedded in the global flow of funds, and the extent to which these borders persist in the face of accelerating countervailing imperatives of

integration and harmonization. See, for example, recent work on the implications of the harmonization of international accounting standards for the continuity of nation-state institutions and their matching social and economic relationships (Clark 2003*b*). If geography is taken seriously in this manner, it is an issue that has gained increasing significance as it has come to be realized that the origin and transmission of global financial crises may be located, in part, in the co-existence of very different financial regimes and their embedded behavioural and institutional imperatives (see the various reports on the Asian crisis and its international transmission; Clark and Wójcik 2001).

A third way of proceeding, and the one followed here, would be to analyse the spatial and temporal heterogeneity of information. In economics, there is a presumption in favour of market efficiency: by the logic of the efficient market hypothesis, the only surprises are to be found in new information that is systematic neither in its origin nor in its timing. Otherwise, or so the argument goes, these events would be priced into market expectations and discounted as a consequence (see Fama and French's recent review and re-assessment (2005)). By contrast, many studies in geography and finance point to the existence of local, intimate, and often highly differentiated networks of market information that translate into differentiated patterns of expectations within and between markets (see, e.g. Amin and Thrift (1992) on the City of London, and Wilhelm and Downing (2001) on intellectual capital and financial innovation). Importantly, financial theorists have come to recognize that information and expectations can be highly differentiated within and between markets. Witness the work of Shleifer (2000) on the co-existence of different kinds of traders in the most 'efficient' stock markets of the world.

This kind of perspective on the geography of finance can be traced to early work of Alan Pred (1973) on the circulation of information within city systems, and more recent work by Manuel Castells (2000) on networks and communication in post-modern societies. In essence, we contend that information is systematically channelled rather than shared using universal mechanisms of transfer and transmission. Even so, we would readily acknowledge that there is more information available now than ever before to market participants linked to global information networks. There can be no doubt about the significance of the revolution in access to market information, nor can there be any doubt about the massive volume of real-time transfers of market information between remotely located market agents. Presumably, this means that most market

traders, whatever their space-time location, have access to much the same information for making investment decisions about financial trends and expectations. But there are real doubts about the relevance of this information, just as there are many doubts about the integrity and veracity of this information. Information is not knowledge. We must not confuse the quantity of information available with its quality as illustrated by the accounting scandals involving companies such as Ahold (Chapter 7), Enron, and WorldCom (Clark et al. 2004).

But note that the presumption in favour of ubiquitous information is actually a presumption about a certain kind of market or markets (nominally Anglo-American). It is important to recognize that there may be systematic differences between markets in the nature, quantity and quality of information shared between market participants. In market regimes characterized by a high degree of cross-shareholdings and internal cooperation between financial institutions, information often circulates internally before it is transferred or leaks out into third-party market institutions. Continental European market regimes have been quite different from Anglo-American market regimes in this respect. Not only may there be differences between market agents in the quality of information, there may be also systematic differences between market agents in their access to the quantity of information necessary to make informed investment decisions. This is an important distinguishing characteristic of national regimes of corporate governance, one that is crucial to the issue of global capital market integration.

By focusing on the channelling of information within and between financial markets, we are able to consider the nature of investment practices and market institutions in the context of global finance. In doing so, our goal throughout the book is to take geography seriously but in a way that goes beyond documenting the existence of different regulatory regimes to the interaction between those institutions and the actions of market agents located within and without those markets. Financial information, in this regard, flows across space and time in ways that are managed, rather than simply absorbed by market participants.

Investment Theory and Practice

According to Fama (1991), an *efficient* financial market is 'one in which security prices always fully reflect the available information'. Depending on the scope of information embodied in market prices, we can

distinguish three versions of the efficient market hypothesis. The weak version asserts that stock prices 'already reflect all information that can be derived by examining market trading data such as the history of past prices or trading volume' (Bodie et al. 2002: 342). The semi-strong-form hypothesis states, 'all publicly available information regarding the prospects of a firm must be fully reflected in the stock price' (p. 343). In addition to past prices and volumes, publicly available information includes data on firms' product lines, management, financial standing, and earnings forecasts. Finally, the strong version of the efficient market hypothesis states that 'stock prices reflect all information relevant to the firm, even including information available only to company insiders' (p. 343).

Belief in the efficient market, or the lack thereof, has had a crucial impact on the choice between two generic types of investment management. To summarize,

> *active management* entails an attempt to seek out and purchase mis-valued securities, with the implicit assumption that the market is inefficient and that not all information is present in securities prices. *Passive management* assumes that the market is efficient and hence returns are maximized by 'holding the market.' Reflecting transactions and management costs, active management invariably entails higher fees than passive. Davis and Steil (2001: 61)

In passive management, the objective is to equal the return on a market index. This can be accomplished by 'purchasing all of the component securities of the index in identical proportions' or by purchasing 'a statistically representative sample of stocks whose combined total return will closely approximate that of the index' (Pozen 1998: 214). Active managers, by contrast, may switch between broad asset classes (cash, bonds, and stocks), between countries, and between specific stocks or groups of stocks (sectors, regions, and firms), in the hope of beating the available market return (see Clark 2000).

According to a study by ABN AMRO (Betson 2000), these two types of investment management are complementary and their relationship evolves over time according to the maturity of the market. Immature markets with few experienced investors are often very inefficient and the potential benefits of an active investment strategy loom large. With time, as competition between active managers grows and as the market becomes increasingly efficient in terms of the processing of transactions, this creates opportunities for passive investment products. And as regulatory regimes become focused on market transparency, at some point competition between active managers forces some out of the market.

Passive management is one response to market efficiency but cannot be the only strategy pursued by all investors—the shift from active to passive strategies as well as the exit of some active managers can create mis-pricing. In the last stage of the development process, an equilibrium persists where 'there are enough active managers to stop prices going too far from fundamental value, but not too many so that there are no mis-pricing opportunities to justify the cost of fundamental analysis' (*IPE* 2000: Nov).

Taking this issue into the European domain, Solnik (2000: 161) argued that international market efficiency should be 'viewed in terms of international *market integration* or *segmentation*'. Assume (against the evidence) that continental Europe is a set of perfectly efficient but closed national markets with no international diversification of financial assets. Assume a listed company in Germany, the shares of which are traded at €10, surprises the market by introducing a new technology. This innovation is expected to increase the value of the company by €2 per share. By assumption, all investors will value the company at €12 per share virtually immediately. Now, assume there is a foreign investor (an Italian) who neither speaks German nor has immediate access to German company information. What happens after the announcement of the innovation? German investors would immediately value the company at €12, but the Italian would still value it at €10 and would sell shares at prices above €10. The share price would not adjust as quickly as the market takes time to adjust to Italian trades, with German investors buying the stock for less than €12 at the expense of the outside Italian investor.

Figure 3.1 presents in a simplified manner the impact of efficiency and integration on European investment strategies. We distinguish between the allocation of funds within countries and the allocation of assets between countries. The allocation strategy within a country is determined by the level of market efficiency in a country, while the strategy of allocation between countries is determined by the level of integration. The more inefficient a country's capital market, the more likely active investment strategy is the most viable option. The more integrated are national capital markets with one another, the less an investor would benefit from analysing the specific conditions of the countries involved. In an immature market where both efficiency and integration are low, investors benefit from active security selection. This involves a bottom-up strategy of searching for mis-priced securities on the basis of a wide array of information, starting from the circumstances of particular companies through country-specific and sectoral-specific considerations.

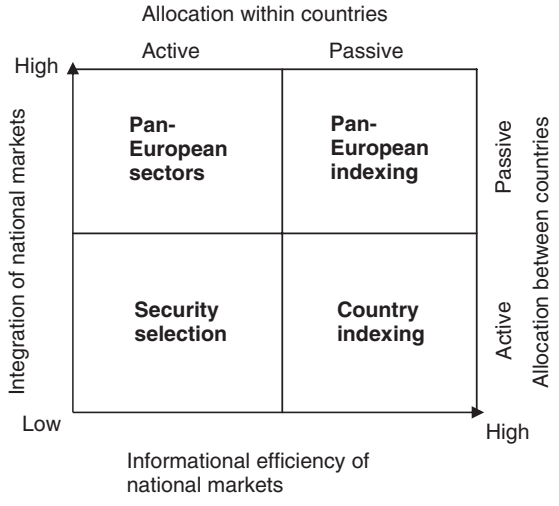

Figure 3.1. The choice of investment strategy as a function of market efficiency and integration

Source: Authors

Imagine now that a step is taken towards the integration of a set of inefficient markets by means of the introduction of a common electronic trading platform and a common clearing and settlement system through which investors from any European country can buy and sell securities from any other country at a reasonable cost. This would take us to the upper left part of Figure 3.1. Integrated but still inefficient national markets would imply a European economy that is a set of firms and industries. Security selection would still be viable but it would be based more on the analysis of sectors than countries. By contrast, with a high level of efficiency in poorly integrated national markets, an investor would benefit from identifying mis-priced national markets but within these markets would pursue a passive strategy. Finally, a Europe of highly efficient and integrated markets would suggest the most passive and top-down of all strategies—pan-European indexing using one of a variety of index products including the FTSE Eurotop 300.

Capital Market Integration and Efficiency

There are numerous barriers to the creation of an integrated and efficient international capital market. Solnik (2000) listed the following major impediments: regulations limiting foreign investment, high costs

including brokerage, custody, withholding taxes, data collection and analysis, lack of familiarity with foreign markets, risk perception, and the opaqueness of foreign markets including limited liquidity and the potential for manipulation by local investors. It should be stressed that most of the items on this long list have one common denominator, information. The issues of data collection and analysis, familiarity, risk perception, and manipulation by local investors all depend on how information is channelled in and between financial markets—disclosure matters (as we saw in Chapter 2). In Europe, the introduction of a common currency and the alignment of some capital market regulations between countries have removed foreign exchange risk within the euro-zone, and have largely neutralized the legal limitations on foreign investment.

Financial reporting can adversely affect efficiency and integration in three ways: by being untimely, of poor quality, and by being incomparable between companies. All three problems are very significant in Europe (more so than in the USA and the UK notwithstanding recent scandals). In some countries, financial reports are released only a long time after the end of the accounting year. As regards quality, accounting, and disclosure in most of the continental European countries are tailored to the needs of tax authorities and creditors, not investors (Nobes and Parker 2000). Investors interested in the market value of company assets are often stymied in their attempts to better understand market value because of the dominance of conservative valuation procedures (Schmidt 1998). Lack of transparency also refers to liabilities, in particular to those concerning pension obligations owed to employees owing, in part, to the diversity of accounting standards applied across Europe. Pope and Rees (1992) found that when corporate earnings were adjusted from UK standards to US generally accepted accounting principles (US GAAP), there was a market surprise and a significant impact on the stock prices of British companies listed in the USA. Investors in arguably the most developed capital markets of the world have difficulty in reconciling financial reports between countries.

In order to be useful for investment, publicly available information has to be processed. Caramanolis-Cötelli (1999) and others studied the relationship between the number of analysts researching a Swiss company and abnormal returns around the date of the publication of the company's financial statements.[1] Controlling for other factors such as the size of a company, they found that the larger was the number of analysts, the lower were the negative abnormal returns—the more intensely a company was analysed, the less surprising was bad news from this company. Aktas and

others (2001) provided evidence on the role of inside information on the French market by studying abnormal returns prior to the announcement of mergers and acquisitions involving French companies in the period 1995–9. They reported high abnormal returns beginning on average thirty days before the announcement date. Their results indicated the existence of heavy informed trading via the exploitation of private information. They also reported on the ineffectiveness of French authorities in detecting insider dealing. Of 148 mergers and acquisitions in 1999, the French Securities Supervision Authority reported only three cases of illegal trading. The use of insider information on the capital markets has been, though to varying degrees, a Europe-wide phenomenon (see also Story and Walter 1997; Ferrarini 1998).

There is considerable evidence that proximity affects the intensity of interactions on capital markets. Examples of these interactions include the global flows of portfolio investment (Portes and Rey 1999), foreign ownership of European corporations (Wójcik 2002*a*), pension fund investments in the UK (Martin and Minns 1995), and interregional corporate ownership in Germany (Wójcik 2002*b*). Evidence on the significant role of proximity comes from even relatively small capital markets. Grinblatt and Keloharju (2001) showed that Finnish investors are more likely to hold, buy, and sell the stocks of Finnish firms that are located close to the investor. Furthermore, the Swedish-speaking part of the Finnish population was proportionately more represented in the ownership and trading of shares of firms that published their reports in Swedish (in addition to Finnish) and in the firms that had a chief executive of Swedish origin. The significance of distance, language, and culture was less important among sophisticated investors such as financial institutions than among households (see also Wójcik 2003).

If geography is important, it should be reflected not only in the relationship between proximity and market interactions, but also between proximity and investment performance. Shukla and van Inwegen (1995) showed that over the period 1981–93, British open-end fund managers investing in the USA performed significantly worse than US open-end fund managers investing domestically.[2] Hau (2001*a*, 2001*b*) analysed the trading performance of 756 foreign-based and domestic traders in 11 German blue chip stocks. All considered, traders had equal access to the electronic trading system Xetra, and all the stocks traded were included in the pan-European index DJ Stoxx50. He showed that traders located near corporate headquarters of the traded company outperformed other domestic traders. He suggested 'a plausible explanation is that local traders

find it easier to establish and maintain a privileged relationship with a company insider who might communicate information shortly before it becomes public' (Hau 2001*b*: 20). Moreover, despite the financial sophistication of traders, it can be shown that proprietary trading by foreign traders statistically and economically significantly underperforms domestic traders. Hau (2001*a*: 1) concluded, 'while exogenous or technological barriers might largely disappear, information heterogeneity of investors is likely to represent an enduring feature of market microstructure with important macroeconomic consequences'.

The significance of proximity between traders and company insiders leads us to the core issue of corporate governance. Europe hosts a variety of corporate governance regimes (Wenger and Kaserer 1998). Previously, we divided them into two main groups. One is characterized by dispersed ownership and an arm's-length relationship between managers and owners (an open system) as prevailing in the UK and Ireland. The main features of the closed system, prevailing in continental Europe, are concentrated ownership and cross-shareholdings between inter-related firms (Becht and Roëll 1999; La Porta et al. 1999). In an ideal open system, information is universally shared, while in a closed system it is likely to circulate in a network embracing management, the dominant holders of voting rights, and other insiders before it leaks out to outsiders. In other words, the latter system is opaque. The degree of transparency can be so restricted that the identity of entities controlling companies is itself hidden from outsiders. It has taken a large international project of the European Corporate Governance Network to unveil even the most basic facts on the control of the largest European companies (Barca and Becht 2001).

To illustrate, consider the relationship between corporate governance and capital market performance in two German companies, Mannesmann (now Vodafone) and Bayerische Motorenwerke (BMW). Mannesmann, headquartered in Düsseldorf, was a leader in German heavy industry before refocusing its activities in the 1990s on telecommunications. The company had the most diffused and international ownership structure of any German firm, with over 60 per cent of its shares held by foreigners including 40 per cent held by US institutional investors. In February 2000, the company was taken over by the British firm Vodafone after a most spectacular battle for corporate control (Garret 2001). Shareholder orientation was strong in Mannesmann with high-quality annual reports, profitability goals implemented explicitly in the announced strategy, and managerial compensation aligned with share performance (Höpner and Jackson 2001). By contrast, the Quandt family controlled BMW, the car

Table 3.1. Summary statistics on the distribution of daily changes in the stock prices of Bayerische Motorenwerke (BMW) and Mannesmann (now Vodafone) in the period between the end of 1996 and the end of 2001

	BMW	Mannesmann
Total number of observations	1,260	1,261
Minimum	−1,137	−1,133
Maximum	1,369	5,433
Mean	10.4	19.2
Standard deviation	268	318
Kurtosis	1.77	67.01

Note: Minimum, maximum, mean, and standard deviation expressed in basis points.

Source: Authors' calculations based on data from Centaurus Capital, London.

manufacturer headquartered in Munich. As for shareholder value, the company was perceived to be the antithesis of Mannesmann in terms of the quality of its financial reporting (Höpner 2001).

Table 3.1 presents summary statistics on the distribution of the daily changes in the stock prices of the two companies over the period end of 1996 to the end of 2001. While the extreme daily changes in price were much bigger for Mannesmann than for BMW, the kurtosis for Mannesmann was 67 compared to 1.77 for BMW. Kurtosis allows us to estimate the extent to which observations cluster around a central point (the formula is provided in the following section). For a normal distribution the value of kurtosis is 0. Positive kurtosis means that the observations cluster more, while a negative score means that they cluster less than for a normal distribution. Comparing these two companies, it was apparent that the distribution of observations for Mannesmann was much narrower than for BMW. This observation is consistent with our earlier contention that information circulates differently in open and closed regimes of corporate governance. In brief, when information is more widely shared there is on average lower volatility on the stock market (as suggested by numerous analysts).

Corporate Governance and Market Efficiency

We have suggested that there is a relationship between corporate governance and the volatility of stock prices. In this section, we show the systematic nature of this relationship by analysing the constituent companies of the DAX100 German stock market index, with particular

focus on companies included in the DAX30. The DAX30 includes the top 30 German companies traded on the Frankfurt Stock Exchange, not only according to their size (market capitalization) but also on account of their turnover. The next 70 companies, following the constituents of DAX30 in terms of their market capitalization, are included in the index for mid-capitalization firms (MDAX). Together, the DAX30 and the MDAX form the DAX100 index. The German stock market is highly concentrated. Over the period 1997–2001, the DAX30 accounted for approximately 85 per cent of market capitalization and 96 per cent of turnover of the DAX100. The share of DAX30 in the total turnover of all German listed companies exceeded 90 per cent (Deutsche Börse 2004). The companies analysed covered all companies that were constituents of the DAX100 index as at the end of 2001.

In terms of the variables, the independent variable expresses the character of corporate governance in a company against the stylized extremes 'open' or 'closed'. For this purpose, we used concentration of ownership, acknowledged as a central concept in the theory of corporate governance (Morck 2000; Shleifer and Vishny 1997), and a central feature of corporate governance in Germany (Hopt et al. 1998; Wójcik 2003). We used two measures of ownership concentration: the share of the largest holder of voting rights in a company (C1), and the Herfindahl index calculated on the basis of the structure of holdings of major voting rights with the following formula:

$$\text{HI} = \sum_{i=1}^{n} S_i^2, \text{ where}$$

n—the number of major holders of voting rights in a company,
S_i—the share of a holder in the total number of voting rights of a company.

Data on ownership came from Bundesaufsichtsamt für den Wertpapierhandel (BaWe, now incorporated into BaFin) in Frankfurt and refers to the major holdings of voting rights. The BaWe compile the data on the basis of notifications of voting rights listed companies are required to publish to comply with the Securities Trading Act (Wertpapierhandelsgesetz). Both individuals and institutions are obliged to notify BaWe if their voting rights reach, exceed, or fall below one of the thresholds of 5, 10, 25, 50, or 75 per cent. Note that this obligation refers to both direct and indirect holdings of voting rights. Indirect holdings involve any situation where an entity controls voting rights from shares that it does not own. This

may happen, for example, when an entity controls a direct shareholder or has been entrusted with the responsibility for its shares.

The advantage of this unique data set is that it allowed us to look at the concentration of holdings of ultimate control, not merely shareholdings in companies. In the analysis, we used the data on holdings in companies as at the end of 1997. If a company was first listed after that date, we used the data on holdings as at the end of the year when the company was first listed.

Another variable used to express the corporate governance arrangements of a company was the index of shareholder value orientation (SVO) developed by Höpner (2001). This is meant to show whether a company has a proactive shareholder value policy, and how strong such a policy may be. The index is built using three components: the information quality of annual reports, the quality of investor relations, the implementation of profitability goals, and the alignment of managerial compensation with the company share price. Höpner calculated the value of the index for the forty largest German companies, based on data from the late 1990s. Even though the index is unavailable for most of the companies that are the subjects of our analysis, we considered it a useful complement to the cruder indicators of corporate governance (ownership concentration).

The dependent variable was the volatility of stock prices. We used data on the daily changes in the stock market prices of DAX100 companies for the period between the end of 1996 and the end of 2001. Daily change is defined as the percentage change between the stock price as at the close of trading in the Xetra system on a given day and the closing price of the preceding trading day. In the analysed period of five years, there were 1,261 trading days. The volatility of stock prices was measured with three different statistics describing the distribution of the daily changes: range, standard deviation, and kurtosis. The last measure was calculated using the following formula:

$$\text{kurtosis} = \frac{\sum_{i=1}^{N} (y_i - \bar{y})^4}{(N-1) \cdot s^4} - 3, \text{ where}$$

N—number of trading days,
y_i—change in stock price on day i,
$\bar{y}$—mean of daily stock price changes,
s—standard deviation of daily stock price changes.

Basic descriptive statistics on all the variables are presented in Table 3.2.

Table 3.2. Summary statistics for the variables of corporate governance and volatility

Variable	Number of observations	Unit	Minimum	Maximum	Mean	Std. dev.
C1	100	per cent	5	97.80	37.42	23.46
Herfindahl index	100	Index	0	1.17	0.24	0.23
SVO	29	Index	−1.3	1.61	0.15	0.81
Range	100	basis point	1	10,618	2,886	1,495
Standard deviation	100	basis point	119	496	285	81
Kurtosis	100	NA	0.68	213.31	7.29	21.40

Source: Authors' calculations based on data from BaWe, Frankfurt, Centaurus Capital, London, and Höpner 2001.

Our analysis is not the first attempt to relate stock price volatility to ownership concentration. Research on this issue has been heavily influenced by the work of Demsetz and Lehn (1985). Analysing the determinants of US ownership concentration, they suggested that the less predictable a firm's environment the larger the potential benefit a shareholder might obtain by monitoring the firm. Therefore, in firms characterized by noisier environments, reflected in a higher standard deviation of stock market returns, we should find a higher level of ownership concentration (see also Prowse 1992; Crespi-Cladera 1998; Morck 2000). Our reasoning, however, goes in the opposite direction and starts with corporate governance. As we argued above, the mode of a company's corporate governance in general, and the degree of ownership concentration in particular, directly affects the circulation of information crucial for the assessment of firm market value. If the circulation of information is primarily internal, as we expect in a company with a higher concentration of ownership, outside investors and agents trading its stocks are likely more uncertain about the true value of the company. Less agreement on firm value and the potential for insider trading would lead to more volatile daily stock prices. We acknowledge the controversial nature of our argument, but contend that the empirical evidence supports our view.

In order to test this hypothesis, we regressed measures of stock price volatility on measures of corporate governance. The coefficients and the goodness-of-fit for single factor regressions are reported in Table 3.3. Separate results are presented for DAX30, MDAX, and DAX100. Starting with range, for the DAX100 there was a significant positive relationship between ownership concentration and volatility. Measures of ownership concentration, however, explained only about 4 per cent of the variability in range. The standard deviation of daily price changes also increases

Table 3.3. Parameters of single-factor regressions of volatility on corporate governance

Independent variable	Dependent variable					
	Range		Standard deviation		Kurtosis	
	Coeff.	Adj. R^2	Coeff.	Adj. R^2	Coeff.	Adj. R^2
C1						
DAX30	1.7	0.004	0.94**	0.106	−2.11E-02**	0.195
MDAX	10.9	0.031	0.59	0.026	9.18E-02	0.009
DAX100	11.5**	0.042	0.81**	0.056	8.80E-02	0.007
Herfindahl index						
DAX30	502	0.022	136**	0.143	−2.23**	0.155
MDAX	858	0.021	50	0.020	3.48	0.010
DAX100	1,108*	0.038	79**	0.051	5.37	0.013
SVO index						
DAX30	149	0.025	−4.9	0.005	0.92**	0.228
MDAX	125	0.006	−15.2	0.062	2.84	0.016
DAX100	−116	0.012	−13.2	0.064	−0.69	0.004

Note: Significance of coefficients at 5% (**) or 10% (*).

Sources: Authors' calculations based on data from BaWe, Frankfurt, Centaurus Capital, London, and Höpner (2001).

with growing ownership concentration. Among blue chip companies, the variability of C1 and Herfindahl index explained respectively 11 and 14 per cent of volatility. The relationship between ownership concentration and stock price volatility was strongest when we measured the latter with kurtosis. For the DAX30, we obtained significant negative coefficients and goodness-of-fit of respectively 19.5 and 15.5 per cent. In Figure 3.2, the values of the volatility and ownership concentration for the DAX30 companies are plotted. Kurtosis was significantly higher for blue chip companies with a stronger orientation towards shareholder value. The SVO index explains as much as 23 per cent of the variability of kurtosis. This is a high level of explanatory power considering that there are many factors that affect price volatility, including external economic conditions such as interest rates and firm-specific factors unrelated to corporate governance (Shiller 1989).

Whatever measures of corporate governance and price volatility, the results for MDAX were insignificant. The probable explanation is the very low liquidity of its constituents. Recall that the MDAX accounts for only 4 per cent of the turnover of DAX100 and 15 per cent of its market capitalization. Thus, the average intensity of turnover is almost four times lower than for the DAX30. With such 'thin' trading, it is not unreasonable to expect no systematic relationship between stock price behaviour and

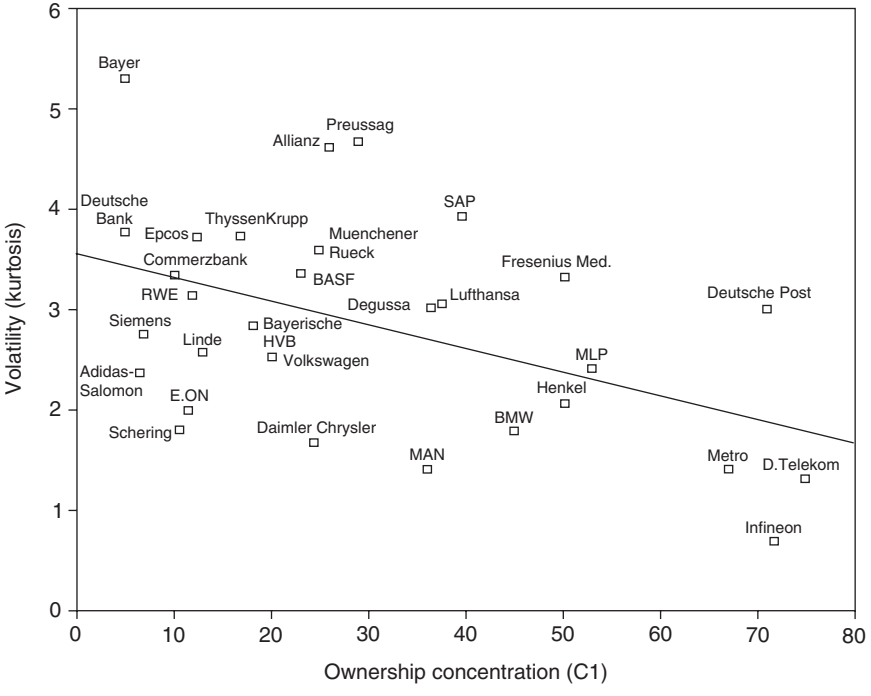

Figure 3.2. Ownership concentration and volatility of stock prices for the DAX30 companies

Source: Authors' calculations based on data from BaWe, Frankfurt, and Centaurus Capital, London.

corporate governance. Turning to our central hypothesis, we established that the relationship between corporate governance and price volatility was weak for range, medium for standard deviation, and strong for kurtosis. This order of the strength of the analysed relationships was not surprising. We expected that the sum of the most positive and the most negative daily change of a stock price, over a five-year-long period, reflects 'big' events such as the announcement of major unexpected losses, new investment projects, mergers and acquisitions, and so on. Meanwhile, the 'quiescence' of daily prices, reflecting the degree of market saturation with information about companies would be better expressed with standard deviation and kurtosis.

Recall that BMW is headquartered in Munich, the capital of Bavaria, while Mannesmann was headquartered in Düsseldorf, the capital of North Rhine-Westphalia. Bavaria and North Rhine-Westphalia are the two largest Länder of Germany. Table 3.4 presents the main characteristics

Table 3.4. Corporate governance characteristics for Bavaria and North Rhine-Westphalia (for non-financial companies listed on Amtlicher Handel)

Variable	Bavaria		North Rhine-Westphalia		Germany	
	1997	2001	1997	2001	1997	2001
No. of firms	79	79	89	95	321	352
Concentration of holding rights						
Median C1 (%)	73.1	71	63.2	58.5	63.4	60.1
Median Herfindahl index	0.56	0.52	0.42	0.41	0.45	0.44
Foreign holdings						
No. of firms with major foreign holders	16	19	20	30	na	na
Share of foreign holders in Mcap (%)	3.2	3.1	26.5	25.4	16.8	14.5
Domestic holdings						
No. of firms with major holders from the same Land	59	50	50	44	na	na
No. of firms with major individual or family holders	34	36	31	32	na	na

Note: For a description of Amtlicher Handel see n. 3.

Source: Authors' calculations based on data from BaWe, Frankfurt, and MSDW, London.

of corporate governance in all non-financial companies headquartered in the two Länder listed on the Amtlicher Handel.[3] Mannesmann and BMW are remarkably representative of the corporate governance regimes prevailing in their regions of origin. Bavarian firms exhibit a higher level of ownership concentration and a lower incidence of foreign holdings. In 2001, over 60 per cent of Bavarian firms had at least one major holder of voting rights from the same Land and in almost 50 per cent of firms a major holder was a German individual or family. In North Rhine-Westphalia, by contrast, the respective figures were about 40 and 30 per cent. In a nutshell, Bavaria has a closed regime of corporate governance compared to North Rhine-Westphalia.[4] Significant changes have taken place in both Länder over the past ten years, but the difference between Länder remains significant.

Our argument is not just that the borders between Länder are the borders between regimes of corporate governance. We also argue that since the conditions that affect corporate governance are region and time-specific, they can be read in the observed patterns and behaviour of stock prices. The two major findings of this section, namely the relationship between corporate governance and stock price behaviour and the fact that corporate governance is geographically 'nested', reveal the extent of German capital market inefficiency and fragmentation.

Geography of Investment Management

Unsurprisingly, one implication of our results is that investment management must take geography seriously. A bottom-up country-based or region-based investment strategy would seem preferable, all things being equal, to a passive index strategy that treated Europe as an integrated whole. This goes against widely accepted Anglo-American evidence to the effect that investment managers waste investors' money searching for mis-priced securities (Jensen 1969; Sharpe 1970; Fama 1991). Still, when Anglo-American institutions invest abroad, their strategies and performance suggest little belief in the efficiency of international capital markets. A survey of managers of international equity products marketed to US tax-exempt customers by InterSec (a consulting company specializing in international investment) found that 83 per cent of managers followed an active strategy. Security selection was identified the most important stage of the investment process, and only 3 per cent of managers used a top-down approach. It was also found that for the ten years ending in 1998, a median non-US equity manager outperformed the EAFE index by a striking 42 per cent (reported in Solnik 2000).

Inefficiency and fragmentation are reflected in the structure of the investment management industry across Europe. In 2000, the percentage of pension funds managed passively was estimated at 20 per cent for the UK and 12 per cent for Continental Europe (Reid 2000). A survey of investment managers in Germany reported that over 83 per cent believed that the search for new information and its in-depth analysis were most likely to lead to superior results (Arnswald 2001). Though research on the performance of European investment managers is elusive, there is also evidence that such beliefs are more than a matter of wishful thinking. Otten and Bams (2001) demonstrated that domestic mutual funds in the UK, Italy, the Netherlands, and France on average significantly outperformed relevant domestic market indices. They concluded 'contrary to most US evidence, the majority of European funds seem to be able to find and implement new information to offset their expenses, and therefore add value to investors' (p. 23).

The importance of country or even region-specific networks of information, the central finding of this chapter, is evident in the practice of European investment management. Institutions that have a privileged position as insiders in these networks, especially the leading Continental European banks, have a competitive advantage over their Anglo-American rivals. In principle, investment managers should not take advantage of

information about the companies they analyse or in which they invest that comes from the rest of the organization. In order to prevent conflicts of interest there should be 'Chinese walls' between the banking and investment management arms of these institutions. If the ideal, in practice it hardly is ever the case (Ferrarini 1998). Meanwhile, US and UK investment management firms from outside these networks promote and lobby for the ideal of market transparency in corporate affairs. Powerful institutional investors through networks, including Hermes Pensions Management, Morley Fund Managers, and TIAA-CREF, etc., have met chief executive officers of Continental European companies and lobby for the improvement of their corporate governance.

It should be stressed that the viability of active investment strategies does not rule out passive management. Following the European market in the form of indexing, however, poses some serious problems. Indexing assumes investing in securities according to their market capitalization. In Europe, figures for market capitalization of companies by sectors and countries can be highly misleading for at least two reasons. First, cross-shareholdings between listed companies, so common in Continental Europe (Barca and Becht 2001; Wójcik 2003), imply that market capitalization is inflated. A related problem is the issue of free-float—'the proportion of a company's capital available for trading by the public on a stock market' thus 'excluding the shares held by the controlling shareholders' (Moles and Terry 1999). The lower the free-float, given market capitalization, the higher the risk that by trading a stock an investor can adversely affect its price. The providers of stock market indices, such as Morgan Stanley Capital International, have attempted to resolve these problems by identifying cross-shareholdings and the free-float on a company-to-company basis, thereby adjusting the composition of their indices.

In analysing the choice of investment strategies by firms, it should be remembered that passive and active management are offered in a competitive market. Returning to Figure 3.1, for any point therein representing a specific level of efficiency and integration, we could find at least one investment manager that would claim Europe is exactly at this point. Research by Morgan Stanley Dean Witter shows that industry factors are increasingly important, and will soon dominate country factors implying the added value of a 'top-down' approach (Sharaiha and Ametistova 2000). ABN AMRO (1999) agrees that equity research should be organized by industries, not countries. Schroders, by contrast, claims that countries are still relevant and that 95 per cent of global institutional finance is still managed according to conventional country allocation models

(Oppenheimer and Coombs 1999). HSBC stresses that country-based strategies remain vital as markets differ in terms of corporate governance while Fidelity and Goldman Sachs use security selection based on stock-specific factors rather than country and sector effects (*The Economist* 11 November 2001).

The diversity of investment strategies reflects the fact that European capital markets are diverse in terms of efficiency and integration. They are not all located in a single quadrant of Figure 3.1. Industries exposed to intense international competition, like chemical commodities, are more likely to be more integrated than other less exposed sectors such as utilities.[5] Some countries with more open systems of corporate governance and a large number of international companies, such as the UK, Ireland, and the Netherlands, have more informationally efficient capital markets than other countries such as Italy and Greece. Within national capital markets, stock market segments for small firms are less efficient than the markets for blue chip companies (as suggested by Clark and O'Connor 1997). Otten and Bams (2001) have shown that the outperformance of European investment funds was most pronounced in the case of funds investing in small capitalization stocks.

Implications and Conclusions

Some commentators argue that by the end of 2010 as much as 50 per cent of funds invested in Europe will be managed passively. Belief in the fast pace of capital market integration is strong. In a survey of pension funds' investment strategies by Watson Wyatt, 53 per cent of European managers declared an emphasis on sector-based strategy and only 26 per cent declared a country-based approach (Robinson 2002). What is more, some believe that sector-based strategies undertaken by investment managers can 'dictate' the developments in the underlying capital markets. Witness Solnik (2000: 268) who suggested that 'the mere fact that major brokers and investors have decided to focus, within Europe, on industries rather than countries will be a self-fulfilling move.' Our evidence on the nature and circulation of information in German capital markets suggests that scepticism is needed. The circulation of information is geographically 'nested' and segmented by firm and region.

Driving analysis in this chapter was a presumption that the flow of information within and between markets is a fundamental determinant of the efficiency of markets and ultimately the prospects for any investment

strategy. This presumption is shared by a number of geographers, economists, and financial analysts. Notwithstanding the significance of this presumption for the theory of global finance, few studies have been able to link patterns of European stock ownership with the measured volatility of corporate stock prices. Furthermore, we have shown that within the German securities market there are clearly distinctive regional regimes of open and closed stock ownership patterns, with implications for the measured volatility (and informational content) of quoted market prices. We have been able to capture the financial image of what many other economic geographers emphasize, namely the existence of distinctive national and regional regimes of production and innovation (see, e.g. the work of Cooke and Morgan 1998; Gertler 2001; Christopherson 2002). We have been able to demonstrate a systematic connection between corporate governance and stock prices reflecting the underlying geography of firms.

At the same time, we should be clear about the significance of these findings for debate over path dependence, persistence, and convergence. Using Mannesmann and BMW as examples, it was apparent that there is considerable diversity among large-quoted German firms as to their informational transparency in relation to the needs and practices of global institutional investors. These cases are illustrative of rather different regional regimes of corporate governance within the German economy and suggest that whole blocks of firms are more or less sensitive to the imperatives driving global investors. In effect, as large German firms reach out into the international economy the extent to which they are integrated into institutional investors' active or passive equity strategies depends on the extent to which information flows are transformed from internally focused to externally focused. Put slightly differently, at issue is the extent to which local internal stakeholders' interests in privileged access to information are supplanted by global shareholders' interests in commonly accessible market information.

In subsequent chapters, it is argued that the German model is hardly an integrated and commonly shared model as is often assumed by commentators on comparative corporate governance. Enormous pressures have been brought to bear on German firms and their corporate managers by global financial forces, prompting far greater informational transparency than ever before. This pressure is apparent in the rapid adoption of international accounting rules and the moves of many such firms to adopt the governance practices consistent with their listing on Anglo-American security markets. By this logic, the evidence gleaned from our research is

that the German model should be understood as a set of regional regimes of accumulation more or less accessible to global investors and more or less amenable to their expectations regarding shareholder value and shareholder dominance.

Furthermore, in the context of changed German federal tax regulations regarding the unwinding of the cross-holding of shares between intimately related firms, it has been shown that whole groups of large German firms have moved to dilute concentrated local ownership in favour of dispersed national and international ownership consistent with the experience of their competing Anglo-American corporations (Wójcik 2002*a*, 2003). When combined with the apparent incentives for German corporate managers to promote the interests of shareholders as opposed to stakeholders, these kinds of changes in ownership structure and informational transparency suggest that some regions of Germany are increasingly global as opposed to regional in orientation. Here, while recognizing that we are documenting trends rather than settled conclusions, we would suggest that the 'German model' is hardly a model at all if that is meant to represent an integrated system of mutually reinforcing institutions that sustain a particular path of accumulation (Berndt 1998). In fact, it would seem that there are a number of German regional models more or less tuned to global financial imperatives (see the next chapter).

Notes

1. Abnormal return is defined as the difference between actual return on a security and the return implied by the level of market return (in this case the return on the whole Swiss stock market) and the security's sensitivity to market return. For details see, e.g. Bodie, Kane, and Marcus (1996).
2. Open-end mutual funds continually issue new shares as people invest their money. They also buy back these shares when investors wish to sell. This is in contrast to closed-end funds, which raise their initial capital by selling a fixed number of shares in a process similar to selling a new stock issue. After this initial offering the fund is closed, hence its name.
3. Amtlicher Handel is one of the four segments of the German stock market, along with Geregelter Markt (regulated market), Freiverkehr (over-the-counter market), and Neuer Markt (new market, opened in 1997 and meant for young growth firms). In relation to Geregelter Markt and Freiverkehr, companies listed on Amtlicher Handel have to comply with stricter disclosure requirements. The shares are traded not only on the Frankfurt Stock Exchange, but also on the seven regional exchanges in Berlin, Bremen, Düsseldorf, Hamburg, Hannover, München, and Stuttgart. Frankfurt, however, in 2000 accounted for over

80 per cent of the trading volume. Recent reorganization of the German stock market is presented in Chapter 5.

4. Rodríguez-Pose and Zademach (2003) show that when we compare mergers and acquisitions by companies headquartered in Munich with those by companies headquartered in Düsseldorf and Cologne, the incidence of intra-regional transactions is considerably lower for the cities in North Rhine-Westphalia. This supports our empirical findings on a more closed regime of corporate governance in Bavaria.
5. Interestingly, Höpner (2001) in his study of forty top German firms found a positive relationship between a company's exposure to international product market competition and shareholder value orientation (SVO).

4

Geographical Foundations of Corporate Governance

Most studies of corporate governance assume path dependence drives the persistence of nation-state models (e.g. Roe 1994).[1] If convincing a decade or so ago when it appeared that the Japanese and German economies were on different long-term paths of accumulation equal to, or superior to, Anglo-American economies otherwise preoccupied with short-term capital markets, there are now considerable doubts about the plausibility of such an assumption. Having explained the development and recent reform of German corporate governance by reference to its historical roots, Hopt (1998: 258) concluded with a most important caveat: modest reform is likely 'as long as it [nation-state difference] is allowed by the forces of globalization and their impact on corporate governance.'

At best, these issues are tangential to economic geography. We take as given national institutional and financial structures, referring to 'models' as a convenient shorthand for situating more detailed studies of corporate strategy and decision-making at the local level. But, as we have begun to appreciate, national 'rules' regarding the formation and use of corporate financial resources may have significant implications for local outcomes (see Christopherson 2002*b*). We also now recognize that 'national' models may be less national than regional, as in the UK during the first half of the twentieth century (Franks et al. 2003) and as is still the case in Germany (Wójcik 2002*b*). There is increasing interest in the connection between corporate governance and competitive strategy, and local innovation and labour productivity (see e.g. Fuchs, Krauss, and Wolf 1999). Economic geography may have a vital role to play in making these connections (*contra* Crouch et al. 2000).

This chapter is about the relationship between corporate governance and global finance. We show that the German model of concentrated

ownership through direct and indirect cross-holding between institutions was discounted by financial markets over the period 1997–2001. Empirically, there was a significant and negative relationship between the level of ownership concentration (one indicator of corporate governance) and the daily stock price of DAX traded corporations. We also show that this relationship had a distinctive geographical footprint, reflecting rather different regional (Länder) systems of corporate governance and their 'openness' to the interests of portfolio investment managers. We use the term 'regional' as a descriptive device to represent the distinctive geographical scale of the phenomenon we are studying. We do not mean to imply that it is 'regional' in the sense of constituted as a system of organization that exists independently of the nation-state. We do observe, however, that many corporate governance mechanisms including collective bargaining function at the regional level. As such, this chapter follows the programme begun in Chapter 3 on the relationship between German corporate governance, stock price volatility, and informational intensity. In this case, we show that the traditional German 'model' has been so discounted that rival German models more consistent with Anglo-American financial practices may be better attuned to global financial imperatives (the topic of Chapter 5).

In so doing, we should be cautious about the scope of our findings. It is tempting to analyse nation-state stock markets as if they are just like Anglo-American markets. Such an approach facilitates analysis of comparative market performance and structure (see Dimson et al. 2002), and global asset allocation by country (Diermeier and Solnik 2001). But German stock markets are smaller than their Anglo-American counterparts in terms of traded volume, and more concentrated in terms of the share of traded volume due to the largest corporations. Furthermore, publicly traded corporations (Aktiengesellschaft, AG) are relatively few in number compared to the vast number of family owned enterprises (Gesellschaft mit beschränkter Haftung, GmbH) that are the object of many academic studies of German development (as illustrated by Cooke and Morgan 1998). Even so, the performance of Deutschland AG may have significant implications for the network of closely related local (untraded) firms, just as recent reforms of German corporate governance designed to promote institutional innovation consistent with financial market imperatives may have substantial implications for the penetration of global finance to the local level (Wójcik 2003).

In the next section, we note recent contributions in finance that demonstrate the significance of geography for understanding corporate

governance and market performance. This leads to a more focused discussion on the expected relationship between German corporate governance and economic performance (in general), and financial market performance (in particular). We note the importance of ownership concentration as an indicator of minority stockholders' lack of influence but also observe that much of the literature on corporate governance has not demonstrated a robust statistical relationship between governance and performance. Thereafter, we devote a section to the data and estimation techniques used in our analysis, a section on results, and a section on their implications for national and regional systems of German corporate governance.

Geography of Corporate Governance

The most significant recent contribution to the literature on the geography of finance has come from financial economists. In a project spanning the globe, La Porta et al. (1997, 1998) mapped national systems of corporate governance paying particular attention to the historical bases of those systems and their relationship to financial markets. Underpinning the whole project was the presumption that the institutional and legal frameworks of national systems of corporate governance have long-term consequences for the structure and performance of local firms, their relationships with stakeholders and shareholders, and the depth of liquidity of local financial markets.[2] Mapping the world has been an exercise in formalism, one that has brought into the open the principles (if not the practice) behind different systems of corporate governance (compare Lombardo and Pagano 1999).

There are, of course, a variety of definitions of what counts as corporate governance (see Hopt et al. 1998). Some focus upon the interaction between firms and markets with reference to issues of agency and accountability, while others focus upon the interaction between firms and societies including reference to the proper relationship between corporate owners, managers, workers, and communities.[3] Crudely speaking, the former is the preserve of Anglo-American scholars, whereas the latter is more often than not the preserve of European scholars. These differences in definition and emphasis are the product of historical trajectories of national development. In between are the critics of contemporary corporate governance such as Dore (2000) and Hutton (2002) who argue that the Anglo-American preoccupation with firms and markets poses a threat

to the future of the traditional Japanese and German models, recognizing that a virtue of the German model is its respect for stakeholders'—not just shareholders'—interests.

Driving the comparative analysis of national systems of corporate governance has been the realization that among developed economies stock markets are quite different in terms of their structure and performance. Economies of much the same size seem to have very different securities markets when we consider indicator variables such as market liquidity and trading volume, and the virtues or otherwise of active versus passive investment strategies. Whereas investment managers would have us believe that a global portfolio of stocks can be easily constructed on the basis of MC, such portfolios are often naive in terms of the assumptions made about the compatibility of markets and the usefulness of standardized techniques of trading and investment management. In effect, Anglo-American theories of efficient markets and investment strategy have a limited geographical domain. One response by policy institutes and multilateral institutions has been to reference Anglo-American standards as the appropriate benchmarks when advocating global standards of market governance and structure.

Not surprisingly, economic geographers identify with La Porta et al.'s project. In play are the conceptual building blocks of differentiation, heterogeneity, and disequilibrium that have encouraged the rapprochement between economists and geographers (see generally Clark, Feldman, and Gertler 2000). At the same time, sensitivity to national differences of corporate structure in the context of globalization resonates with economic geographers' interest in globalization and regional systems of innovation. There remains, however, a most significant difference of perspective between economists and geographers. Among many financial economists, there appears to be an unambiguous one-way relationship between national frameworks (input) and local outcomes (output).[4] For economic geographers, matters are rarely so simple. National frameworks are hardly ever so coherent and direct in effect. One of the advantages of working from the bottom-up is the realization that different frameworks can have similar outcomes at a local level, just as seemingly coherent national frameworks may be little more than the sum of local experience roughly codified and legitimated by the nation-state (Berndt 1998).

Still, the literature on financial market structure is increasingly interested in geography. For instance, Pagano et al. (2002) examined trends in the foreign listing of companies, comparing firms that cross-list from

Europe on US exchanges with firms going in the opposite direction. If global financial markets were functionally integrated and efficient, cross-listing would make little sense. However, they showed for the period 1986–97 that European firms with a significant technological bias and an interest in funding growth through capital markets cross-listed in the USA for access to investors with an otherwise strong 'home bias'. Cross-listing from Europe on US exchanges has accelerated over the last decade, as large German firms have adopted international accounting standards and sought to reap the benefits of the final phases of the TMT boom, bubble, and bust (an important topic in the next section of our book).

With respect to financial market performance, a number of studies have demonstrated that 'geography matters' (for Europe, especially). For example, Grinblatt and Keloharju (2001*b*) showed that national borders, the language of investors, and the nationality of firm managers, along with the culture of different language groups within countries, may all affect where and how financial investment takes place. They considered investment in the stocks of Finnish firms and the role and significance of Swedish-speaking as opposed to Finnish-speaking investors. By this account, 'home bias' may be deeply embedded in investors' social identity and their community location. Adding to this story, Hau (2001) showed that the trading profits of professional investors located across Europe (in twenty-three cities and eight countries) on the German electronic trading system were significantly negatively affected by being located outside Germany and in non-German-speaking cities. A location close to the corporate headquarters of a traded stock positively contributed to traders' performance.

Finally, a recent study by Peterson and Rajan (2002) on the lending practices of US bank and non-bank institutions suggests that the significance of geography (in this case distance) depends a great deal on the type of institution and the degree to which borrowing firms are informationally opaque as opposed to transparent. They found that small firms characterized by informational transparency and reliant upon non-bank (venture capital and related) lenders were firms with more distant and formal relationships with financial institutions. On the other hand, small firms characterized by informational opaqueness and reliant upon bank lenders were firms with local intimate financial relationships. In effect, transparency and institutional innovation can facilitate geographical elasticity; closeness for reasons of managing borrowers' use of financial resources and monitoring the principal–agent problem can be replaced

with information technology and systems of performance evaluation assuming no inherent selection bias.[5]

Our intention in recognizing these particular papers is fourfold. First, whereas the issues raised above have been recognized in the geographical literature for many years (see generally Pred 1973), the papers referred to were published in the leading finance journal. Second, blanket assertions about the necessary efficiency of capital markets and the consequent irrelevance of institutions and communities are less plausible once we take into account 'local' evidence. Third, given that information is an essential ingredient of all developed financial markets (Wilhelm and Downing 2001), it is geographically channelled, whether by distance, culture, language, or institutional form (Clark 2005). Fourth, the interaction between corporate governance and financial markets is in part an issue of systemwide principles of function and purpose and an issue of information management by economic agents located in specific settings.

Corporate Governance and Performance

A great deal has been written about the legal form and structure of German firms (see above). In this section, we concentrate on the AG model—the object of subsequent empirical analysis. By law, the executive functions of such firms are divided between a supervisory board and a management board. Supervisory boards consist of the representatives of shareholders and employees, and their responsibilities include the appointment and monitoring of the management board with respect to the company's financial performance, business strategy, productivity, and international operations. As many commentators have observed, supervisory boards are more often than not formal mechanisms of corporate governance, often dominated by chairpersons who play a vital coordination role between the boards. By contrast, most management boards are smaller than supervisory boards, are responsible for the operations of firms, typically include representatives of the supervisory board, and are dominated by the senior executives of the firm.

It is expected that AG firms are dominated by a few large owners who are, more often than not, the financial institutions that provide a variety of financial services to the firm. In a regulatory regime with a modicum of shareholder protection, concentrated ownership exercised through an effective and skilled supervisory board should be positively correlated

with firm performance. In theory, fewer shareholders with larger stakes in a firm mean that their own performance is intimately tied with the performance of the invested firm. With few large shareholders, the costs of coordination are lower than in circumstances where there are many shareholders. Logically, there are strong incentives to monitor manager performance, cooperate with other board members, and appoint board representatives with the necessary skills and expertise. Where shareholders are unable to dilute their holdings, as was the case for many years, there are also strong incentives to 'supervise' in a manner consistent with shareholders' long-term commitments. If we add to this picture a set of social obligations to the region of origin, it is arguable that concentrated ownership should be to the advantage of shareholders and stakeholders alike (Hutton 2002).

There are reasons to be sceptical of the practice of German corporate governance, if not the virtues of the ideal. For a start, supervisory board voting rights are not always directly proportional to the number of shares held by shareholding institutions (Prigge 1998: 979–83). The formal nature of infrequent board deliberation combined with the fact that board members may rely upon inertia and the power of board chairpersons to 'manage' the firm are consistent with the fact that supervisory boards rarely intercede on management issues.[6] Indeed, the formality of most supervisory boards combined with the lack of expertise of board members means that managers have wider discretion over firm functions and operations than logic would suggest.[7] This does not mean that managers are wholly insulated from the consequences of poor performance; there is evidence of higher rates of management turnover in underperforming German companies (as in the USA and the UK). At the same time, it appears that the gap between managers and their supervisory boards increased over the 1990s as stock options and other forms of performance remuneration became more popular (Clark 2003*a*).

Ownership Concentration and Firm Performance

Systematic assessment of the evidence linking ownership concentration with firm performance suggests a positive and significant correlation, especially if compared with state-owned enterprises. Although there are various measures of firm performance relevant to this issue, most studies of the relationship appear to focus on net profit, the rate of return on invested capital, and cash flow. In effect, performance is measured by the

income generated by the firm and available for distribution as investment, salaries, wages, and dividends among the various claimants to the firm (managers, shareholders, and stakeholders). For most commentators, the distribution of current corporate income within the German model is an internal issue decided by economic, social, and political criteria. For some, this is just a fact of life. For others, it is an important virtue of the German model.

The apparent correlation between concentrated ownership and firm performance is thought by many to support the theory underlying the German model. Implied by this relationship is profit-maximization behaviour—a link in reasoning that attributes to ownership concentration the driving force behind a mode of corporate governance focused upon an overriding long-term profit-making objective. And yet, among informed commentators, there are reasons to be cautious of strong claims made on its behalf. Prigge (1998: 985) suggested that the 'available evidence does not offer a clear-cut picture of [the effects of] control by shareholders [on corporate performance] in Germany' even if he contends that 'concentrated shareholdings . . . is a pre-condition for intensive control.'[8] If true, there are various ways in which ownership may be exercised, just as there may be various coalitions that drive the distribution of current income. It is possible to imagine 'solutions' to the two-part game of management and income distribution that maximize managers' and workers' shares of current income, leaving shareholders a smaller portion of current income than their ownership stake would imply.

Ownership Concentration and Market Performance

Left out of this picture are the claims of minority shareholders who are under-represented on supervisory boards and who only exercise their 'rights' through German stock markets. Prigge (1998) was particularly critical of the size and significance of German markets, contending that market mechanisms are inadequate for governing German corporations. Their relative inefficiency, combined with the lack of important information relevant to the interests of market-trading shareholders, means that public markets are often hostage to private (untraded) interests. He does note, however, that the (then) prospect of large German firms adopting international accounting standards could pave the way for markets to play a larger role in German corporate governance. This was in fact the case over the past five years, in anticipation of changes in federal

German capital-gains tax law encouraging the unwinding of cross-holdings between institutions (Wójcik 2003).

More importantly, we showed previously that global portfolio managers have become increasingly important in German capital markets. Commonly, portfolio managers hold small portions of firm-traded stock relying upon diversification within and between markets to manage risk and return. In a number of cases, global and European stock indices have been designed in accordance with the stock available for trade (the 'free-float') segmented and structured by industry. Whereas these indices have been designed and sold for purposes of passive investment, we have also shown that a number of major financial institutions have used active investment strategies to reap the rewards of intensive information strategies (see Chapter 3 in this volume). As global fund managers have played an increasing role in German markets, some of the largest German firms have also sought listing on foreign stock markets. There seem to be a variety of motives for pursuing a dual-listing strategy. Because US and UK capital markets are far deeper and the number and types of potential investors far more diversified, the cost of capital may be cheaper and the stake of individual equity holders far smaller (Doidge et al. 2004*a*, 2004*b*).

Furthermore, it is arguable that Anglo-American capital markets are more attuned to the growth prospects and technological capacities of large German firms than domestic markets. This may be a consideration if domestic shareholders and stakeholders are focused on current income as opposed to managers' interests in applying the available cash flow to expand the business. Therefore, there may be a listing premium due to differences between capital markets as regards the virtues attributed to growth and the level of control exercised by foreign as opposed to domestic institutional shareholders. Dual listing effectively dilutes the share of outstanding stock held by German shareholders while introducing many more shareholders who tend to be passive as opposed to active, trading in and out of stock on the basis of market expectations rather than inside information. We develop these points in Part III of the book.

Analytical and Empirical Strategy

Given these arguments about the changing role and status of markets for traded German firms, we contend that the relationship between ownership concentration and market value is likely negative rather than

positive. This stands in contrast to the supposed positive correlation between ownership concentration and firm performance. In large part, we contend that portfolio investors are suspicious of closely held firms believing that minority shareholders are likely to lose in any competition over the distribution of current income. We also contend that portfolio investors doubt the effectiveness of many supervisory boards, using high levels of ownership concentration as a proxy indicator for 'capture', 'excessive formality', or 'income-focused' (none of which is thought consistent with minority shareholders' interests). There may be significant benefits to be had in detailed knowledge of the circumstances and standards of governance of individual German firms (see Chapter 3 in this volume). But we also observe that portfolio managers tend to economise on information collecting, using commonly observed indicators to discriminate between companies' quality of corporate governance.

To test our expectations, we used a database covering the constituent companies of the DAX100 stock market index, with the DAX30 and MDAX as its component indices, for the period 1997–2001. The independent variables used in the chapter express the character of corporate governance of a company. For this purpose we used concentration of ownership measures in two ways: the share of the largest holder of voting rights in a company (C1), and the Herfindahl index calculated on the basis of the structure of holdings of major voting rights. Another variable used to express the corporate governance arrangements of a company is the index of SVO developed by Höpner (2001). Chapter 3 contains a description of the DAX stock market indices, the discussion of the data on corporate ownership, the formula for the Herfindahl index, and the details on the SVO.

The dependant variables measure corporate stock market returns. For this purpose, we used data on the daily changes in the stock market prices of the DAX100 companies for the period between the end of 1996 and the end of 2001. Daily change is defined as the percentage change between the stock price as at the close of trading in the Xetra system on a given day, and the closing price of the preceding trading day. Over the analysed period of five years, there were 1,261 trading days. On the basis of this raw data, we calculated two variables for each company: the arithmetic average of the daily stock price changes and the Sharpe ratio. While the former is a basic measure of daily rate of return, the latter is the usual measure of risk-adjusted rate of return (Solnik 2000). Specifically, the Sharpe ratio measures the return in excess of the risk-free rate (risk premium), per unit of risk taken (Sharpe 1994). The following formula

Table 4.1. Summary statistics for the variables of corporate governance and corporate stock returns

Variable	Number of observations	Unit	Minimum	Maximum	Mean	Sd. dev.
C1	100	per cent	5	97.80	37.42	23.46
Herfindahl index	100	Index	0	1.17	0.24	0.23
SVO	29	Index	−1.3	1.61	0.15	0.81
Arithmetic average of daily returns	100	basis point	−60.03	40.11	4.70	11.47
Standard deviation of daily returns	100	basis point	119	496	285	81
Sharpe ratio	100	ratio	−0.127	0.078	0.011	0.031
Size	100	see note	1.65	4.70	3.15	0.75

Note: Size is defined as the logarithm at the base of 10 of a company's market capitalization as at 2 May 2001.
Source: Authors' calculations based on data from BaWe, Frankfurt; MSDW, London, and Höpner (2001).

was applied to calculate the Sharpe ratio for a company:

$$\text{Sharpe ratio} = \frac{\bar{r}_d - \sqrt[252]{r_f}}{\sigma_d}, \text{ where}$$

$\bar{r}_d$—the arithmetic average of the daily stock price changes,
r_f—risk-free rate, here assumed as 5 per cent per annum, the approximate yield on German federal government bonds through the corresponding period,
σ_d—standard deviation of the daily stock price changes.

The geometric average of the annual risk-free rate is calculated per trading day (1,261 trading days over five years give on average 252 trading days per year). The choice of the risk-free rate is arbitrary. Given that there is one rate for all companies in question, the impact of this choice on the analysis is negligible. The descriptive statistics on all the variables discussed above as well as the size of the DAX100 companies are presented in Table 4.1.

Results of Analysis

In order to assess the relationship between corporate governance and corporate stock market returns, we performed three statistical tests. We started with single-factor regressions between corporate stock market return and ownership concentration. In the next step, we repeated the regression analysis with the addition of control variables. The final

sub-section sketches the analysis of ownership concentration and stock market returns across German regions.

Regression of Stock Market Returns on Ownership Concentration

As stock market returns represent changes in the market value of a company, it is worth recalling the factors that affect this value. According to the most popular valuation method, the value of a company's shares is based on the stream of expected future dividends, which can be used for consumption by shareholders, discounted to reflect the riskiness of the company's activities (Bodie et al. 1996). The factors influencing corporate earnings are endless, including conditions so diverse as input prices, demand patterns, the competitive structure of industry, and the internal organization of a company, comprising such aspects as organizational efficiency, creativity, and flexibility to adjust to changes in external environment. In order to assess share values, all these factors have to be projected into the future. If we add that valuation depends on the behaviour of investors who may or may not be rational (see Shiller 2000; Shleifer 2000), it may be difficult to discern a significant relationship between stock market returns and ownership concentration. In this light, it is not surprising that previous research has not ventured beyond the examination of the relationship between corporate governance and past corporate performance.

Table 4.2 reports the main results of the regression of corporate stock market returns on ownership concentration and corporate governance for

Table 4.2. Regression of corporate stock market returns on corporate governance

Variable	Index	Arithmetic average of daily returns		Sharpe ratio	
		R^2	Coefficient	R^2	Coefficient
C1	DAX100	**0.054**	**−0.115****	**0.066**	**−0.00034*****
	DAX30	0.052	−0.080	**0.088**	**−0.00034***
	MDAX	**0.046**	**−0.118***	**0.050**	**−0.00032***
Herfindahl	DAX100	**0.038**	**−10.700****	**0.047**	**−0.03300****
	DAX30	**0.087**	**−12.500***	**0.129**	**−0.04950****
	MDAX	0.027	−9.780	0.029	−0.02700
SVO index	DAX100	0.012	0.659	0.005	0.00150
	DAX30	0.068	−2.500	0.047	−0.00600
	MDAX	NA	NA	NA	NA

Note: The asterisks show the significance at 10% (*), 5% (**), and 1% (***) level.

Source: Authors' calculations based on data from BaWe, Frankfurt; MSDW, London, and Höpner (2001).

the DAX100, the DAX30, and the MDAX. Starting with the DAX100, we observed a statistically significant negative relationship between ownership concentration and stock market returns. The relationship holds for both the C1 and Herfindahl index, and for the arithmetic average of daily returns and the Sharpe ratio measures of corporate stock market returns. The coefficient of determination was modest, between 4 and 7 per cent. But this is not surprising given the myriad factors that affect stock market returns. Notwithstanding the level of determination, we should acknowledge the economic significance of the results. Considering the sensitivity of returns to the Herfindahl index within the DAX100, the negative coefficient of 10.7 implies that a company with diluted ownership (with the value of the index close to 0) would have earned an annual return as much as 30 percentage points higher than a closely held company (index close to 1).

The negative relationship between ownership concentration and returns holds within both the DAX30 and the MDAX. However, the coefficients of determination as well as the levels of significance were higher for DAX30 firms. In addition, when we turn from the C1 to the Herfindahl index as the independent variable, the analysed relationship was stronger for the DAX30 but weaker for the MDAX. Neither of these observations is surprising. In general, the DAX30 constituent firms are more closely scrutinized by investors than the smaller, less liquid, and less transparent MDAX companies (see Chapter 3 in this volume; Jürgens and Rupp 2001). It is costly to obtain and analyse information on the largest holders of a company's voting rights (C1), and it is even more costly to obtain a full picture of a company's ownership and control structure (the Herfindahl index). Thus, taking into account investors' resources and skills as well as the transparency of DAX100 companies, investors in the DAX30 are likely to have access to more detailed information on corporate ownership structures than investors in the MDAX.

The use of the SVO index did not yield significant results. Not only were the coefficients insignificant, they were negatively correlated to the DAX30. This is puzzling, since the index is designed to capture SVO. Thus, we would expect companies with a higher value of the SVO index to command higher returns. We can suggest two possible solutions to the puzzle. First, with the index values only available for twenty-nine companies, including only eighteen companies from the DAX30, the data were insufficient to capture a significant relationship. Second, it is also likely that investors economise on obtaining the information necessary to assess the SVO of a company, and use instead far cruder indicator variables such

as ownership concentration. The results suggest that investor behaviour driving stock market prices is less informed and sophisticated than we would otherwise hope or expect.

For all three indices and for both measures of ownership concentration, the negative relationship between governance and stock market returns was stronger when we moved from the arithmetic average of daily returns to the Sharpe ratio. It seems that higher ownership concentration affects risk-adjusted returns more than it affects unadjusted returns. Recalling the Sharpe ratio, this result suggests a positive relationship between ownership concentration and the standard deviation of daily returns. The systematic character of this relationship was explored in Chapter 3, in which we argued that high-ownership concentration indicates a more closed corporate governance regime. With less information available to outside investors and a higher potential for insider trading, companies with more closed corporate governance tend to exhibit more volatile stock market prices. In brief, high-ownership concentration tends to inhibit corporate stock market returns.

Regression of Stock Market Returns on Ownership Concentration with Control Variables

In order to extend the analysis of the relationship between ownership concentration and stock market returns, we added two control variables to the previous regression analysis: the size of a company (defined as the logarithm of its MC) and its inclusion in the DAX30 index (a dummy variable). Being the most basic characteristic of a company, size may influence corporate stock market returns. A direct impact can be expected on the basis of the literature on investors' bias towards or against large capitalization firms (see Falkenstein 1996). An indirect influence, of particular importance for our analysis, could lead through ownership concentration. In fact, there is a large body of research demonstrating an inverse relationship between size and ownership concentration. Put simply, the explanation is that larger companies need more capital and hence cannot rely on non-diversified sources of equity capital to the same extent as smaller firms (Demsetz and Lehn 1985; Mørck 2000).

Inclusion in the DAX30 index can be important for stock market performance for analogous reasons. First, investors might be biased towards companies included in the index due to their market visibility (see Mørck and Yang 2001). Second, there may be a relationship between index inclusion and ownership concentration. Indeed, our previous research

Table 4.3. Regression of corporate stock market returns on ownership concentration with control variables

Variable	Index	Arithmetic average of daily returns		Sharpe ratio	
		R^2	Coefficient	R^2	Coefficient
C1	DAX100	**0.056**	**−0.113****	**0.068**	**−0.00034*****
	DAX30	0.083	−0.080	**0.104**	**−0.00033***
	MDAX	**0.046**	**−0.118***	**0.051**	**−0.00032***
Herfindahl	DAX100	**0.040**	**−10.500****	**0.051**	**−0.03200****
	DAX30	**0.112**	**−12.400***	**0.141**	**−0.05000****
	MDAX	0.027	−9.800	0.031	−0.02700

Note: Independent variables used except for C1 and the Herfindahl index were company size (for all indices) and a dummy indicating the inclusion of a company in the DAX30 (for the DAX100). Neither of these variables was significant at a level lower than 30% and their coefficients are not reported.

Source: Authors' calculations based on data from BaWe, Frankfurt and MSDW, London.

demonstrated that other factors being equal, DAX30 firms had a lower level of ownership concentration than other German-listed companies did (Wójcik 2003). We should note that the relationship between DAX30 inclusion and concentration is a two-way relationship. Inclusion causes more exposure to trading as portfolio investors and in particular indexed funds, seek a small portion of the index companies in their diversified portfolios. In order to be included in DAX30, of course, a company must have sufficiently dispersed ownership to ensure that its shares have the required level of liquidity (Jürgens and Rupp 2001).

The results of the multiple regressions reported in Table 4.3 are very similar to the results reported for single-factor regressions, with the coefficient of determination being only slightly higher for each regression than before. Coefficients on size and DAX30 inclusion are far from significant and are not presented in the table. Consequently, the results support all observations derived from the analysis of single-factor regressions. After we account for company size and inclusion in the DAX30, the negative relationship between ownership concentration and corporate stock market returns remains true.

Stock Market Returns and Ownership Concentration across Länder

Data on the location of the headquarters of the DAX100 companies allows for an explicit geographical analysis of the relationship between ownership concentration and corporate stock market returns. There are six Länder that host at least five DAX100 companies. In Table 4.4 and

Table 4.4. Ownership concentration and corporate stock market returns of the DAX100 firms headquartered in major Länder (median values)

Land	Number of observations	Arithmetic average of daily returns	Sharpe ratio	Herfindahl index	C1
Hesse	21	7.86	0.0201	0.12	28.2
Bavaria	21	7.55	0.0140	0.13	29.2
Hamburg	7	7.03	0.0200	0.21	37.6
North Rhine-Westphalia	26	4.15	0.0107	0.25	35.5
Lower Saxony	6	4.79	0.0126	0.29	37.0
Baden-Württemberg	13	2.19	0.0008	0.30	51.7

Source: Authors' calculations based on data from BaWe, Frankfurt and MSDW, London.

Figure 4.1, we present the median values of the relevant variables for these Länder, showing considerable spatial variation of ownership concentration and corporate stock market returns. The typical size of the largest holding of voting rights in a DAX100 company in Baden-Württemberg is almost twice as large as that in Hesse. Further, the diversity of returns is even more pronounced. In addition, if we rank the Länder in the order of ascending ownership concentration, we obtain almost the same ranking in terms of their descending returns. Significantly, the negative relationship between ownership concentration and corporate stock market returns holds across Länder.

The strong inverse correlation between the ranking of Länder in terms of ownership concentration and their ranking in terms of corporate stock market returns suggests that the features of a region have little direct influence on the stock market valuation of companies headquartered in this region. However, the above finding does not make the observed spatial diversity of ownership concentration and stock market returns disappear. Quite to the contrary, combining these findings with our previous research (see Chapter 3 in this volume; Wójcik 2002*b*, 2003), we would claim that regionally nested regimes of corporate governance have profound implications for the valuation of their constituent companies on the German markets.

Implications and Conclusions

Many factors affect stock market prices. While there is an industry devoted to excavating the fundamentals underpinning companies' observed stock prices, the TMT boom, bubble, and bust is evidence enough of the irrationalities of financial judgement and reasoning

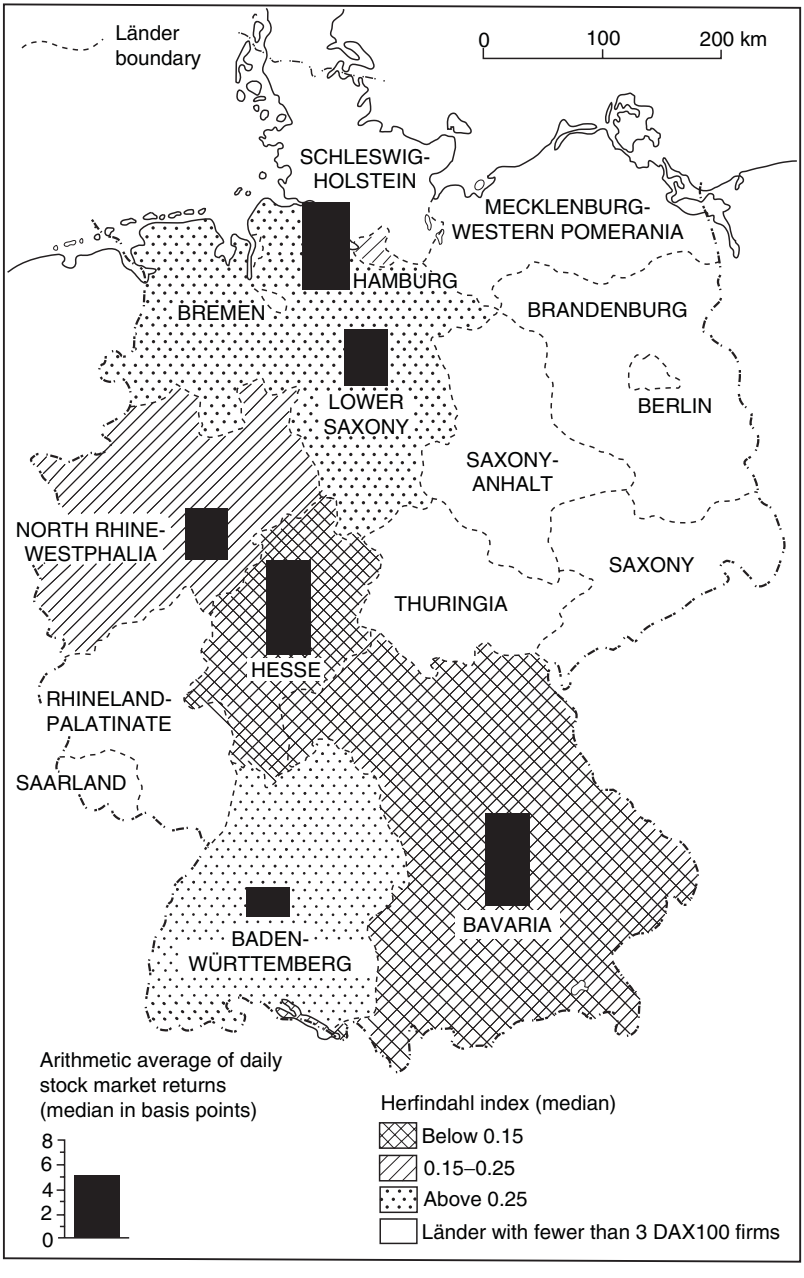

Figure 4.1. Ownership concentration and stock market returns of DAX100 companies by Land, 1997–2001

(Shiller 2002). Not surprisingly, in seeking to establish an empirically sound relationship between German ownership concentration and stock market returns, we were conscious of the fact that such a relationship, if plausible in theory, may easily be swamped by the tides of fortune. Even so, we were able to establish the statistical significance of such a relationship for the DAX100 and most importantly, for the DAX30 over the period 1997 through 2001. Of notable importance in this regard was the strength of the relationship between ownership concentration and the risk-adjusted rate of return. Textbook treatments of financial investment would argue that the Sharpe ratio is the most relevant measure of the rate of return. In our case, this was surely shown to be true.

At the heart of our analysis were three inter-related assumptions. First, whatever the historical significance of concentrated ownership for the German model, over recent years global and European portfolio investors have played an increasing role in 'pricing' the virtues or otherwise of German corporate governance (compare with Dore 2000). Second, as is the case in many other jurisdictions, portfolio investors are concerned about the potential for exploitation—that is, the likelihood that their place as minority owners, and largely passive owners at that, may be exploited by other better-placed owners with more access to private information. It remains, however, a most important factor in understanding how and why ownership concentration may be systematically discounted as large firms come to the global financial marketplace. Furthermore, we suggested that global portfolio investors use, more often than not, cost-effective ways of judging firms, and hence, valuing those firms in the marketplace. By this logic, we argued that there should be a significant and negative relationship between high levels of ownership concentration and the risk-adjusted rate of return as found in German stock markets.

To appreciate the significance of this finding, imagine that Germany encapsulates a variety of styles or models of corporate governance. Some are characterized by high levels of ownership concentration, whereas other styles are more like the Anglo-American model. Now assume that these different styles of governance are randomly spread across the German economic landscape. Our results suggest that the discounting of firms characterized by high ownership concentration is in part a process of relative pricing where over the long-term such firms are either slowly driven out of the marketplace or respond by changing patterns of ownership towards the preferred model (see Chapter 5 in this volume). Firms that persist with concentrated ownership would face a higher cost of

capital, may be more vulnerable to takeovers if one or more of their majority owners were to defect, and may even face discounting of their credit ratings. One way or another, there is a penalty to be paid in financial markets for persisting with high levels of ownership concentration if there are comparable firms with much lower rates of ownership concentration. This issue may not be decisive in decisions over the proper level of ownership concentration—there are many other variables involved, including social solidarity and political commitments (as suggested by Roe 1994 for the USA).

Of course, with a distinctive geographical footprint, the relationship between ownership concentration and stock market returns takes on added interest. Most importantly, we observed that firms with high levels of concentration are not randomly scattered around Germany but are concentrated in a few Länder. Therefore, it is not just a question of discounting the value of an individual firm. It is also an issue of discounting the value of an entire regional regime of accumulation. Granted, the numbers of such firms in any Länder are relatively low when compared against all German firms traded and untraded. However, these firms are often very important for the regions concerned, being the core units in extensive networks of transaction and exchange spilling down the hierarchy of firm size and function. Indeed, these core firms are linked with other local firms in networks of exchange governed by social norms such as trust and reciprocity, not just the terms and conditions of price and quantity. To the extent that there is a price attached to high-ownership concentration among the leading firms of a region, that price may filter down and be distributed among the many other firms that rely on, or in some other way, trade with those firms.

The geographical implications of the negative relationship between ownership concentration and stock market returns are threefold. In the first instance, there is the issue of distributing the costs of the relationship within the firm and between owners, managers, and workers, and/or between the firm and its other related firms from the region. To the extent to which core firms are dominant politically and economically, they may also be able to externalize the cost of ownership concentration by narrowing the profit margins and wages paid to outside firms and employees in the region. In the second instance, the fact that ownership concentration has a distinctive geographical footprint suggests that some German regions and their firms may have a mode of corporate governance more amenable to global portfolio managers than others. To the extent to which investors target investment to particular firms, those German

regions with models of corporate governance more amenable to global finance may be the regions that attract the largest volumes of investment. In the third instance, if high levels of ownership concentration remain the preferred regional model of corporate governance, another way to accommodate its costs would be to seek out other jurisdictions (in central and eastern Europe) which offer much lower costs of production, treating those within the home region as the beneficiaries of an ideal political order, while treating firms outside the region as those who subsidize that political order.

If these seem disturbing implications with respect to the long-term future of the German model of corporate governance, we do not mean to imply that this is the proper order of the world. The whole logic of the argument, and indeed the empirical structure of the chapter, is premised upon the assumption that financial markets have become significant players in pricing German and Continental European modes of economic organization. Even so, in many respects our chapter is about a certain point in time and space capturing the global financial bubble at its peak and its aftermath, without taking forward the German model into more recent history. While reform of German and European corporate and tax laws have added urgency to the issue of ownership concentration, one response to these forces of change has been to retreat from incorporation into global finance. This requires, of course, the support of firms' majority shareholders, including banks, insurance companies, and other related industry and regional partners. At issue here is the extent to which there remains a common interest between German financial service providers and their region-specific firms and communities (see Chapter 5 in this volume).

Therefore, the most important conclusion of our analysis is as follows: the German model of corporate governance is not one model but a number of related regional models, some more and others less consistent with the imperatives of global financial markets. The future of the German economy may be found in the degree to which some regions reap the benefits of their newfound favour with portfolio investors, while other regions find ways of adapting and responding to the realities of the global pricing of organizational form. What we have found may be simply a moment in a process of convergence to one national model of corporate governance, mimicking the process of geographical homogenization documented by Franks et al. (2003) for the UK and by Roe (1994) for the USA. One way or another, the story about German corporate governance is about rivalry between regional systems of corporate governance and

competing claims on national and European political elites for control over the design of codes of practice.

Notes

1. There is a massive literature devoted to this topic. In this chapter, we have no intention of surveying or assessing that literature except to cite Clark et al. (2001) on the limits of path dependence in the context of regional economic development.
2. See the opening comment made by La Porta et al. (2002: 1147): '[r]ecent research suggests that the extent of legal protection of investors in a country is an important determinant of the development of its financial markets. Where laws are protective of outside investors and well enforced, investors are willing to finance firms, and financial markets are both broader and more valuable.'
3. Our characterization of the relevant literature does harm, of course, to the nuances of positions and arguments about these issues. For instance, Hollingsworth and Boyer's project (1997), like that of Crouch and Streeck (1997) and others, looks closely at the institutional differences of modern capitalist economies and the subtle interaction between the collective responsibilities of 'home' institutions and the options for actions available to economic actors. On that theme, Hall and Soskice's project (2002) goes from nation-state institutional forms to informal deliberative action based upon social norms and customs. Thus to talk about 'models' of capital accumulation is to gloss over a great deal of internal differentiation while reifying what may be 'mirages' rather than coherent structures (see Hirst and Thompson 1997: 353).
4. Though there are notable exceptions; see the recent study by Franks et al. (2003) on the governance and evolution of UK corporate structure emphasizing the regional coalitions of firms that underpinned the UK economy during the early years of the twentieth century.
5. Where only small transparent firms are attractive to distant non-bank investors while small opaque firms can only be served by local institutions close enough to monitor performance on a regular but non-routine manner (for a theoretical treatment see Clark and O'Connor 1997).
6. Informed observers have suggested that the fact that supervisory board members often sit on a number of related boards including their own means that for a board member to intercede in management issues on another board would be to invite retaliation by board members who sit on their own boards. And to become involved in management strategy on one board may reveal too much about their own institution's strategic interests. Finally, it has been suggested that there is an implicit culture of solidarity joining board members from the corporate and financial sectors set against the interests and possible hostility of union and worker representatives.

7. Theisen (1998: 264–5) is scathing about the competence and skills of many supervisory board members. He suggests that complacency is common, audit functions are poor, and standards of performance comparable between firms non-existent. Indeed, he suggests that the lack of detailed legislative provisions specifying the supervisory functions of board members means that the formal ideal is a chimera.
8. He also suggests thereafter that 'the superior performance of closely held corporations is compatible with the interpretation that ownership includes the incentive to exercise control with the goal of market value maximization' (p. 986).

5

Path Dependence and Transition

In Chapters 3 and 4 on the German model, we emphasized the increasing significance of global financial institutions in pricing the prospects of German firms and regions. This required an analysis of ownership concentration and the pricing practices of portfolio managers, and an analysis of the geographical foundations of the German stock market. We have found that geography matters; spatial differentiation is deeply embedded in the German model (if there is a model at all). In some respects, we have uncovered a world of finance familiar to many even if it references a kind of institutional structure more consistent with the early years of the twentieth century in the UK and the USA than contemporary circumstances (see Franks and Mayer et al. 2003). Even so, the academic debate about the prospects of national regimes of accumulation in the context of global financial integration is really about two competing intellectual claims: continuity versus convergence (where the former relies on path dependence and the latter depends on unbounded financial capitalism).

This tension is apparent in the literature on economic geography and the literature on corporate governance. For some analysts, path dependence underpins the persistence of local and regional traditions in the face of globalization (compare Cooke and Morgan 1998 with O'Brien 1992). At a higher spatial scale, there is debate about the standing of national models of corporate governance and in global financial markets. Some suggest that nation-state traditions remain significant (La Porta et al. 1999), and will likely do so notwithstanding the interests of global financial institutions (Dore 2000). On the other hand, celebrated instances of cross-border takeovers and the adoption of Anglo-American financial practices seem to suggest that nation-state traditions are not nearly as robust and as impervious to change as commonly assumed (Gordon

2003*a*). For some, path dependence and systems integration provide the theoretical tools justifying resistance to the very idea of institutional convergence. For the USA, however, path dependence does not square with the empirical evidence, while the idea of systems integration is too strong an assumption given the fragility of nation-state economies and internal political tensions.

In this chapter, we interrogate the logic of path dependence in ways relevant to both economic geography and corporate governance in the context of the market for incorporation. Recognizing that corporate governance is normally treated as an issue of nation-state rules and regulations, we reinforce previous argument that in the German case, at least, there is no one model, but a set of related models located at the Länder or provincial levels. But there is a sting in our tale: we also show that German industry at the regional level is changing (at different rates and in different ways) in response to the opportunities and incentives available in national and global financial markets. Path dependence may unravel in some circumstances while being reinforced in others. At the regional level, recent German experience would seem to suggest that both are happening at the same time. We find that the national model is itself undergoing significant transformation as new industries and regions take their place in the financial world. In this respect, we argue that path dependence may be undercut by the changing fortunes and shifting interests of different industries and regions within the umbrella of the German model.

In this chapter, we rely on data previously introduced as well as other sources of information on entry and exit from the German stock market. This includes data on stock holdings in German listed companies from Bundesaufsichtsamt für den Wertpapierhandel (BaWe—the Federal Securities Authority), now reorganized into Bundesanstalt für Finanzdienstleistungsaufsicht (BaFin) augmented by data from Deutsche Börse, Höppenstedt Aktienführer, Wright Corporate Information, and Thompson Analytics. Being concerned about changes in ownership we were also concerned with documenting the sectoral and geographical composition of the flow of companies in ('novices') and out ('dropouts') of the German stock market over the period 1997–2003. Some 262 ('core') companies remained in the database throughout the entire period. Note that the period 1997–2003 was momentous for many reasons. Not only were German firms permitted to report their financial positions according to international accounting standards (1998), but also in this period was the removal of tax penalties on unravelling cross-holdings first announced and then implemented (2002). Significantly, the German Börse was also

affected by the latter stages of the TMT bubble and its aftermath (collapse of the Neuer Markt).

Path Dependence and Systems Integration

One of the core principles joining geographers and economists in the economic geography project is path dependence. Drawing on related debate in economics about the nature and putative (in)efficiency of technological change, and a presumption that time and space are fundamental building blocks in understanding the economic landscape, path dependence represents a shared commitment to the past as an explanatory tool. It is not, however, easily defined in any unambiguous fashion. Some theorists seem to imagine that it is entirely deterministic; others allow for a stochastic element to help drive the process of translating the past into the present and future. We are not concerned, in this chapter, with discriminating between these related conceptions of path dependence.

In general, the idea of path dependence collects past decisions, the inherited configuration of production, and the benefits of remaining true to the past through to the present (see Teece 2002 for an extensive discussion). Path dependence provides an explanation why chosen paths of accumulation may be reinforced and taken into the future. Whether because of increasing returns to scale, the incremental and accumulated benefits of tacit knowledge, or the power of incumbent market position, path dependence is a significant factor in firms' strategic decision-making. When combined with geography—the positive spillover effects of co-location, agglomeration economies, and complementarities—path dependence becomes both an element in corporate decision-making and an unplanned advantage of one location over others. In sum, it provides theoretical logic for a differentiated economic landscape that may be characterized by multiple equilibria (Christopherson 2002).

Path dependence is also thought to provide a buffer against short-term opportunism; whereas differences in market pricing may signal immediate opportunities for those fleet of foot and capable of spontaneous response, the principle of path dependence suggests that many economic agents are locked in to a time and space of their own making. Therefore, in the short term, path dependence may appear to be a constraint on market efficiency. But when judged over the longer term, path dependence may be a means of sustaining commitment and a means of reinforcing advantages that would otherwise be washed out by short-term exigencies

(Dore 2000). In the context of comparative corporate governance, analysts suggest that the German model is distinctive for its path dependence relative to the Anglo-American model which is believed to be more vulnerable to short-term opportunism and defection (see, e.g. O'Sullivan 2000). Of course, path dependence may not always be beneficial; the history of many industry-regional complexes can be written as histories of successively greater reliance on one model of accumulation through to crisis and collapse (Clark and Tracey 2004).

Path dependence may not be sufficient to explain the development of whole regimes of accumulation. If important for some firms in some places, market opportunism might drive other firms away from its core characteristics. What is needed, analytically speaking, is a means of integration among firms in a place while other firms in other places respond to integrative devices contributing to the development of their own distinctive regimes of accumulation. In this context, path dependence has been linked with social practice such that the latter provides the social glue of shared norms and customs going beyond firms' strategic decision-making and the economic benefits of co-location (Storper 1997). If path dependence is to be a robust explanatory tool, it needs to be sustained by something other than mere economic advantage; by this logic, shared systems of meaning are crucial regulatory devices for setting behavioural expectations. We find this argument in the European literature on economic geography in contrast to the Anglo-American literature which seems to point to European experience rather than their own experience as evidence of the significance of such argument (Bathelt 2003).

The notion of systems integration is more than an empirical argument. For some social theorists, it is an organizing principle underpinning social life (Luhmann 1995). In some instances, it is used to explain the holistic relationship between the economy, civil society, and the state. It is also used to explain how behaviour may be regulated in the sense that widely shared expectations about proper behaviour stand in place of nation-state regulation. And in some instances, it is argued that the overlapping and mutually reinforcing nature of such institutions means that opportunities for defection are few and the penalties imposed on those who attempt to defect are significant. Implied is an integrated moral and economic order that regulates behaviour. Like the French regulation school, the German version of systems integration carries with it an explanatory logic and a normative ethos. And yet, for all its theoretical virtue, the combination of path dependence and systems integration carries with it three unfortunate implications. These are noted below.

Path dependence is a very useful intellectual tool when accounting for the past. It is used more often than not as a means of explaining the ways in which widely recognised economic processes were harnessed to develop distinctive industry-regions (Krugman 1991). With well-chosen case studies, whether from industrial economics or economic geography, path dependence is elucidated through detailed understanding of the interaction between economic principles and the contingencies of certain times and places (Crouch and Streeck 1997). Being used in this manner, path dependence is almost always a retrospective explanatory device. It is hardly ever predictive except in a broader sense to suggest that the spatial differentiation is an ongoing process whether in the past, the present, or in the future. In this manner, path dependence matches the collective intellectual agenda of economic geography: a common commitment to differentiation and the importance of historical continuity.

Path dependence combined with systems integration leaves us with a picture of the world that is silent about the forces undercutting the coherence of one or more models of corporate governance. In part, this is because path dependence is used in a defensive manner to protect, conceptually speaking, models or regimes of accumulation under threat from global finance. In effect, to sustain the argument in favour of path dependence requires an argument in favour of whole-system coherence and integration such that economic and social change is an internal process of incremental accretion and at the limit a disruptive and destructive process of crisis and collapse. In this chapter, we identify the internal forces driving the break-up of the German model while demonstrating that these forces coexist over time and space with inherited institutions, social practices, and regimes of accumulation. We dispute the internal coherence of the German model, suggesting that its ongoing transformation is a response by new industries and regions to the past and the opportunities of global financial markets.

Data and Methodology

The database on German corporate governance was composed of the following elements: listed companies, major holders of voting rights in these companies, and the links between companies and holders. Data on all three elements were provided by BaWe, the Federal Securities Authority now reorganized into BaFin. Data for 31 December 1997 covered all companies listed on Amtlicher Handel (official market) while data for

30 June 2003 covered both Amtlicher Handel and Geregelter Markt (regulated market). This distinction stems from federal securities law, where companies listed on Amtlicher Handel have to be bigger, have a longer record of incorporation, and comply with stricter disclosure requirements than those listed on Geregelter Markt.

Expansion of data coverage reflects the recent reorganization of the German stock market. The Deutsche Börse has introduced a distinction between General Standard and Prime Standard companies. To be designated General Standard, it is sufficient for a company to satisfy either Amtlicher Handel or Geregelter Markt criteria. To be designated Prime Standard, a company must satisfy the conditions of the General Standard and meet international standards of disclosure and transparency. These include quarterly reports in English as well as German, the application of either International Financial Reporting Standards or the US GAAP, publication of a financial calendar, and the staging of at least one conference a year for investment analysts. Furthermore, any ad hoc disclosure must be published in English. The Deutsche Börse has indicated that the Prime Standard designation is meant for companies seeking to attract international portfolio investors, while the General Standard designation is for those targeting national investors. In effect, the German stock market has been restructured to better match the expectations and interests of institutional investors from global capital markets (developed in Clark 2003*a*).

To summarize, the available 1997 data covers the companies of Amtlicher Handel, while the 2003 data covers companies of the General Standard. In addition, the data include companies listed in 1997 that were later squeezed out through acquisition by majority stockowners and hence no longer listed in June 2003 (compare Rodríguez-Pose and Zademach 2003). In this way, we track corporate governance changes in a larger number of companies including the corporate elite of Deutschland AG.

For our discussion of the data BaWe compile, and the obligations of individuals and institutions to notify BaWe as per their voting rights, see Chapter 3 of this volume. Throughout the current chapter, we use the terms *holding*, *blockholding* and *voting block* interchangeably to describe the percentage of voting rights in a company held by an entity directly and indirectly. Financial service companies may apply to have their trading portfolio exempted from the aforementioned notification requirements (see Chapter 3 in this volume). This possibility, along with a minimum threshold of 5 per cent, means that the database tends not to include

index-related portfolio holdings. It is not a major obstacle to research since the level of portfolio holdings in German companies is historically low (Wójcik 2002*a*).

The database was extended by taking into account the economic sectors of the listed companies, as well as various types of holders. Industrial structure was defined using the classification devised by the Deutsche Börse (18 sectors). The typology of holders was based partly on that used by the European Corporate Governance Network (see Barca and Becht 2001). In cases where more than one family member held voting rights in a company, the whole family was treated as a single holder. In order to maintain an explicit spatial dimension to the data, companies and holders were assigned to their headquarter Länder or, in case of individuals and family pools, to their Länder seats. The MC for 31 December 1997 was obtained from Morgan Stanley Dean Witter (London) and similar data for 30 June 2003 was obtained from Thompson Analytics and Höppenstedt Aktienführer. The value of a holding was defined as the product of the percentage of voting rights controlled and the MC of a company.

To study the economic geography of the German model, we concentrated on corporate governance and in particular spatial and temporal patterns of ownership concentration (see also Chapters 3 and 4 in this volume). This may appear to be a rather crude and broadly conceived measure of corporate governance, recognizing that the comparative measure of ownership concentration is more often the concern of financial markets than necessarily a good measure of 'best practice'. But it is a core concept in the economic theory of corporate governance (Shleifer and Vishny 1997; Morck 2000) and is a defining feature of German corporate governance (Hopt et al. 1998; Wójcik 2003). Again, we examined three measures of ownership concentration: the total of voting blocks, the share of the largest holder of voting rights in a company (C1), and the Herfindahl index.

Beyond the examination of ownership concentration, we also analysed the identity and origin of the holders of voting rights, distinguishing between four more variables. First, we considered the share of foreign holdings in total holdings. This is an important variable, since foreign holders can be seen as potential agents of change in the corporate governance of host companies, regions, and countries. Second, we took into account the share of family holdings in domestic holdings, recognizing the fact that family holdings represent the most traditional mode of corporate control (see La Porta et al. 1999). Third, we analysed the share of intra-Land holdings in domestic holdings. This measure was presented in

one of our previous papers (see Wójcik 2002*b*), emphasizing a high level of regional fragmentation of the German market for corporate control. Finally, we considered the share of cross-holdings in domestic holdings. Cross-holdings occur when voting rights in listed companies are held by other listed companies. They are a characteristic feature of corporate governance in Germany among other things protecting the companies against hostile takeovers (see, e.g. Hopt et al. 1998 and Wójcik 2003).

The seven variables of corporate governance form a basic analytical framework with which we start the presentation of our results in the following section. Thus, our empirical strategy is quantitative, though it should be noted that the interpretation of results has also been informed by numerous interviews with the executives of European, including German, financial and non-financial companies.

The logic of the empirical part of the chapter is the following. The next section starts our assessment of integration, path dependence, and convergence by analysing the level and change of the seven variables of corporate governance for Germany as a whole, across Länder and economic sectors. The following section looks at the flows of companies in and out of the stock market in order to identify groups of firms that are potential pioneers of change or centres of resistance. Thereafter, a section accounts for location, sector, stock market history, and additional corporate characteristics such as the index inclusion, testing their relationship with the variables of ownership concentration, and its change in the framework of a regression model. The penultimate section extends the analysis of the driving forces of changing corporate governance, investigating the structure of foreign holdings by type and origin.

Corporate Governance—Länder and Sectors

In this section, we present the nature and the change of German corporate governance by analysing the variables of ownership concentration and structure at three levels: the German corporate elite as a whole, individual Länder, and economic sectors. Caution is required when comparing figures for 1997 and 2003, as the samples do not consist of the same companies. Recalling the explanations from the preceding section, the change in the coverage follows the development of the German stock market as well as change in data availability. Specifically, data for 1997 includes all officially listed companies as at 31 December 1997, while data for 2003 consists of all companies included in the General Standard of the

Table 5.1. Corporate governance variables according to company group

Variable	Germany		Core		Dropouts	Novices
	1997	2003	1997	2003		
No. of companies	415	750	262	262	153	436
Market capitalization (€ bn)	535	672	419	487	116	172
Sum of voting blocks						
Mean	74.5	65.4	69.5	72.1	82.9	57.2
Median	81.6	69.9	75.0	78.4	90.7	60.0
Herfindahl index						
Mean	0.49	0.41	0.41	0.47	0.62	0.31
Median	0.49	0.29	0.35	0.44	0.62	0.21
C1						
Mean	61.9	54.0	55.2	60.1	73.3	44.6
Median	66.4	50.9	53.3	64.0	77.7	39.4
Share of foreign holdings						
Number	16.8	17.5	15.0	18.1	20.4	17.5
Value	17.4	23.4	15.7	23.4	23.2	20.4
Share of family holdings						
Number	35.8	49.8	38.6	42.0	29.7	59.9
Value	26.3	23.9	31.1	24.8	7.3	15.0
Share of intra-Land holdings						
Number	55.5	55.6	53.7	53.9	59.3	57.8
Value	64.5	52.7	65.1	57.9	62.2	51.0
Share of cross-holdings						
Number	29.7	18.7	24.5	21.8	41.2	11.7
Value	40.2	45.7	35.3	43.2	59.3	55.3

Note: The figures for 1997 are as at 31 Dec. 1997; the figures for 2003 are as at 30 June 2003; the figures for family, intra-Land, and cross-holdings represent respective shares in total domestic holdings; the sum of core and novices is lower than the German total for 2003, because the latter includes squeezed out firms for which data was still available in 2003.

Source: Authors' calculations based on data from BaFin, Deutsche Börse, MSDW, Thompson Analytics, Wright Corporate Information, and Höppenstedt Aktienführer.

Deutsche Börse as at 30 June 2003, plus companies squeezed out before this date but for which data is still available from BaFin. Notwithstanding the complexity of the sample coverage, for the purpose of this section we can assume that we are analysing governance within the German corporate elite.

The first striking finding from Table 5.1 is the fall in the level of ownership concentration. The median sum of voting blocks decreased from over 80 to approximately 70 per cent; a 'typical' share of small holders of voting rights in a company increased from less than 20 to 30 per cent. An even more dramatic change is revealed by the median value of the Herfindahl index which fell from 0.49 to 0.29; minor holders grew in significance at the expense of the largest holders. In fact, the median values of C1 indicate that while the largest holder typically in 1997 had a block of two thirds of voting rights, in 2003 it had 50.9 per cent, merely

giving the holder a majority status. Considerable changes took place also with regard to the identity and origin of blockholders. The share of foreign holders grew slightly in terms of the number of holdings but significantly in terms of value. The share of family holdings grew by an impressive 50 per cent in terms of number but fell in terms of value. The share of intra-Land holdings, though falling in terms of value, remained high in terms of number, with the majority of the voting rights in the German corporate elite being held by entities located in the same Land where the listed company is located. Finally, the share of cross-holdings fell in terms of number and increased slightly in terms of value.

More light on overall changes in the German corporate elite can be shed by analysing corporate governance variables across Länder and economic sectors (Table 5.2). Focusing on Länder and sectors with at least twenty companies in 2003, it can be shown that ownership concentration and the share of cross-holdings fell, while the share of family holdings grew in all of these major Länder and almost all the sectors. However, this change was not uniform across the German economic landscape. First, the degree of change differs greatly between Länder and sectors. Second, the other two variables of corporate governance do not confirm the existence of a single direction of change, with the share of foreign holders and the share of intra-Land holdings decreasing or increasing depending on which Land or sector is considered.

Diversity refers not only to the change but also to the absolute level of corporate governance variables. All of them vary across Länder and sectors but some vary much more than others. The variable with the lowest ratio of standard deviation to mean for both Länder and sectors is ownership concentration, while the share of cross-holdings and the share of foreign holdings exhibit the highest ratio suggesting they are the product of region and sector-specific conditions to a higher extent than other variables. Considering the evolution of the diversity in corporate governance arrangements across Länder and sectors, we should stress that it did not fall in the analysed period. In fact, the ratio of standard deviation to mean in both Länder and sectors was higher in 2003 than in 1997.

To gain further insight into the diversity of corporate governance we select Hesse and Baden-Württemberg as well as software and banking as Länder and sectors for which differences in corporate governance variables are most pronounced. As illustrated in Figure 5.1 Baden-Württemberg had a significantly higher ownership concentration, a higher level of intra-Land holdings, and a lower level of

Table 5.2. Ownership concentration and structure by land and sector

Land/sector	Sum of voting blocks (mean)		Share of foreign holdings (mean)		Share of family holdings (mean)		Share of intra-Land holdings (mean)		Share of cross-holdings (mean)	
	1997	2003	1997	2003	1997	2003	1997	2003	1997	2003
Baden-Württemberg	77.0	70.3	15.8	16.2	43.8	49.8	62.5	65.0	26.6	14.3
Bavaria	74.9	60.7	12.1	19.5	30.7	57.7	69.3	66.8	36.6	17.0
Berlin	71.7	64.4	15.0	12.9	35.3	39.5	35.3	37.0	17.6	16.0
Hamburg	84.3	71.5	8.0	13.3	26.1	52.0	32.6	46.9	28.3	17.3
Hesse	71.9	60.9	17.9	19.1	32.1	49.5	47.4	50.0	32.1	22.1
Lower Saxony	76.3	71.2	16.2	12.9	41.9	50.8	45.2	52.5	22.6	14.8
North Rhine-Westphalia	72.0	66.5	21.8	18.8	35.7	43.0	54.5	59.4	29.2	25.5
Mean	75.4	66.5	15.3	16.1	35.1	48.9	49.5	53.9	27.6	18.2
Standard deviation	4.2	4.3	4.0	2.8	5.8	5.5	12.5	9.8	5.7	3.8
Standard deviation/mean	0.06	0.07	0.26	0.18	0.16	0.11	0.25	0.18	0.21	0.21
Automobile	62.5	67.7	13.8	28.8	48.0	56.8	48.0	51.2	28.0	24.3
Banks	76.9	79.2	10.9	20.9	14.0	8.8	57.9	31.8	52.6	35.3
Construction	82.3	78.6	13.3	16.3	57.7	64.2	71.2	66.7	17.3	11.9
Consumer	71.0	74.3	25.7	25.5	42.0	51.9	50.6	49.1	21.0	16.7
Financial services	79.1	72.9	19.7	11.2	43.4	49.4	56.6	59.2	20.8	16.7
Food & beverages	81.9	87.4	5.0	16.1	29.8	44.7	47.4	58.8	8.8	6.4
Industrial	67.7	61.5	21.8	20.1	46.2	51.8	55.9	56.0	38.7	20.0
Media	76.9	53.4	12.5	16.5	0.0	66.2	42.9	60.6	0.0	5.6
Pharma & health care	64.2	46.6	25.0	11.6	40.0	59.0	53.3	53.8	20.0	13.1
Retail	68.1	63.0	16.7	27.8	35.0	53.8	30.0	42.5	10.0	7.7
Software	92.8	49.1	0.0	18.5	60.0	72.7	100.0	70.6	20.0	6.8
Technology	76.0	52.0	22.2	26.5	35.7	61.1	42.9	60.0	35.7	13.9
Transportation & logistics	82.6	81.2	8.7	5.9	42.9	18.8	57.1	42.2	4.8	18.8
Utilities	87.6	82.3	6.3	12.5	8.3	7.1	76.7	40.0	45.0	42.9
Mean	78.3	61.1	13.0	17.0	31.7	48.4	57.6	52.8	19.4	15.5
Standard deviation	9.4	13.9	8.2	7.4	19.2	23.3	22.0	10.8	15.1	12.0
Standard deviation/mean	0.12	0.23	0.63	0.43	0.60	0.48	0.38	0.20	0.78	0.77

Note: Länder and sectors with at least 20 companies in 2003.

Source: Authors' calculations based on data from BaFin, Deutsche Börse, MSDW, Thompson Analytics, and Höppenstedt Aktienführer.

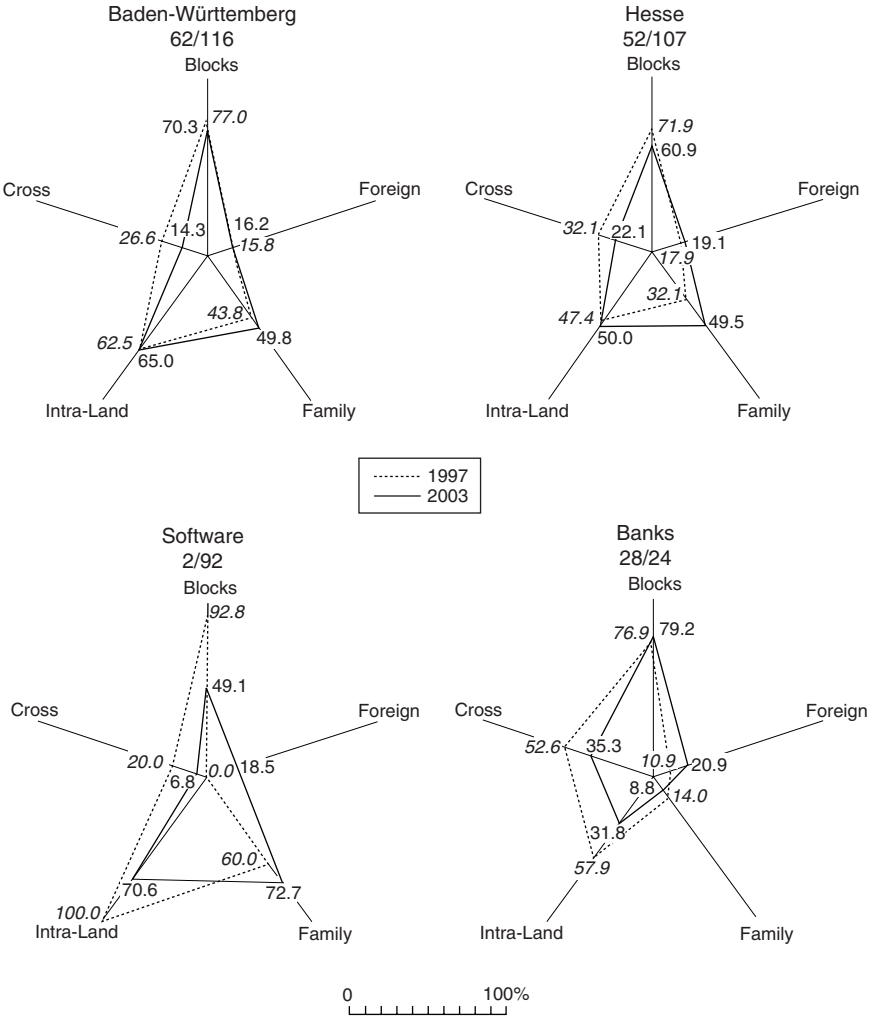

Figure 5.1. Corporate governance variables in Baden-Württemberg, Hesse, software, and banking sector

Notes: The figures below the name of the Land or sector stand for the number of companies in the sample as at 31 December 1997 (the first figure) and 30 June 2003 (the second figure). Variables stand for:

Blocks—average sum of voting blocks

Foreign—share of foreign holdings in the total number of holdings

Family—share of family holdings in the number of domestic holdings

Intra-Land—share of intra-Land holdings in the number of domestic holdings

Cross—share of cross-holdings in the number of domestic holdings.

Source: Authors' calculations based on data from BaFin and Deutsche Börse.

foreign holdings than Hesse. Corporate governance in Baden-Württemberg relies more on insiders and relationships than on market-based interactions (see also Cooke and Morgan 1998).

Perhaps Hesse has more open corporate governance because of the role Frankfurt am Main plays in international finance. At the same time cross-holdings, a traditional feature of German corporate governance (see Hopt et al. 1998), are more common in Hesse than in Baden-Württemberg, making the corporate elite in Hesse appear more connected or integrated in terms of corporate ownership with the rest of Germany. Turning to sectors, in 2003 the average sum of voting blocks in banks was close to 80 per cent while in software companies it was below 50 per cent. Family holders and intra-Land holders were very rare in the banking sector and absolutely dominant in the software industry. Cross-holdings, in contrast, were common in banking and rare in software. The only variable that had similar values for both sectors was the share of foreign holders, in both cases close to the German average.

The results show that the diversity of corporate governance is so large that it questions claims about the existence of a German model. Consistent with previous chapters, we have uncovered a mosaic of regional and sectoral regimes, with various combinations of corporate governance variables, changing over time not only at a different pace, like in the case of falling ownership concentration, but even in opposite directions. In addition, we found that the change over five and a half years was considerable. In the following sections, we explore the multifaceted nature of change.

Dynamics of the Stock Market

As companies enter and leave the stock market, its corporate composition changes over time. In this section, we account for the dynamics of the German stock market by distinguishing between three groups of companies within our sample. Among the companies that were listed on the official market at the end of 1997, we distinguish between those still listed in the middle of 2003 (referred to as core) and those no longer listed at the end of the analysed period (dropouts). The latter group includes companies that were taken over or were merged with other companies, went bankrupt, or were de-listed after a squeeze-out when minority shareholdings are purchased by a majority holder. There are companies that

were not listed on the official market on 31 December 1997 but were included in the General Standard of the Deutsche Börse on 30 June 2003, and thus appeared in the database ('novices'). This group comprises companies that were listed before 1998 but not on the official market, as well as those listed for the first time after the end of 1997. As presented in Table 5.1, each of the three groups is sizeable, with dropouts representing almost 40 per cent of the companies listed on 31 December 1997.

Table 5.1 shows that ownership concentration varies considerably between the core, dropouts, and novices. To start with, dropouts exhibiting the highest ownership concentration can probably be ascribed to the fact that companies in which minority holdings are smaller are more prone to squeeze outs. More importantly, ownership concentration of the novices was by far the lowest, while in the core it was high, and actually increased between 1997 and 2003. This is a striking finding, implying that the fall in ownership concentration is not as consistent as it seemed in the preceding section, since it was brought about almost entirely by companies new to the German corporate elite. In companies long established on the stock market the tendency was rather the opposite, with growing ownership concentration, suggesting that in the future many of them may leave the stock market altogether.

Regarding the structure and the origin of holders, it is remarkable that the share of foreign holders is similar across the three groups of companies, and that this share increased significantly in the core. The novices, being the pioneers of more diluted ownership structures, are thus not necessarily the pioneers of more international blockholding structures. Second, the share of cross-holdings was most prominent among the dropouts, suggesting that though the incidence of cross-holdings may fall among the stock market listed companies, their overall role in the corporate sector may remain high.

The three groups of companies distinguished on the basis of their stock market history have distinctive sectoral structures presented in Table 5.3. The biggest differences occur between the dropouts and novices. In other words, companies that drop out of the stock market are not replaced by companies with a similar composition in terms of sectors. Instead, we can recognize winner and loser sectors. The latter tend to represent such industries as food & beverages, basic resources, as well as banking, insurance, and utilities. Winner sectors represent software, media, investment services, pharmaceuticals & health care, and telecommunications.

Regarding the structure of companies by Land, Figure 5.2 shows a relatively high number of both dropouts and novices for all Länder.

Table 5.3. Companies according to their stock market history and sector

Sector	Total				Core		Dropouts		Novices	
	1997		2003		1997/2003					
	No.	%	No.	%	No.	%	No.	%	No.	%
Automobile	17	4.1	28	3.7	13	5.0	4	2.6	11	2.5
Banks	28	6.7	24	3.2	14	5.3	14	9.2	7	1.6
Basic resources	15	3.6	16	2.1	5	1.9	10	6.5	8	1.8
Chemicals	11	2.7	16	2.1	10	3.8	1	0.7	6	1.4
Construction	26	6.3	30	4.0	19	7.3	7	4.6	8	1.8
Consumer	57	13.7	78	10.4	42	16.0	15	9.8	30	6.9
Financial services	41	9.9	89	11.9	28	10.7	13	8.5	54	12.4
Food & beverages	33	8.0	33	4.4	17	6.5	16	10.5	10	2.3
Industrial	74	17.8	127	16.9	48	18.3	26	17.0	72	16.5
Insurance	23	5.5	19	2.5	13	5.0	10	6.5	3	0.7
Media	5	1.2	44	5.9	3	1.1	2	1.3	40	9.2
Pharma & health care	11	2.7	33	4.4	10	3.8	1	0.7	23	5.3
Retail	15	3.6	29	3.9	11	4.2	4	2.6	15	3.4
Software	2	0.5	92	12.3	2	0.8	0	0.0	90	20.6
Technology	11	2.7	31	4.1	7	2.7	4	2.6	24	5.5
Telecommunication	1	0.2	15	2.0	1	0.4	0	0.0	14	3.2
Transportation & logistics	14	3.4	21	2.8	10	3.8	4	2.6	11	2.5
Utilities	25	6.0	20	2.7	8	3.1	17	11.1	8	1.8
Unknown sector	6	1.4	5	0.7	1	0.4	5	3.3	2	0.5
Germany	415	100.0	750	100.0	262	100.0	153	100.0	436	100.0

Note: The distribution of core companies by sector in 1997 and 2003 is the same.

Source: Authors' calculations based on data from BaFin, Deutsche Börse, MSDW, Thompson Analytics, and Höppenstedt Aktienführer.

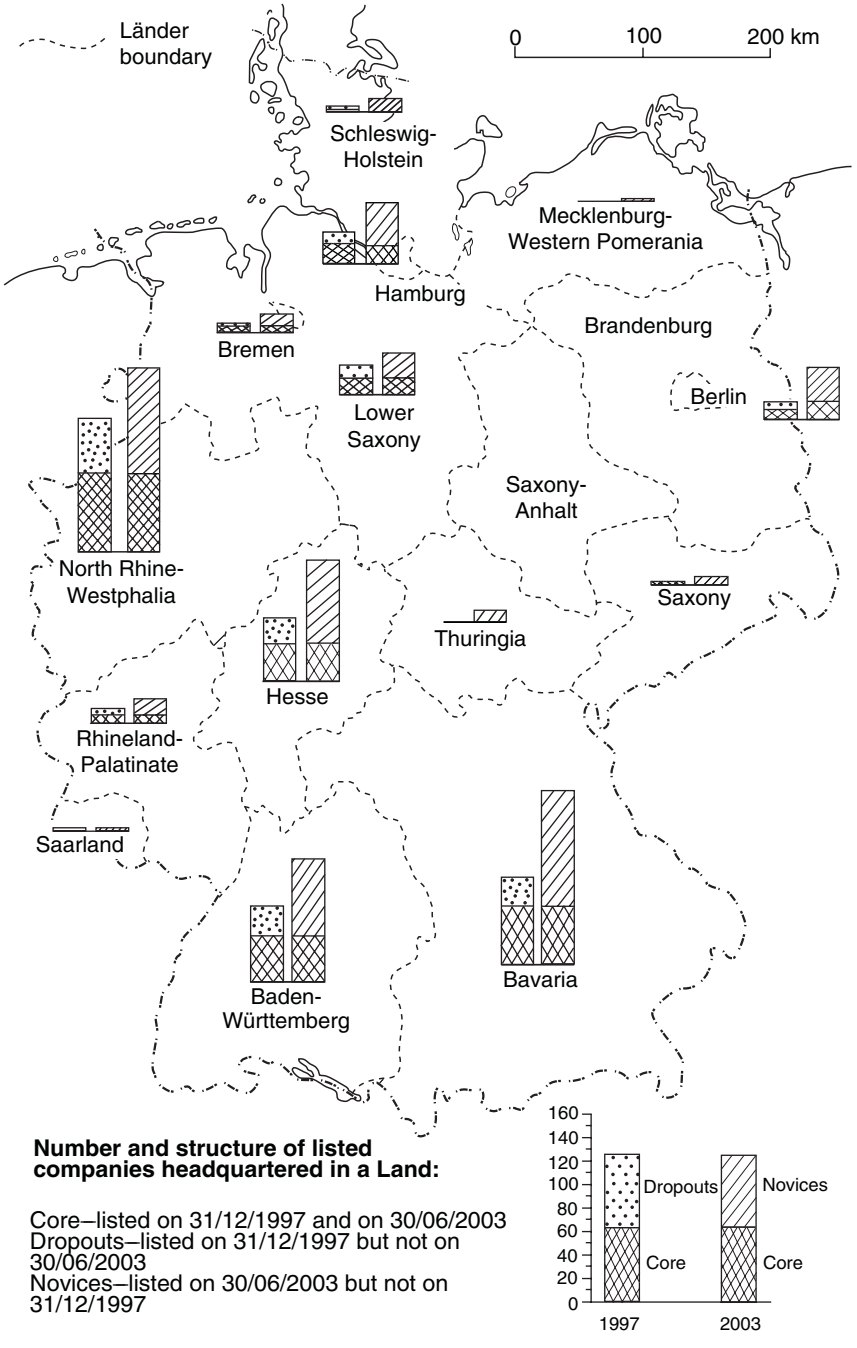

Figure 5.2. Distribution of German listed companies by Land

Source: Authors' calculations based on data from BaFin and Deutsche Börse.

However, the geographical origin of novices is significantly different from the geography of dropouts, thus resulting in an overall change in the geography of the German stock market. The Land with the largest number of 'drop-outs', and one that lost most in terms of the share in the number of stock market companies was North Rhine-Westphalia. The number of dropouts in relation to novices was also high in Lower Saxony. The main winner Land was Berlin, hosting a high number of novices but also attracting a number of core companies, including Siemens and Allianz (each now has headquarters in both Munich and Berlin). Less spectacular albeit considerable gains in the stock market presence were experienced by Hesse and the new Länder, most notably Thuringia.

Summarizing, the results of this section emphasize the dynamic and diverse nature of corporate governance in Germany. In the preceding section, we showed the significance of falling ownership concentration. In this section we have shown that long-established stock market listed companies seem to go against this trend, with increasing ownership concentration. Under the umbrella of the German model is diversity not only according to sector and location but also according to stock market history.

Determinants of Changing Ownership Concentration

Analysing corporate governance across regions, economic sectors, and groups of companies based on their stock market history, we have only looked at one or two of these three dimensions at a time. In this section, we use a regression model in order to test the relationship between location, sector, stock market history, and other corporate characteristics on one side and corporate governance on the other side. It should be noted that our previous research has already tackled the issue of the determinants of ownership concentration, indicating potential significance of location and sectoral composition (Wójcik 2003). Here we refine the geography and sector variables and add many new variables to the analysis.

The dependent variable in our model is ownership concentration, a central focus of research on corporate governance (Shleifer and Vishny 1997; Hopt et al. 1998; Chapter 3 in this volume), and notably the variable for which we have obtained the most intriguing results in the preceding sections. The specific measure we use as our dependent variable is the value of Herfindhal index (HI) at the start and end of the analysed period,

as well as the change in HI, expressed as the ratio of HI as at 30 June 2003 to HI as at 31 December 1997.

The list of independent variables starts with MC, representing company size. Previous research suggests an inverse relationship between size and ownership concentration, with the explanation being that the incidence of investors holding large shares of corporate equity falls with the increasing size of the company (Demsetz and Lehn 1985). For example, there are few entities in the world that could afford 80 per cent of shares in General Electric, but thousands that could afford 80 per cent in a company with MC of US$1 million. The next variable is the value of sales or turnover per employee (SPE), a proxy of capital intensity of a company. The idea for the use of this variable stems from Hopt et al. (1998), where it is suggested that the shareholders of German companies need large voting blocks to counterbalance a relatively strong power of labour. Otherwise, they would not be able to assure themselves an adequate return on their investment. Building on this proposition, we can put forward a hypothesis that companies with higher labour intensity (lower capital intensity) should exhibit higher ownership concentration. We also account for stock market history of a company, and specifically the number of years since a company was admitted to stock market trading (A). We could expect companies with a longer history of stock market trading to have lower ownership concentration. After all, the objective of listing is for the shares to be traded publicly by diluted shareholders. What complicates this hypothesis, however, is our earlier finding, where the core companies exhibited higher ownership concentration than the novices.

The list of dummy variables opens with the inclusion of a company in the DAX30 stock market index (DAX). The DAX30 includes the top 30 German companies traded on the Frankfurt Stock Exchange according to their size (market capitalization) and turnover. Its share in the total turnover of all German listed companies in 2002 exceeded 90 per cent (Deutsche Börse 2004). The potential significance of the index inclusion is suggested by our previous research (Wójcik 2003), where DAX30 companies were found to have much lower ownership concentration than other listed German companies. The relationship between index inclusion and concentration may be explained in two ways. First, the inclusion causes more exposure to investors, including indexed funds willing to keep a small portion of the index companies in their portfolios. Second, one of the requirements set by the Deutsche Börse is that companies included in the DAX30 must have sufficiently dispersed ownership to ensure a relatively high liquidity of their shares.

Table 5.4. Descriptive statistics for non-dummy variables used in regression analysis

Variable	Abbrev.	Mean	Std. dev.	Min.	Max.	Median	*n*
1997							
Herfindhal index	HI	0.49	0.31	0.00	1.00	0.49	415
Market capitalization	MC	1,372.86	4,829.85	0.10	49,858.80	128.05	415
Sales per employee	SPE	1,437.26	7,213.52	0.72	97,000.00	210.04	415
Years since admission	A	37.71	37.82	1.00	133.00	18.00	415
2003							
Herfindhal index	HI	0.41	0.35	0.01	1.07	0.29	750
Market capitalization	MC	998.88	4,028.59	0.10	52,355.00	44.00	750
Sales per employee	SPE	907.71	4,881.14	1.00	97,000.00	178.00	750
Years since admission	A	15.42	27.15	1.00	134.00	4.00	750
The ratio of Herfindhal index 2003 to 1997		5.55	55.15	0.05	970.00	1.02	262

Note: Market capitalization in million euro, sales per employee in thousands euro.

Source: Authors' calculations based on data from BaFin, Deutsche Börse, MSDW, Thompson Analytics, and Höppenstedt Aktienführer.

Another variable related to the exposure of a company to international investors is the type of accounting standards applied in financial statements. We use a dummy variable (AS), taking the value of one, if a company applies the IFRS or the US GAAP, and the value of zero if a company applies only the German accounting standards. The underlying hypothesis is that the application of internationally recognized, capital market-driven standards, in contrast to national, more tax purposes-driven standards (see Nobes and Parker 2000), expresses the willingness to become more transparent and reach more investors, and thus would coincide with more dispersed ownership. The number of companies in the sample that applied IAS or US GAAP was 64 in 1997 and 305 in 2003. The last independent variables on the list are the dummy variables for Länder (L) and sectors (S). We have accounted for the fact that some companies changed the location of their headquarters between 1997 and 2003. No companies changed their sectoral allocation in this period.

Descriptive statistics for all non-dummy variables are presented in Table 5.4. The general regression model takes the following form.

$$\mathrm{OC}_t = \alpha + \beta_1 \log \mathrm{MC}_t + \beta_2 \log \mathrm{SPE}_t + \beta_3 \log \mathrm{A}_t + \beta_4 \mathrm{DAX}_t + \beta_5 \mathrm{AS}_t + \beta_6 \sum_{i=2}^{14} \mathrm{L}_{it} + \beta_7 \sum_{i=2}^{18} \mathrm{S}_i + \varepsilon$$

where $\mathrm{OC}_t = \log \frac{\mathrm{HI}_t}{1-\mathrm{HI}_t}$, and t = 1997 or 2003.

Table 5.5. OLS parameters for the regression of the Herfindahl index of ownership concentration on corporate variables

	1997		2003		Change 2003/1997	
	Coeff.	*t*-stat.	Coeff.	*t*-stat.	Coeff.	*t*-stat.
LogMC	0.080	0.512	0.269	3.867***	0.196	1.211
logSPE	2.550	1.846*	0.030	0.537	0.079	0.547
logA	−0.251	−2.449**	−0.051	−0.808	0.030	0.265
DAX	−0.298	−2.036**	−0.317	−5.104***	−0.513	−3.298***
AS	−0.119	−1.121	−0.156	−2.767***	−0.005	−0.044
Bavaria	0.256	2.039**	0.036	0.576	−0.175	−1.363
Lower Saxony	0.184	1.709*	0.077	1.451	−0.151	−1.400
Banks	−0.253	−2.133**	0.022	0.410	0.037	0.307
Insurance	−0.223	−1.757*	0.053	0.987	0.094	0.712
Financial services	−0.086	−0.769	0.110	1.938*	0.114	0.895
Technology	−0.170	−1.707*	0.036	0.654	0.018	0.170
Retail	0.114	1.023	0.100	1.855*	−0.035	−0.303
Transportation	−0.016	−0.158	0.163	3.197***	−0.002	−0.019
HI 1997	NA		NA		−0.238	−2.063**
Adjusted R^2	0.144		0.121		0.076	

Note: Coefficients for Land and sector dummies that were insignificant at 10% level in all three regressions are not reported; the coefficients reported are standardized coefficients; significance of coefficients is reported at 10% (*), 5% (**), and 1% (***) level.

Source: Authors' calculations based on data from BaFin, Deutsche Börse, MSDW, Thompson Analytics, and Höppenstedt Aktienführer.

Two remarks should be added to this general specification regarding the regression of the change in ownership concentration. First, in this regression we added an independent variable expressing the level of HI as at 31 December 1997. Second, all other independent variables were used with their values for 1997. It should be noted that the use of values for 2003 would not change the results in a significant way.

The variable OC was unbound for 1997 and 2003 using a log transformation which brings the distribution of this dependent variable close to normal, following the approach of Demsetz and Lehn (1985). To express the change in OC we used the logarithm of the ratio of HI in 2003 to HI in 1997. Also log transformed were MC, SPE, and A in order to eliminate the excessive influence of observations on companies with very high values of these independent variables. North Rhine-Westphalia and industrials are selected as reference categories for Land and sector dummies respectively. We have used Variance Inflation Factor and Cook–Weisberg statistics to test for multicollinearity and heteroscedasticity. No violations of the linear regression model assumptions were detected.

The results of the regression analysis are presented in Table 5.5. The only independent variable with a significant coefficient in all three regressions is the index inclusion. Thus, DAX30 seems to be the best tool for

distinguishing German companies with relatively dispersed ownership, better than any other corporate characteristic we accounted for in our model. What is more, DAX30 constituents had a systematically lower ratio between OC in 2003 and OC in 1997 than other companies. This suggests that DAX30 is much more than a prestigious league of companies that have already achieved relatively dispersed ownership structures. It is a vehicle that enables its constituents to maintain or deepen their ownership dispersion.

Except for the creation of elite stock market indices, our findings underline the significance of another major development on capital markets—the spread of the international accounting standards. In the model for 2003, companies applying the IFRS/IAS or the US GAAP had a systematically lower ownership concentration. This implies that the introduction of international standards is not only a change in the way companies present their financial statements. It may reflect more fundamental features in the way a company is owned and governed. It remains an open issue whether the application of international standards actually contribute to ownership dispersion after they are introduced or whether it is just that companies with concentrated ownership tend to abstain from these standards.

Regression of the change in ownership concentration reveals a negative relationship between the ratio of OC in 2003 to OC in 1997 and the starting level of ownership concentration in 1997. We should recall that this regression involves the core companies, which in 2003 exhibited higher ownership concentration than in 1997. The regression results suggest that companies that in 1997 had higher ownership concentration experienced a lower increase in concentration than companies which started the period with lower concentration. If our speculation that many core companies were on their way to leave the stock market is true, we may say that companies with higher concentration at the start did not need much increase in concentration. Notwithstanding these speculative explanations, the regression results confirm the observation about a large part of long-established companies moving against the current of the overall change in German corporate governance.

As shown in Table 5.5, the sectoral nature of a company may have a significant impact on ownership concentration. In 1997, banks, insurance, and technology firms exhibited significantly lower level of ownership concentration. In 2003, firms in transport and logistics, retail, and financial services sectors appear with higher concentration. It is beyond the scope of this chapter to investigate why different industries involve

different levels and dynamics of ownership concentration. These issues are the subject of extensive discussion about the growth and development of the German economy. What we can suggest is that these differences are difficult to explain by the labour–capital intensity of a sector.

The number of years since a company's admission to the stock market is negative and significant in 1997, indicating that the holdings of voting rights become more diluted with the time a company is exposed to the stock market. Nevertheless, A is no longer a significant variable in 2003. Instead, we find the coefficient of MC to be highly significant and positive in 2003, suggesting that after we control for the DAX inclusion, among other factors, larger companies have more concentrated ownership than smaller ones. This is contrary to our hypothesis on the relationship between company size and ownership concentration, but is consistent with the observation that companies joining the stock market after 1997, mostly smaller in size than the core companies, had relatively diluted ownership structures.

Regarding the location of corporate headquarters, the regression results include two instances where geography has a significant relationship with ownership concentration. In 1997, companies seated in Bavaria and Lower Saxony had significantly higher ownership concentration. Considering the scarcity of factors that can be proven significant determinants of ownership concentration, the value of these findings should not be understated. In other words, location in its own right can significantly affect the patterns of ownership concentration.

Foreign Holdings as a Catalyst

We have analysed the share of foreign holdings across sectors, Länder, and groups of companies based on their stock market history; however, we have not yet tackled the issue of who they are and where they come from. This section completes the analysis by focusing on the structure of foreign holders by type as well as by their origin, defined as the country and the city where they are headquartered or seated. This way we shed light on the potential impact of foreign holders on the diversity and dynamics of German corporate governance.

Table 5.6 presents the breakdown of foreign holders, foreign holdings, and their value by type of entity. Remarkably, families and individuals do not play a key role as foreign holders. According to Table 5.1, their share in 2003 domestic holdings was 50 per cent in terms of number

Table 5.6. The structure of foreign holdings by type of holder

Type of holder	Number of holders		Number of holdings		Value of holdings (€ m)	
	1997	2003	1997	2003	1997	2003
Individuals and families	21	44	21	46	6,927	8,074
Banks	6	8	6	9	1,131	2,536
Insurance companies	5	8	21	21	7,591	8,664
Other financial companies	7	35	9	60	781	3,874
Non-financial companies	48	86	53	93	12,291	37,227
Governments	3	5	4	8	7,686	10,910
Holdings	4	8	8	8	8,892	599
Other types	4	12	4	13	415	949
Unknown type	6	13	6	13	3,530	2,376
Total	104	219	132	271	49,244	75,208

Source: Authors' calculations based on data from BaFin, Deutsche Börse, MSDW, Thompson Analytics, and Höppenstedt Aktienführer.

and 24 per cent in terms of value, while within foreign holdings they accounted for 17 per cent and 11 per cent, respectively. This may be because it is more difficult for individuals and families than for corporate entities to establish and exercise cross-border ownership and control. Could this hypothesis also hold for borders between regions within Germany? In fact, it turns out that in 2003 over 60 per cent of the number of intra-Land holdings were family holdings. Thus, as we move from the level of Land to country and further on to the international arena, the position of individual and family holders of voting rights becomes ever weaker. This is yet another example of how crucial geographical scale is for the understanding of corporate governance structures.

An important phenomenon can be discerned within the category of financial holders. The share of banks remained tiny, that of insurance companies fell, while the share of other financial companies including mainly brokerage firms, venture capital, investment, and pension funds skyrocketed. To some extent, this picture may be misleading, since many of these financial services firms are controlled by large universal banks and insurance companies, as the latter spin off their investment and other non-credit or non-insurance activities. Notwithstanding the incidence of these spin-offs, our results indicate a shift from holders acting simultaneously as lenders or insurers of companies to holders with interests focused more narrowly, on purely financial return from their investment.

With regard to the holders' country of origin (Table 5.7), countries with which Germany has an overland border accounted for approximately 60 per cent of the number and value of holdings in 1997.

Table 5.7. Foreign holdings by country of holder's origin

Country	Number of holdings		Value of holdings (€m)	
	1997	2003	1997	2003
Austria	6	15	1,575	680
Australia	2	2	503	8
Belgium	2	10	490	1,232
Bermuda	0	4	0	44
Switzerland	38	54	13,954	5,929
Denmark	1	2	2	14
Spain	0	6	0	290
France	16	20	8,937	32,535
Finland	2	2	79	196
UK	14	42	6,787	8,306
Greece	0	1	0	0
Hong Kong	1	1	35	104
Rep. of Ireland	4	16	1,003	8,967
Israel	0	1	0	2
Italy	1	2	26	79
Iran	1	2	439	176
Japan	0	2	0	115
Kuwait	4	4	7,249	2,368
Luxembourg	3	5	21	6
Netherlands	12	22	2,911	1,064
Portugal	0	1	0	27
Panama	2	0	17	0
Sweden	3	6	1,222	7,004
South Africa	1	2	38	126
Singapore	0	1	0	1
Turkey	1	—	34	0
United Arab Emirates	0	1	0	14
USA	17	49	3,914	5,552
Virgin Islands	1	2	9	12
Total	132	275	49,244	74,851

Source: Authors' calculations based on data from BaFin, Deutsche Börse, MSDW, Thompson Analytics, and Höppenstedt Aktienführer.

By 2003, however, the share of Germany's neighbours fell, in terms of numbers, quite dramatically, to approximately 45 per cent. Meanwhile, the most spectacular gains were experienced by entities from the USA, the UK, and the Republic of Ireland with the number of holdings increasing more than threefold and their value twofold. Interestingly, in terms of corporate governance the three countries have much in common with each other, and very little in common with Germany and Germany's neighbours. Though it is a broad generalization, neglecting the differences between and within countries (see Wójcik 2002*a*), the USA, the UK, and the Republic of Ireland are recognized champions of Anglo-American corporate governance, characterized by diluted

Table 5.8. Foreign cities among the top 30 seats of holders

Rank		Number of holdings
2003		
10	London	26
11	Zürich	22
14	Paris	16
17	Amsterdam	12
25	New York	9
26	Vienna	9
1997		
10	Paris	14
11	Zürich	13
13	London	11
20	Amsterdam	5
21	Baar (Switzerland)	5
30	New York	5

Source: Authors' calculations based on data from BaFin, Deutsche Börse, MSDW, Thompson Analytics, and Höppenstedt Aktienführer.

shareholdings, while continental Europe is dominated by concentrated, mostly family ownership, and cross-holdings (Hopt et al. 1998; La Porta et al. 1999).

Considering the expansion of Anglo-American holdings in the German corporate sector, and the general, albeit not across all regions and sectors, decrease in the level of ownership concentration, our findings indicate a potential role of Anglo-American investors as the agents of change in German corporate governance (see also Clark 2003*a*). Witness the report on a tour of investment bankers from the City of London, preaching the virtues of 'open' Anglo-American corporate governance in continental Europe, and starting their tour in Germany (Targett 2002*a*). In this context, it is worthwhile to look at Table 5.8, which presents the position of foreign cities as the seats of holders. Between 1997 and 2003, London surpassed Paris and Zurich, with New York improving its position as well.

Given that our data on foreign holdings involve small numbers, and that it is available for two points in a relatively recent period, we cannot show a definite trend, in terms of either the types or the origin of holders. However, if what we see from these data is a long-term trend, the implication is that corporate governance in Germany is increasingly driven by the interests of capital markets and principles that originate in 'other' places such as the City of London and Wall Street.

Implications and Conclusions

The German model is under increasing pressure from within and from without. Low rates of employment growth, high rates of unemployment, and the prospect of structural government deficits threaten social solidarity and the stability of the European project. With respect to the Anglo-American world, conventional expectations of a German model of stakeholder capitalism insulated from financial markets and the interests of institutional investors are less secure. In this chapter, we have demonstrated that elements of German industry have sought to bypass the putative national model in favour of the perceived advantages of financial capitalism. Being left behind are the industries and regions that cling to the past.

Our results provide evidence on a high level of diversity of corporate governance in German companies across Länder, economic sectors, and groups of companies distinguished on the basis of their stock market history. Diversity refers not only to the level of corporate governance variables but also to the pace and the direction of their change. High ownership concentration and cross-holdings, for example, are more common in traditional industry sectors than in new economy sectors such as software. Family and intra-Land holdings are common in Baden-Württemberg but uncommon in Hesse. Long-established companies have more concentrated ownership than recently listed firms. These results raise doubts about the existence of an integrated German capital market and an integrated system of corporate governance. Rather than conceptualizing the German model as a national model which flows from the top-down to the regions, it is perhaps better to conceptualize it as a bottom-up process retaining a great deal of flux and differentiation.

Regarding change in corporate governance variables, when we add up the tendencies prevailing in different groups of companies, they do not cancel each other out. Instead, the emerging picture is of considerable change at the level of Germany, particularly in terms of ownership concentration and cross-holdings, thus questioning the strength of path dependence. Explaining these types of changes, we have emphasized the opportunities and incentives offered by financial markets. In this respect, we have demonstrated a significant relationship between ownership concentration and such 'tools' of global finance as international accounting standards and stock market indices. Another driving force of change is the influence of foreign holders, increasingly Anglo-American and focused more on financial returns than on long-term relationships with

companies. In other words, the imperatives of global finance are seeping into German regions and industries. What is also clear, however, is that some industries and regions have embraced this process more than others.

These changes in the German 'model' have significant lessons for understanding the significance of path dependence. We have shown here and in the previous two chapters that German firms, their industries, and regions are increasingly vulnerable to market pricing. We have shown that the intrusion of 'external' investors into existing regimes of accumulation brings opportunities for some industries and regions even if those opportunities are shunned by other industries and regions. In this respect, path dependence is hardly once and forever. As such, we must take care to provide room for firms and industries to manoeuvre outside the norms and conventions that would otherwise describe an industry-region regime of accumulation. We noted that there is a significant difference between so-called core firms and industries compared to small firms in technology-related industries in their response to the opportunities provided by financial markets. Furthermore, we note that some firms and industries in some regions have sought to shift towards a model of corporate governance more in tune with global financial markets than the paradigmatic German model.

There are two points of qualification to our argument. In virtually every field of social science, if we look underneath widely accepted categories and look in detail at the empirical evidence we can demonstrate greater heterogeneity than homogeneity. By their nature, categories and concepts such as path dependence and regimes of accumulation play an important role in theory. It is inevitable that the German model, the Japanese model, and the Anglo-American model are all in one form or another stylized facts. So the real question is not whether these categories are watertight but whether an assumption of coherence is useful in building an understanding about social and economic life. We have argued here that the German model has lost its value as an adequate conceptual apparatus in understanding the transitions occurring in continental Europe. We also have argued that the related concepts underpinning the coexistence of models or regimes of accumulation such as path dependence and systems integration are also increasingly burdens on our imagination rather than the means and mechanisms for understanding changing circumstances.

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Part III

Managing Global Integration

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6

Cross-Listing and the Market for Governance

The listing of corporate stock on foreign exchanges and trading stocks in foreign markets have been fascinating aspects of financial globalization. In late 1990s, there were over 4,000 foreign listings in the world. Since then, however, we have witnessed major reversals in the geography of cross-listings. Until the late 1980s, European exchanges were the main destination for both intra-European and inter-continental cross-listing. Since then, the major cross-listings have followed the route from Europe to US markets (Pagano et al. 2001). It is not surprising that the intersection between cross-listing and corporate governance attracts interest. In simple terms, a foreign listing represents a contact between the corporate governance of the listing company's home and host environments. This prompts the obvious question as to the diffusion of standards between the jurisdictions and the extent to which the company adjusts to the host environment. Another debated issue is whether the relationship between the home and the host corporate governance environment is important for the decision whether and where to cross-list.[1]

According to Licht (2004), companies avoid stock exchanges with strict corporate governance requirements; therefore, to attract foreign listings stock exchanges and regulators are supposedly lax in applying their domestic standards to foreign companies. In contrast, proponents of the so-called bonding hypothesis claim that firms can 'opt into governance systems, disclosure standards, and accounting rules that may be more rigorous than those required or prevailing in their jurisdiction of incorporation' (Coffee 1999: 651). These firms could be motivated by the gains of increased credibility in the eyes of minority shareholders, and ultimately higher stock market valuation and a lower cost of capital. If cross-listing was linked with stricter corporate governance, the lack

of cross-listing could prompt the suspicion of investors thereby placing listed domestic companies under pressure to improve their standards of corporate governance (Stulz 1999). Also at stake in the debate about the relationship between cross-listing and corporate governance is the future of the stock exchanges, the extraterritorial reach of stock market regulators, and the convergence (or otherwise) of corporate governance (topics of subsequent chapters in this section of our book).

There are two groups of recent empirical research supporting the bonding theory. The first group has focused on the stock market implications of foreign listings, suggesting that non-US companies that cross-list in the USA achieve higher valuations, offer lower private benefits of control to their controlling shareholders and managers, and enjoy better access to capital than companies without a cross-listing in the USA (Miller 1999; Reese and Weisbach 2002; Doidge 2004; Doidge et al. 2004). On the basis of stock market phenomena that coincide with a cross-listing the authors infer a positive impact of US cross-listings on corporate governance of foreign companies. The second group of research explores the relationship between corporate governance and cross-listing directly. Klapper and Love (2003) as well as Durnev and Kim (2005) show that within emerging markets, firms listing on a US stock exchange tend to have higher corporate governance ratings. Doidge, Karolyi, and Stulz (2004*b*) corroborate these findings claiming that a US cross-listing is a form of access to global capital markets and increases firm-level incentives for good corporate governance.

The objective of this chapter is to contribute to a better understanding of the relationship between corporate governance and cross-listing focusing on European firms. Using proprietary data on corporate governance in the largest European corporations provided by Deminor Rating SA, constituents of the FTSE Eurotop 300 index over the period 2000 and 2004 combined with data on the cross-listing status of European companies (covering both US listings as well as cross-listings within Europe), we consider two major research questions: How does the corporate governance of US cross-listed European companies compare to the corporate governance of companies from the same country that do not cross-list in the USA, and what is the relationship between cross-listing within Europe and corporate governance?

It is shown that companies with a US cross-listing commanded higher corporate governance ratings than companies without a US cross-listing. The advantage of a US cross-listed firm holds if we control for the country of origin and other company characteristics, and it was stronger in 2004

than in 2000. Regarding the structure of corporate governance, US cross-listed firms had systematically higher ratings in terms of disclosure and in terms of board structure and functioning. In contrast, they had no advantage over non-US cross-listed firms in terms of shareholders' rights and duties.

The US cross-listed companies had superior corporate governance scores at least a couple of years before the time of cross-listing, which leaves open the question whether their superior corporate governance is an effect of US cross-listing. By contrast, it is shown that there is no significant relationship between corporate governance and cross-listing within Europe.

The next section outlines a conceptual framework linking corporate governance and cross-listings, leading to the hypotheses presented in section three. Following sections recount our data sources, methodology and sample, and present the analysis of the bivariate relationship between corporate governance and US cross-listing status in four major European countries. Section six extends the bivariate analysis to the whole sample, accounting for corporate governance before and after cross-listing. Section seven presents a multivariate analysis of the relationship between corporate governance and US cross-listing status, where we control for a number of factors that are likely to affect cross-listing. Section eight explores the relationship between corporate governance and cross-listings within Europe. Section nine concludes the chapter with a view towards Chapter 7.

Corporate Governance and Cross-listing

At the heart of corporate governance lies the risk that corporate managers will misuse or even steal the capital entrusted to corporations (Shleifer and Vishny 1997). The interests of minority shareholders can be abused by managers and shareholders who enjoy the so-called private benefits of control at the expense of minority shareholders. Benos and Weisbach (2004) classified such benefits into non-pecuniary and pecuniary elements. Non-pecuniary benefits include the ability to direct a company's resources to a cause one agrees with (Demsetz and Lehn 1985), a preference for glamorous projects (Jensen 1993), and the use of a position for the enhancement of one's human capital (Shleifer and Vishny 1989). More substantially, Benos and Weisbach (2004: 3) also contended that 'private benefits can have enormous direct financial effect on minority shareholders, through transactions that divert corporate resources to other companies owned by the managers or their families'. In this section,

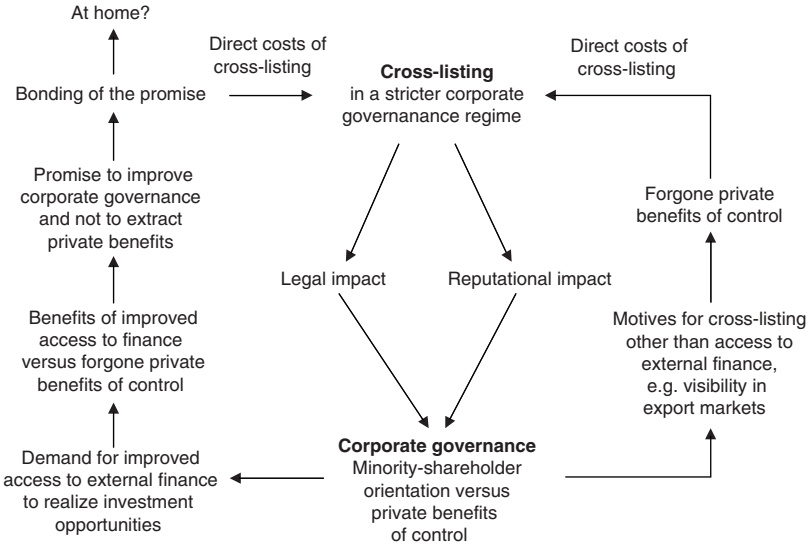

Figure 6.1. Corporate governance and cross-listing: a conceptual framework

Source: Authors

the notion of private benefits of control is the starting point for building a simple conceptual framework of the relationship between corporate governance and cross-listing. The framework is summarized in Figure 6.1.

By discouraging minority-shareholdings, private benefits restrict a firm's access to external capital, and particularly equity capital. This claim is supported by many empirical studies with La Porta et al. (1997) finding a significant positive relationship between the strength of minority shareholders' legal rights in a country and the ability of firms in that country to raise external capital. At the level of the individual company, the positive (negative) relationship between minority-shareholder-oriented corporate governance (the level of private benefits of control) and stock market valuation has been detected in the USA (Gompers, Ishii, and Metrick 2003), Asia (Claessens et al. 2002), and Europe (Bauer, Günster and Otten 2004). The trade-off between private benefits and access to external finance presents a manager and/or a controlling shareholder with a dilemma:

> the private benefits he enjoys prevent him from accessing capital market, and hence from reaping the positive net present value of the project. If he could somehow commit to forgo taking private benefits personally (and convince potential investors of his commitment), he could then undertake the project

and reap his share of the net present value. By this logic, if the project were sufficiently valuable, then it would make sense for managers to 'bond' themselves to avoid taking private benefits. (Benos and Weisbach 2004: 12–13)

If the benefits of enhanced access to external finance outweigh the forgone private benefits of managers and/or controlling shareholders, the question is how to make promises to forgo private benefits credible in the eyes of potential investors. In this context, Jeffrey Gordon (1988) writing about US companies listing on the NYSE observed that they obliged themselves not to recapitalize with dual class common stock. In other words, US companies commited to maintain a one-share one-vote capital structure, crucial for the protection of minority shareholders. A company may adopt higher standards of corporate governance by changing its articles of association or by joining a stock exchange with strict listing and/or disclosure requirements. If neither 'solution' is available at home, a company can make a promise of lower private benefits and minority shareholder friendly governance by listing their shares abroad. Coffee (1999) and Stulz (1999) were among the first to propose bonding as a reason for foreign firms listing on US stock exchanges. Of course, beyond the costs of forgone private benefits there are the direct costs of cross-listing. For example, an exchange may require increased disclosure on corporate governance or the participation of independent directors on the board of the company applying for cross-listing.

To better understand the bonding mechanism, legal bonding can be distinguished from reputational bonding. Legal bonding involves the rules set by stock exchanges and capital market regulators to be complied with by cross-listing companies. Reputational bonding relies upon the opinion of the investment community and industry at large, including investors, investment banks, rating agencies, investment consultants, analysts, auditors, and others. Lang et al. (2003) show that analysts, being experts in evaluating the companies' growth opportunities, can significantly affect a company's access to finance by shaping investors' opinions; one company characteristic that the investment industry pays considerable attention to is corporate governance (Clark and Hebb 2005). Siegel (2003) also shows that US-listed Mexican companies that engaged in bad governance practices during the Mexican peso crisis of 1994–5 were effectively cut-off from access to finance in the future, while companies with better practices during this period enjoyed enhanced reputational benefits. Siegel claimed that reputational bonding is actually much more important than legal bonding.

There are many other motives for cross-listing beyond access to external finance. Companies may cross-list to enhance their visibility in foreign markets (Baker et al. 2002), to gain more exposure to specialized analyst communities that may better appreciate a company's business and growth opportunities, or to extend the trading hours of its shares by cross-listing in a different time zone (see Pagano et al. 2002; Karolyi 2004; and Chapter 7 of this book). Whether and where to cross-list may not hinge on access to external finance but on access to export markets, cultural and geographical proximity, or industrial specialization (Sarkissian and Schill 2004). Nevertheless, even for a company uninterested in improved access to external finance, cross-listing on a stock market with stricter corporate governance requirements than their home market, means it becomes subject to legal and reputational pressure. Consequently, such a company is likely to account for the forgone private benefits of control and will definitely account for the direct costs of cross-listing.

We can apply this conceptual framework to the relationship between disclosure or transparency and cross-listing. Here, the dilemma faced by management and controlling shareholders is that while disclosure is costly it can improve the credibility of cash flows and, in general, the outside perception of company prospects (Stulz 1999). In other words, disclosure reduces the information asymmetry between outside investors and company insiders (Merton 1987). By analogy, the company may decide to bond its promise of improved disclosure via a foreign listing in a stricter disclosure regime. The stricter character of the host regime can be realized through both legal and reputational pressure (Healey and Palepu 2001). Bushman et al. (2004) distinguished between financial transparency and governance transparency. In this chapter, the nature of empirical data allows us to cover governance transparency but not financial transparency. We are, however, aware of the close relationship between disclosure and corporate governance as well as the significance of the former for the relationship between corporate governance and cross-listings.

To be sure, our framework linking corporate governance and cross-listing is a part of broader processes of globalization, including financial liberalization, the diversification of investment portfolios, the rise of institutional investors, and growing international competition between financial intermediaries including stock exchanges (see also Chapter 7 in this volume). The shift away from pay-as-you-go to funded pension systems, for example, turns millions of people, directly or indirectly, into minority shareholders and creates pressure on companies to become more

minority-shareholder friendly (Clark 2000, 2003*b*). Beyond the financial sector, product market competition can also directly affect private benefits and corporate governance. As product market competition drives prices closer to costs, less space is left for private benefits to be extracted (Dyck and Zingales 2004). A powerful role is also played by technology affecting the scope of equity trading, and by social norms affecting the acceptability of expropriating the interests of minority shareholders. These multiple forces influence corporate governance and cross-listings; our simplified framework leads to a series of testable hypotheses presented in the following section.

Framework-related Hypotheses

How does the corporate governance of US-cross-listed European companies compare to the corporate governance of companies from the same country that do not cross-list in the USA? Let us start with companies already cross-listed in the USA, and therefore subject to the pressure of the US legal and reputational corporate governance regime. Could this pressure make the corporate governance of cross-listed companies more minority-shareholder sensitive? Can a US regime provide additional discipline on insiders compared to the home regime? Coffee (1999: 683) claimed that 'once an issuer lists on a US exchange the US securities laws become broadly applicable: this is critically important, because the US securities laws do not simply require heightened disclosure and more rigorous financial reporting; rather, they also seek to reduce agency costs in ways that particularly inhibit controlling shareholders and that are not closely paralleled by European law'.

Of course, one can question the extent to which US securities laws are actually enforced in relation to foreign issuers (Licht 2004). Nevertheless, recent research supports Coffee's position that the US market is based upon a relatively strict minority-shareholder-oriented corporate governance regime. Doidge (2004: 1) found in 1997 that foreign companies with shares cross-listed in the USA had Tobin's q ratios 16.5 per cent higher than the q ratios of non-cross-listed firms from the same country.[2] The finding on higher valuation held for nearly all European countries considered in their study. They suggested 'a US listing reduces the extent to which controlling shareholders can engage in expropriation and thereby increases the firm's ability to take advantage of growth opportunities'.

Doidge (2004: 1) analysed the voting premium, defined as the difference between share prices with high-voting rights and those with low-voting

rights. He found that non-US firms cross-listed in the USA had voting premiums 43 per cent *lower* than non-US firms that did not cross-list. According to Doidge, this evidence 'supports the bonding hypothesis: cross-listing in the USA improves the protection afforded to minority investors and decreases the private benefits of control'. Finally, Reese and Weisbach (2002: 1) showed that the cross-listing of non-US firms in the USA is followed by an increase in equity offerings. Their finding applies to companies from European countries. In the spirit of previous papers, they concluded 'the desire to protect shareholder rights appears to be an important reason why some non-US firms cross-list in the USA'. The evidence of these and other research projects (see Miller 1999; Pagano, and Röell 2001) has led us to hypothesize that the corporate governance of European firms cross-listed in the USA should be more minority-shareholder oriented than the corporate governance of European firms not cross-listed in the USA.

It is also important to distinguish between the period before a company decides to cross-list and the period after the decision but before actual cross-listing. In the latter period, we expect the corporate governance advantage of cross-listed companies to hold because a company needs to prepare themselves for cross-listing. The relationship between cross-listing and corporate governance in the period before a company decides to cross-list depends on the nature of a company's motivation to cross-list. If a company considers cross-listing in a more minority-shareholder friendly corporate governance regime for reasons other than access to finance, it is more likely to cross-list the more its corporate governance is minority-shareholder friendly—management and controlling shareholders would weigh the costs of forgone private benefits and direct costs of cross-listing against the benefits of cross-listing unrelated to corporate governance. If a company contemplates cross-listing in order to improve access to capital, the costs of cross-listing are likely higher the less minority-shareholder friendly its corporate governance. But the benefits of improved access to capital are likely higher the less minority shareholder friendly its corporate governance; consequently, the relationship is ambiguous. In a sample of companies with mixed motivations for cross-listing, companies that cross-list may be more shareholder-oriented *before* they make the cross-listing decision.[3]

There are two ways in which a foreign company can list its shares in the USA. It can use American Depositary Receipts (ADRs) or list its shares directly on a stock exchange.[4] Few European firms cross-list directly. The formal requirements they face are essentially the same as for ADRs (Reese

and Weisbach 2002). ADRs are negotiable certificates of ownership of shares of a foreign firm traded in the USA. While the shares are deposited in a depositary bank in the firm's home country, an ADR holder has all the dividend and voting rights stemming from the underlying shares.

Issuers can choose between four different types of ADRs. Rule 144A ADRs allow the sale of foreign firm's shares only to sophisticated institutional investors. These ADRs do not have to be registered with the Securities and Exchange Commission (SEC) and are exempt from US reporting requirements. Level I ADRs are traded on the over-the-counter market, outside stock exchanges, require minimal SEC registration and are also exempt from US reporting requirements. Level II ADRs are traded on a US stock exchange (NYSE, NASDAQ, or Amex), and are subject to full SEC registration and US reporting requirements including a timely submission of financial statements and their reconciliation to US GAAP. Level III ADRs follow similar rules as Level II ADRs, but companies that raise capital in the USA through a public offer of new shares face additional reporting requirements including a prospectus detailing risks of the offer. For Levels II and III ADRs, on top of the SEC registration and reporting requirements come the corporate governance requirements of the stock exchanges where they list.

We can imply that the legal pressure on foreign companies cross-listing with Level II or III ADRs is higher than for those without a US stock exchange cross-listing. It is reasonable to expect the reputational pressure to be higher on these firms as well. As a result, we would expect foreign companies with a US stock exchange listing to have more minority-shareholder-oriented corporate governance than companies without a stock exchange listing. Doidge (2004) demonstrated that the Tobin's q premium of US cross-listed firms over non-cross-listed firms was much higher for companies with an exchange listing, though it still existed for companies with Level I or Rule 144A ADRs. Doidge (2004), however, also shows that foreign firms with Level I or Rule 144A ADRs do not have lower voting premiums than firms that do not cross-list. Consequently, his conclusion is that the bonding mechanism does not apply to Level I or Rule 144A ADRs. Therefore, our analysis focuses on European firms with a US stock exchange cross-listing (Level II or III ADRs) and does not distinguish between European companies that are present on US stock markets via Level I or Rule 144A ADRs and those that do not have any presence on US stock markets.

We now turn to the potential impact of the cross-listing of European companies *within* Europe on their corporate governance. First, we need to

consider whether, in terms of corporate governance, any European stock exchange requires more from foreign companies than is required of them at their home exchange. Existing research focuses on financial disclosure rather than corporate governance. Cantale (1998) investigated stock-price reaction to continental and UK European firms' announcements that they intended to list on the NYSE, the London Stock Exchange (LSE), or the Paris Stock Exchange. Abnormal returns were highest for the NYSE, moderate for the LSE, and lowest but still positive for Paris. The author suggested that this pattern can be explained by disclosure requirements, which were the strictest on the NYSE, followed by the LSE, and then Paris (see also Saudagaran and Biddle 1995). Coffee (2002) suggested the LSE next to the NYSE as the most likely destination of cross-listed companies with high corporate governance standards. However, Poser (2001) reported that unlike the NYSE, the LSE has not emphasized listing or disclosure standards as a competitive strategy.

Another factor to be considered is the mutual-recognition principle incorporated in the European legislation regulating cross-listings (Coffee 1999). Basically, the principle is that what is sufficient for a company to list in one member country should be sufficient in any other member country. To the extent the principle of mutual recognition affects the actual practices of European stock exchanges, it should result in no or little corporate governance impact of cross-listing, at least in the sense of legal pressure. The reputational pressure resulting from a European cross-listing is a separate issue. On one hand, we might expect companies cross-listing on stock exchanges where domestic corporate governance standards are high to be under stronger reputational pressure than companies cross-listing in markets where domestic standards are less strict. For that reason, we could expect firms cross-listing on the LSE to have a more minority-shareholder orientation than firms cross-listing in Switzerland. On the other hand, this difference could fade away if reputational intermediaries from London exert their pressure on large European corporations irrespective of whether they cross-list in London, Switzerland, or not at all. To summarize, we need not find a significant effect of cross-listing within Europe on corporate governance.

Data and Methodology

Following previous chapters, three data-sets are used in this chapter: data on the corporate governance of European companies, data on their

cross-listings in the US and within Europe, and data on company characteristics applied in multivariate analysis on the relationship between corporate governance and cross-listing. The data-set on corporate governance, provided by Deminor Rating SA for years 2000 through 2004, has already been discussed in Chapter 2 (and is used in Chapter 7, following). The first part of the section focuses on the sources and features of the data on cross-listings and company characteristics and the second part presents the structure of the sample.

Cross-listings

Data on cross-listings in the USA was obtained from the ADR data-set available on the website of JP Morgan Chase &Co. This data-set includes the type (Levels I, II, III, or Rule 144A), and the effective year of the ADRs. This data was supplemented with data on terminated ADRs available from the Bank of New York website. Data on cross-listings within Europe was obtained partly through direct enquires with the major European stock exchanges but mostly from the Amadeus database, provided by Bureau van Dijk. The Amadeus database does not give the year of cross-listing, so data on cross-listings within Europe is available for the end of 2004 when it was collected.

Company Characteristics

This data-set involves corporate characteristics other than corporate governance or cross-listing status. The selection of variables was guided by existing research, in particular Pagano et al. (2002) who found the cross-listing decision of European companies to be strongly associated with the following variables: percentage of foreign sales in total sales, asset growth rate in the past, price-to-book value ratio (PBV), a dummy representing high technology industry, and the value of total assets. Data on these variables was obtained from FactSet database. These variables are used in multivariate analysis of the relationship between cross-listing and corporate governance in the penultimate section, where we present the descriptive statistics on these variables, while their detailed definitions are presented in Appendix 6.1.

Sample

Since the Deminor ratings represent the most important of the data-sets used in the chapter, the sample of companies under consideration was

Table 6.1. Sample companies according to their US cross-listing status

Country of incorporation	With Level II or III ADRs			Without Level II or III ADRs			Total		
	2000–4	2000	2004	2000–4	2000	2004	2000–4	2000	2004
Austria	1	0	1	1	0	1	2	0	2
Belgium	1	0	0	10	9	9	11	9	9
Denmark	2	1	1	5	2	4	7	3	5
Finland	3	3	3	3	1	2	6	4	5
France	16	9	14	41	33	28	57	42	42
Germany	12	6	12	30	20	20	42	26	32
Greece	3	0	3	6	3	3	9	3	6
Rep. of Ireland	5	4	4	3	0	3	8	4	7
Italy	7	5	6	30	20	19	37	25	25
Luxembourg	—	0	0	3	1	2	3	1	2
Netherlands	14	13	13	10	8	8	24	21	21
Norway	3	1	3	2	0	2	5	1	5
Portugal	2	3	2	2	0	2	4	3	4
Spain	6	6	5	13	4	12	19	10	17
Sweden	5	4	5	16	11	11	21	15	16
Switzerland	9	4	9	15	12	8	24	16	17
UK	52	31	43	73	45	38	125	76	81
Total	141	90	124	263	169	172	404	259	296

Source: Authors' calculations based on data from JP Morgan Chase&Co. and Bank of New York.

determined by the availability of data on corporate governance. There were 404 companies rated by Deminor rating at least once between 2000 and 2004, 259 rated in 2000, and 296 rated in 2004. Table 6.1 presents the sample by country of incorporation and according to their US cross-listing status. Companies in the sample are incorporated in seventeen European countries. There were no companies from 2004 EU accession countries or the former Soviet Union in the sample. Between 2000 and 2004 the number of companies with Levels II or III ADRs increased from 90 to 124 or from 35 to 42 per cent of the total sample, indicating the migration of European companies to US stock markets documented by Pagano et al. (2002) for the 1990s continued into the new millennium.

Table 6.2 presents the sample companies according to their cross-listing status within Europe at the end of 2004. There were fifty-nine companies for which we could not identify any European cross-listing. A European cross-listing was defined as a cross-listing on any stock exchange of the seventeen countries of companies' origin. In total, we identified 660 cross-listings, which gives over two cross-listings per company. Four stock exchanges that attracted the largest number of cross-listings are presented in the table, with the Deutsche Börse and the Swiss Exchange in the lead followed by the LSE and Euronext Paris.

Table 6.2. Sample companies according to their European cross-listing status in 2004

Country of incorporation	Deutsche Börse	London Stock Exchange	Euronext Paris	Swiss Exchange	Other European	No European	No. of companies
France	38	19	NA	34	28	2	42
Germany	NA	19	10	24	18	6	32
Italy	19	4	1	6	2	6	25
Netherlands	11	9	8	10	11	7	21
Spain	12	6	3	6	5	5	17
Sweden	15	12	4	12	12	1	16
Switzerland	14	10	3	NA	4	2	17
UK	55	NA	14	44	7	24	81
Other countries	38	5	6	21	14	6	45
Total	202	84	49	157	101	59	296

Source: Authors' calculations based on database Amadeus by Bureau van Dijk and information from individual stock exchanges.

US Cross-listing from European Countries

We begin with the relationship between US cross-listing and corporate governance, focusing on major eight European countries in 2004. Companies from France, Germany, Italy, the Netherlands, Spain, Sweden, Switzerland, and the UK accounted for nearly 85 per cent of our 2004 sample. Table 6.3 presents the average and median ratings for each type of US cross-listing and each category of corporate governance.

In each country, the average total corporate governance rating is higher for companies with Level, II or III ADRs than for those with no US cross-listing. If we turn to median values, the advantage of firms with Level II or III ADRs holds with the exception of firms in Sweden. For Germany, Italy, and the Netherlands the median corporate governance rating of companies without a US cross-listing was at least 3 points lower than the median rating of firms with ADRs traded on a US stock exchange and, for Germany, these medians were statistically different from each other. Disclosure as well as board structure and functioning appeared to be the main contributors to the advantage of US cross-listed companies.

Results for the UK are particularly interesting. We would expect British companies to have little problem in adjusting to the US regime of corporate governance. Not only is the overall level of corporate governance ratings high in the UK, some aspects such as takeover rules are considered superior to the US system (Ferrell 2003). Nevertheless, British companies cross-listing in the USA have marginally higher corporate governance ratings than companies without a US cross-listing. This holds for every

Table 6.3. Corporate governance ratings vs. the US cross-listing status in 2004

Country and the US cross-listing status	Total corporate governance		Shareholders' rights&duties		Takeover defences		Disclosure		Board structure & functioning	
	Avg.	Med.	Avg.	Med.	Avg.	Med.	Avg.	Med.	Avg.	Med.
France										
Cross-listed	22.6	21.5	5.9	6.3	3.2	2.3	7.5	7.4*	6.0	6.0
Not cross-listed	22.2	21.1	6.7	6.8	3.0	1.0	6.5	6.7	5.9	6.0
Germany										
Cross-listed	21.7	21.7**	6.9	6.9	2.8	2.4*	7.2	7.4*	4.9	4.9**
Not cross-listed	19.4	18.6	7.0	6.8	2.0	1.0	6.4	6.5	4.1	4.2
Italy										
Cross-listed	21.2	21.7	6.1	6.3	2.3	1.0	7.5	7.7*	5.3	5.6
Not cross-listed	18.1	18.2	5.5	5.6	1.0	1.0	6.6	6.5	4.9	5.1
Netherlands										
Cross-listed	24.6	24.5	5.6	5.4	3.5	4.0	8.3	8.2***	7.1	7.3**
Not cross-listed	21.1	19.6	6.2	6.0	2.5	2.4	6.7	6.8	5.7	5.8
Spain										
Cross-listed	22.8	20.9	6.0	5.6	3.2	1.0	7.7	7.9***	5.8	5.7***
Not cross-listed	19.8	19.5	6.9	6.8	1.5	1.0	6.4	6.4	4.9	4.6
Sweden										
Cross-listed	23.1	23.4	6.7	6.6	4.0	4.3	6.9	7.2	5.5	5.4
Not cross-listed	22.5	24.2	6.5	5.8	4.4	5.9	6.7	6.7	4.9	5.1
Switzerland										
Cross-listed	23.2	21.4	6.8	7.0	4.5	3.4	6.3	6.1	5.6	5.7
Not cross-listed	20.7	18.6	7.0	7.1	3.2	1.0	5.6	5.5	4.8	5.1
UK										
Cross-listed	31.5	32.3	7.9	8.0	8.3	9.0	8.1	8.2	7.2	7.3
Not cross-listed	30.4	31.7	7.7	8.0	7.6	9.0	8.0	8.0	7.1	7.2

Note: Significance at 10%(*), 5%(**), and 1%(***) level.

As the distribution of ratings is not normal or symmetric we used a non-parametric median method testing the null hypothesis that cross-listed companies have the same median rating as those not cross-listed.

Source: Authors' calculations based on data provided by Deminor rating.

category of corporate governance. In our opinion, these findings suggest that the US regime does not have to be stricter in all aspects or even overall in order to claim better protection of minority shareholders in cross-listed companies compared to those non-cross-listed. Cross-listing companies do not escape their domestic regime; instead, they become subject to additional legal and reputational pressures. Thus, by cross-listing in a regime that covers an area of corporate governance not covered by its domestic regime, the governance of a company could change, even if the overall domestic regime is more strict.

To summarize, we have identified the first traces of evidence consistent with our hypothesis about the relationship between corporate governance and US cross-listing status. Companies with US cross-listings tend to command record corporate governance ratings. In the following section,

Table 6.4. Difference in adjusted means around the date of cross-listings in the USA

	Relative year of cross-listing					
	−2	−1	0	1	2	3
Total corporate governance	3.80**	1.73*	1.90**	1.66***	2.09***	2.49***
Shareholders' rights and duties	0.41	0.10	−0.14	−0.64	0.00	0.11
Takeover defences	2.55**	0.83	1.39***	1.06**	0.93**	1.15***
Disclosure	0.75**	0.38*	0.29*	0.39***	0.67***	0.66***
Board structure and functioning	0.09	0.25	0.25*	0.28**	0.50***	0.57***

Note: Significance at 10%(*), 5%(**), and 1%(***) level.

Source: Authors' calculations based on data provided by Deminor rating.

we continue to explore these patterns extending our analysis to the full sample of companies.

Corporate Governance before and after US Cross-listing

Table 6.4 reports the differences in adjusted means of corporate governance ratings between companies with Level II or III ADRs and those without Level II or III ADRs over the whole period 2000–4. The columns give the differences in adjusted means in the year −2, −1, 0, +1, +2, +3 relative to the year of cross-listing. Calculations for the year −3 were not conducted since there was just one company in the sample that cross-listed in 2003. The differences are computed by OLS regression where the corporate governance variable of interest was regressed on a relative-listing-year dummy, controlling for calendar year and country of incorporation. The relative-listing-year dummy for year $+n$ ($-n$) takes the value one for observations taken n years after (before) the year in which the company was cross-listed in the USA. A separate regression was run for each cell in the table. The value reported is the coefficient of the relative-listing-year dummy. It is this coefficient to which we refer as the difference in adjusted means of corporate governance (following Pagano et al. 2002).

Companies with Level II or III ADRs had significantly higher total corporate governance ratings than firms without a US cross-listing irrespective of the relative year of cross-listing: their corporate governance premium started at least two years before the year of cross-listing and remained at least three years afterwards. Corporate governance categories that contributed to the premium of firms with Level II or III ADRs were takeover defences, disclosure, and board structure and functioning. By contrast, the ratings for shareholders' rights and duties did not seem to be higher in firms with Level II or III ADRs. Interpreting this finding, it

should be noted that one of the major criteria within the category of shareholders' rights and duties is whether a company has a one-share, one-vote structure. US stock exchanges, or at least the NYSE, do not require foreign companies to follow this principle. From our findings, it appears that European companies cross-listing on US stock exchanges were not obliged to follow the one-share, one-vote principle. The result of firms with Level II or III ADRs having systematically higher disclosure ratings is not surprising. Previous research suggests that US stock exchange cross-listed companies have higher financial disclosure standards (Khanna, Palepu, and Srinivasan 2004). Our results show that the advantage of foreign firms cross-listed on a US stock exchange applies also to disclosure on corporate governance.

In terms of total corporate governance ratings, the advantage of cross-listed companies is statistically more robust after than before cross-listing. After cross-listing not only are the differences in adjusted means significant at 1 per cent level, the absolute values of these differences rise from approximately 1.66 in the first year to 2.5 in the third year after cross-listing. The building blocks of corporate governance that contribute to this pattern are disclosure as well as board structure and functioning. These findings shed light on the issue of causality between corporate governance and US cross-listing. Higher disclosure, takeover defences, and the total ratings of cross-listed firms one or two years before the actual cross-listing reflect preparation for cross-listing. On the other hand, higher ratings indicate that companies with more minority-shareholder friendly corporate governance are more likely to decide on a US cross-listing. The latter explanation is consistent with Bancel and Mittoo (2001) who showed that European firms with higher levels of financial disclosure perceive the net benefits of listing to be higher because the perceived costs of cross-listing are lower.

To be sure, higher ratings of cross-listing companies before the time of cross-listing can be driven by *both* the preparation and self-selection arguments. To identify the relative contribution of each we would need to know when a company decided to cross-list in the USA. We should also point, however, to evidence that speaks in favour of a US cross-listing as having an impact on corporate governance. The rating advantage of cross-listing firms in terms of board structure and functioning is not statistically significant before cross-listing, but from the year of cross-listing it grows more robust both in absolute value and in statistical significance. In contrast, the advantage of cross-listing firms in terms of disclosure, though it also grows stronger after cross-listing, exists prior

to cross-listing. We would argue that cross-listing has a more direct and immediate effect on disclosure than on board structure and functioning. It is not surprising board structure and functioning reacts more slowly to a cross-listing decision and to the cross-listing event than disclosure.

To summarize, our results suggest that firms cross-listing in the USA have higher corporate governance ratings than companies that do not cross-list in the USA. While these results echo the findings of the preceding section, we also show that the corporate governance advantage of firms cross-listed in the USA exists both before and after the cross-listing event. It remains unclear as to the extent companies cross-list *because* they have higher ratings or have higher ratings *because* of cross-listing. Evidence in support of the latter explanation comes from companies with US cross-listings increasing their advantage over time over firms without a US cross-listing in terms of board structure and functioning. In the following section, we explore whether the findings on the relative corporate governance of companies cross-listing in the USA can be sustained if we account for other factors that affect the cross-listing decision.

Relationship between US Cross-listing and Corporate Governance

In this section, we account for the impact of other non-governance corporate characteristics that affect cross-listing. Pagano et al. (2002) found that European companies cross-listing in the USA between 1986 and 1997 had specific features compared to European companies cross-listing within Europe or firms without any cross-listing. The most distinctive features of firms cross-listing in the USA were as follows: large size (measured as the logarithm of total assets), export orientation (measured as the percentage of foreign sales in total sales), high asset growth rate in the past as well as strong growth prospects (measured as price to book value ratio).[5] In addition, firms cross-listing in the USA tended to belong to the high technology sector.

Here, we ask whether the relationship between corporate governance and US cross-listing status holds after we account for other corporate characteristics that affect US cross-listing decisions. Logistic regression is used, with the dependent variable consisting of two categories of companies: companies with Level II or III ADRs and those without. The objective of the logistic regression was to assess the relationship between a company's propensity towards a given US cross-listing status and a set of predictor

Table 6.5. Descriptive statistics on predictor variables for multinomial logistic regression

	1999–2000					2003–4				
	n	Min.	Max.	Mean	Std. dev.	*n*	Min.	max.	Mean	Std. dev.
Total corporate governance	259	7.54	31.67	19.31	6.38	296	12.35	35.96	23.90	5.89
Sharehold. rights and duties	259	2.53	8.19	6.12	1.33	296	3.65	8.65	6.86	1.17
Takeover defences	259	0.00	10.00	4.07	3.90	296	1.00	10.00	4.18	3.48
Disclosure	259	1.00	7.83	4.81	1.62	296	2.74	9.04	7.04	1.09
Board str. & functioning	259	1.55	7.33	4.32	1.54	296	2.36	8.44	5.82	1.34
Foreign sales percentage	259	0.00	100.00	53.39	30.28	296	0.00	100.00	52.84	28.50
Asset growth rate	259	−19.15	866.95	33.50	68.10	296	−66.48	239.01	1.47	20.91
Price-to-book Value	259	0.68	28.38	5.16	5.47	296	0.68	178.76	3.37	10.86
Hi-technology dummy	259	0.00	1.00	0.16	0.37	296	0.00	1.00	0.15	0.35
Log of total asset value	259	2.72	5.91	4.29	0.67	296	2.95	5.95	4.37	0.66

Note: For the definitions of corporate governance ratings, see Appendix 2.1.

For the definitions of other variables, see Appendix 6.1.

Source: Authors' calculations based on data provided by Deminor rating and FactSet data-set provided by ABP investments.

variables. The predictor variables included corporate governance ratings, country dummies, as well as the company-level variables suggested by Pagano et al. (2002): the percentage of foreign sales in total sales, asset growth rate, the price-to-book ratio, a high-tech dummy, and total asset value (logarithmically transformed due to large absolute values of total assets). We ran separate regressions for 2000 and 2004, and for each of the five corporate governance rating elements. The dependent variable, the US cross-listing status of European companies at the end of 2000 and 2004, was previously presented in Table 6.1. The descriptive statistics for the predictor variables are presented in Table 6.5. As explained in Chapter 2, corporate governance ratings reflect corporate information for the first half of 2000 and 2004 respectively; in the logistic regressions we used non-corporate governance company-level variables for the end of 1999 and 2003 respectively. Definitions of corporate governance variables were presented in Appendix 2.1, and details of other corporate variables are presented in Appendix 6.1.

As a preliminary test of whether the relationship between corporate governance ratings and US cross-listing status is driven by other company characteristics strongly correlated with the ratings, we analysed bivariate

Table 6.6. Logistic regression results: dependent variable—the US cross-listing status

	Total corporate governance		Shareholders' rights and duties		Takeover defences		Disclosure		Board structure and functioning	
2004										
Number of observations	296		296		296		296		296	
2 log likelihood	−191		−189		−193		−159		−183	
χ^2	105		106		102		146		112	
Significance	0.00		0.00		0.00		0.00		0.00	
Pseudo R^2	0.39		0.39		0.38		0.47		0.41	
% of correct predictions	80		80		78		85		79	
	Exp(B)	Sig.	Exp(B)	Sig.	Exp(B)	Sig.	Exp(B)	Sig.	Exp(B)	Sig.
Corporate governance	1.092	0.11	0.669	0.14	1.043	0.57	7.003	0.00	2.236	0.00
Foreign sales percentage	1.048	0.00	1.050	0.00	1.049	0.00	1.051	0.00	1.052	0.00
Asset growth rate	1.001	0.86	0.998	0.82	1.000	0.96	1.008	0.32	1.005	0.52
Price-to-book Value	1.111	0.22	1.119	0.24	1.108	0.25	1.079	0.50	1.114	0.22
High-tech dummy	31.867	0.00	29.242	0.00	29.523	0.00	65.905	0.00	34.679	0.00
Log of total asset value	5.005	0.00	6.271	0.00	5.480	0.00	4.009	0.00	4.937	0.00
2000										
Number of observations	259		259		259		259		259	
2 log likelihood	−157		−149		−157		−150		−155	
χ^2	76		84		76		82		77	
Significance	0.00		0.00		0.00		0.00		0.00	
Pseudo R^2	0.36		0.39		0.36		0.38		0.36	
% of correct predictions	79		80		78		81		80	
	Exp(B)	Sig.	Exp(B)	Sig.	Exp(B)	Sig.	Exp(B)	Sig.	Exp(B)	Sig.
Corporate governance	0.971	0.56	0.561	0.11	0.952	0.46	1.953	0.01	1.461	0.19
Foreign sales percentage	1.029	0.00	1.032	0.00	1.029	0.00	1.024	0.00	1.027	0.00
Asset growth rate	0.999	0.78	0.996	0.41	0.999	0.80	1.001	0.76	0.999	0.90
Price-to-book Value	0.975	0.56	0.970	0.49	0.973	0.53	0.602	0.98	0.611	0.98
High-tech dummy	17.689	0.00	22.465	0.00	17.445	0.00	16.918	0.00	18.225	0.00
Log of total asset value	5.207	0.00	5.049	0.00	5.175	0.00	3.889	0.00	4.442	0.00

Note: Country dummies included but not reported; Cox–Snell pseudo R^2 reported.

Source: Authors' calculations based on data provided by Deminor rating and FactSet database.

correlations of the predictor variables included in the model. We did not find Spearman's rank correlation coefficients higher than 0.35. Table 6.6 presents the results of the logistic regressions for corporate governance ratings in 2004 and 2000. The results include statistics on model fit through to the list of predictor variables with their regression coefficients and significance statistics. We report exp(B) coefficients defined as the effect of the predictor variable on the odds ratio (the probability of the event divided by the probability of the non-event). If exp(B) = 2 it means that an increase of the predictor value by 1 increases the odds of the event by a factor of 2. A coefficient value below 1 implies that the event is less likely with an increase of the predictor variable. If exp(B) = 1 this means there

is a 50/50 chance that the event will occur with a small change in the predictor variable. While the exp(B) coefficients for continuous variables tend to be close to 1, it does not mean they are insignificant (Hosmer and Lemeshaw 2000). To judge the significance of coefficients, we used the reported significance statistics based on the significance level of the Wald statistic (the squared ratio of the coefficient to its standards error).[6]

If US cross-listing is related to corporate governance ratings after we control for corporate characteristics and the country of origin, we would expect the coefficients for corporate governance predictors to be higher than 1 and statistically significant. The model fit statistics show that each of our regression models is significant at the 1 per cent level (χ^2 statistic). Focusing on the predictor variables, our results are largely consistent with Pagano et al. (2002). In both 2000 and 2004, companies with Level II or III ADRs tend to be larger, more export oriented, and more high-tech than companies without a US cross-listing. The coefficients for asset growth rate and PBV, however, were statistically insignificant. This stands in contrast to Pagano et al. (2002) who found US cross-listed companies to have higher growth rates and PBV ratios. Interpreting this difference, we observe that their sample covered all European companies with a US cross-listing while our sample covered only the largest European companies which we would expect to have less dynamic growth records and prospects.

Turning to the relationship between US cross-listing status and corporate governance variables, in 2000 the only governance variable that could be associated with the US cross-listing at a 1 per cent significance level was disclosure. The results for 2004 indicate a much stronger relationship between corporate governance and the propensity of firms to cross-list using Level II or III ADRs, with disclosure as well as board structure and functioning ratings being significant predictors of cross-listing. In 2004, exp(B) coefficients for disclosure and board structure were over 7 and 2 respectively (both significant at 1 per cent level). Thus, a unit change in a company's disclosure and board rating increased the odds of that company being cross-listed on a US stock exchange more than seven times and twice respectively.

These results lead to two major findings. First, after we control for a number of corporate characteristics affecting the US cross-listing decision, European firms with higher corporate governance ratings do have a higher propensity to cross-list via Level II or III ADRs. Firms with Level II or III ADRs are associated, in particular, with higher disclosure ratings, corroborating the results of Khanna, Palepu, and Srinivasan (2004) who

showed that companies from Asia-Pacific and Europe interacting with the US markets tend to command higher transparency and disclosure scores developed by Standard&Poors. However, the association between a US stock exchange cross-listing and a high corporate governance rating goes beyond disclosure, and involves higher board structure and functioning ratings.

The second major finding refers to the strengthening relationship between corporate governance and the US cross-listing status between 2000 and 2004. We can offer two conjectures for this pattern. While the year of 2000 was at the tail-end of the US stock market boom, 2004 was definitely a post-boom year. We presume that in a bear market, the attraction and potential benefits of a US cross-listing are smaller than in a bull market. Since lower corporate governance standards imply higher costs to cross-listing (both direct corporate governance related costs and indirect costs of foregone benefits of control), companies cross-listing in a bear market may have, on average, higher corporate governance standards than companies cross-listing in a bull market. Another way of explaining these findings involves the legal and reputational pressures on companies cross-listed in the USA being higher in 2004 than in 2000, leading to a stronger relationship between corporate governance and US cross-listing status in 2004. With the growing awareness of corporate governance issues following US corporate scandals, and the introduction of the Sarbanes-Oxley Act (SOA) of 2002 such a speculation is entirely plausible.[7]

Corporate Governance and Cross-listing within Europe

In this section, we explore the relationship between corporate governance and cross-listings within Europe by comparing the country-adjusted corporate governance ratings of companies cross-listed on European stock exchanges, controlling for their US cross-listed status. To obtain a country-adjusted rating for each company, we substract from its rating the mean rating for all companies incorporated in the same country and express the resulting difference as the percentage of the mean rating of the country. In other words, a country-adjusted rating of a company tells us by how many percentage points a company's rating differs from the mean rating of the country where the company is incorporated.

We considered four major European stock exchanges that attracted the largest number of foreign European firms, as well as a category embracing the stock exchanges of countries wherein the sample companies are

incorporated. Table 6.7 reports median values of country-adjusted corporate governance ratings for groups of companies classified simultaneously on the basis of their US cross-listing status and whether they were cross-listed on a particular European stock exchange. We also included the results of a test assessing the significance of the difference in medians between firms cross-listed on a particular European stock exchange and those that had not cross-listed on that exchange. If cross-listing on a particular European stock exchange is associated with a systematically higher (lower) corporate governance rating independently of the relationship between corporate governance and US cross-listing status, we would expect companies that cross-list on this particular stock exchange to have a significantly higher (lower) median country-adjusted corporate governance rating than firms that do not cross-list on this exchange.

It appears that firms with *any* European cross-listing have ratings that are not significantly different from firms that do not cross-list in Europe. In fact, for companies without Level II or III ADRs the median country-adjusted shareholders' rights and duties rating is lower for companies that do cross-list within Europe than for those that do not. For the Deutsche Börse, there are no significant differences between medians. In the case of the LSE, within firms with Level II or III ADRs, the median country-adjusted disclosure and board structure and functioning ratings are statistically higher for firms that cross-listed on the LSE than for those that did not. In contrast, ratings on shareholder rights and duties and on takeover defences were higher for companies without a cross-listing on the LSE. Moving to the Euronext Paris, for firms with Level II or III ADRs the median country-adjusted ratings for takeover defences and total corporate governance were statistically higher for firms that cross-listed in Paris than for those that did not. In addition, for firms without Level II or III ADRs, companies listed in Paris had a significant advantage in terms of disclosure. Finally, the results for the Swiss Exchange resemble those for the Deutsche Börse, without statistically significant results.

To summarize, while there are traces of positive association with corporate governance ratings for companies cross-listed on the Euronext Paris, and the LSE, there are no such traces for the Deutsche Börse or for the Swiss Exchange. Note, moreover, that even where a European cross-listing exhibits a positive association with corporate governance ratings, the difference seems to be dominated by the influence of a cross-listing in the USA. As an example, for companies with Level II or III

Table 6.7. Country-adjusted corporate governance ratings according to European and the US cross-listing

Cross-listing on:	US cross-listing status >		Level II or III ADRs			No Level II or III ADRs		
	CG category	Cross-listed?	*n*	Median	Sig.	*n*	Median	Sig.
Deutsche Börse	Total C.G.	Yes	93	4		109	−3	
		No	31	3		63	−4	
	Share.R.&D.	Yes	93	2		109	3	
		No	31	1		63	3	
	Takeover D.	Yes	93	12		109	−24	
		No	31	12		63	−27	
	Disclosure	Yes	93	5		109	−3	
		No	31	6		63	−2	
	Board S.&F.	Yes	93	4		109	−2	
		No	31	7		63	−3	
London Stock Exchange	Total C.G.	Yes	44	6		40	−8	
		No	80	4		132	−2	
	Share.R.&D.	Yes	44	−1	***	40	−3	
		No	80	3		132	3	
	Takeover D.	Yes	44	0	**	40	−54	
		No	80	12		132	−24	
	Disclosure	Yes	44	9	***	40	−1	
		No	80	3		132	−2	
	Board S.&F.	Yes	44	10	*	40	−1	
		No	80	3		132	−2	
Euronext Paris	Total C.G.	Yes	34	6	**	15	5	
		No	90	3		157	−4	
	Share.R.&D.	Yes	34	1		15	1	
		No	90	2		157	3	
	Takeover D.	Yes	34	21	***	15	−27	
		No	90	0		157	−23	
	Disclosure	Yes	34	6		15	1	**
		No	90	4		157	−3	
	Board S.&F.	Yes	34	5		15	0	
		No	90	4		157	−2	
Swiss Exchange	Total C.G.	Yes	82	4		75	−1	
		No	42	3		97	−4	
	Share.R.&D.	Yes	82	2		75	1	
		No	42	3		97	3	
	Takeover D.	Yes	82	12		75	−24	
		No	42	12		97	−24	
	Disclosure	Yes	82	5		75	−2	
		No	42	5		97	−3	
	Board S.&F.	Yes	82	4		75	0	
		No	42	6		97	−3	
Any European exchange	Total C.G.	Yes	107	4		130	−4	
		No	17	3		42	−1	
	Share.R.&D.	Yes	107	2		130	2	
		No	17	3		42	3	
	Takeover D.	Yes	107	12		130	−24	
		No	17	12		42	−15	
	Disclosure	Yes	107	6		130	−3	
		No	17	3		42	−2	
	Board S.&F.	Yes	107	5		130	−2	
		No	17	5		42	−1	

Source: Authors' calculations based on data from Deminor rating, Amadeus, and individual stock exchanges.

ADRs, companies that list on the LSE have total country-adjusted ratings typically 2 percentage points higher than companies that do not list on the LSE. In turn, for companies with a cross-listing on the LSE, companies with Level II or III ADRs have total country-adjusted ratings typically 14 percentage points higher than companies without Level II or III ADRs.

Implications and Conclusions

In this chapter, it was found that European companies cross-listing in the USA tend to have higher corporate governance ratings than companies from the same countries that do not cross-list in the USA. This finding was revealed in bivariate analysis and confirmed by multivariate analysis, controlling for other corporate characteristics affecting the cross-listing decision including company size, growth, and export orientation. The ratings advantage of a US cross-listing does not, however, extend to all aspects of corporate governance. It is consistent in terms of disclosure as well as boards structure and functioning but does not apply to shareholders' rights and duties. It was also found that the advantage of US cross-listing can be traced to at least two years before the year of cross-listing in terms of ratings for takeover defences and disclosure, but starts only in the year of cross-listing for board structure and functioning.

This implies that firms adjust their corporate governance while preparing for a US cross-listing, although it could also mean that companies cross-listing in the USA tend to have higher ratings before they decide to cross-list. Causation can operate in both directions, which is consistent with a view that companies with less minority-shareholder friendly corporate governance face higher direct and indirect costs of cross-listing on a stock market with relatively strict corporate governance requirements. While we also found traces of higher corporate governance ratings for companies cross-listed on the Euronext Paris and the LSE compared to those cross-listed on the Deutsche Börse or the Swiss Stock Exchange, the differences were mostly insignificant.

Neither the extent to which European companies cross-listing in the US bond their commitment to more minority-shareholder friendly corporate governance nor the extent to which they avoid corporate governance related costs of cross-listing could be determined. Nevertheless, our findings bring us to radical versions of both the bonding and avoiding hypotheses. Licht (2001) described the practices of Israeli companies

listing only in the USA while avoiding listing in Israel in order to escape the apparently stricter domestic corporate governance requirements prevailing in Israel. According to our evidence, this extreme form of avoiding corporate governance standards does not apply to European companies cross-listing in the USA. First, all companies in our sample had domestic listings. Second, companies that did cross-list in the USA tended to have higher corporate governance standards than companies without a US cross-listing.

With regard to bonding, Coffee (1999) suggested the possibility of a 'race-to-the-top' among stock exchanges raising their corporate governance requirements in order to provide bonding services to companies. As we find no evidence that major European stock exchanges are taking part in such a race, we are sceptical about the race-to-the-top hypothesis.[8] Rather, these findings suggest that both bonding and avoiding are important for understanding the relationship between corporate governance and cross-listing. Two possible avenues for exploring the interaction between the two concepts involve quantitative analysis incorporating data on the timing of cross-listing decisions, and qualitative research in the form of case studies on corporate governance in companies before and after they cross-list.

Whatever the extent of bonding and avoiding our findings may be of concern to European stock exchanges. Whether European firms migrate to US markets *because* they have higher corporate governance rating or they have higher ratings *because* they migrate, European stock exchanges may end-up sharing their elite customers with US markets. As a consequence, an American investor interested in European companies with superior corporate governance may satisfy themselves by buying ADRs and may have little reason for using the services of European stock exchanges. This threat refers not only to the business of European stock exchanges but is relevant for the future of the European capital markets in general, since sound corporate governance is one of the foundations of strong securities markets (Black 2001). These are clearly contentious issues, and are at the core of Chapter 7 (following).

While we have established the significance of the relationship between corporate governance and the US cross-listing of European corporations, the impact of cross-listing on corporate governance should not be exaggerated. This is not only because the direction of causation is mixed but also because cross-listing is one of many forces of globalization. Other forces operating on corporate governance include product market competition leading to mergers and acquisitions, competition among

financial services providers, and international portfolio diversification (Stulz 1999). Moreover, thinking about corporate governance in the context of globalization we must not lose sight of country-specific factors. The comparison of corporate governance and US cross-listing status in major European countries revealed that though US cross-listed French, German, and Italian firms had higher corporate governance ratings than firms from the same countries that did not cross-list in the USA, these ratings were still by far lower than those for the UK firms (cross-listed or not). Bonding through cross-listing is a form of piggybacking on foreign country's institutions and as such has its limits (Black 2001). Home country institutions remain important for the development of strong international capital markets.[9]

While the analysis of cross-listing exposes problems in European corporate governance, we do not mean to imply that cross-listings present an external solution to these problems. In order to deepen insights into the geography of cross-listing, and build on the cross-sectional analysis provided in this chapter, in Chapter 7 we investigate the interplay between cross-listing and corporate governance change using a case study based on the Dutch corporation, Ahold. In this way, we demonstrate that exposure to international capital markets presents not only opportunities but also threats and pitfalls for the development of corporate governance.

Appendix 6.1

Details of corporate characteristics used as control variables in multinomial logistic regression (if not stated otherwise based on data from FactSet)

Foreign sales percentage	Percentage of foreign sales and revenues in total sales and revenues in 1999 and 2003 respectively
Asset growth rate	The percentage nominal change in the year-end total balance sheet value of assets between the year of 1999 and 1998; and 2003 and 2002 respectively
Price-to-book value	Ratio obtained by dividing the year-end unit price of common shares by the unit book value of common shares for 1999 and 2003 respectively
High technology dummy	1 if a company is classified in one of the following industries according to FTSE Dow Jones Industry Classification Benchmark: health care, telecommunications, and technology

Log of total asset value	Logarithm with the base of ten of the year-end total balance sheet value of assets for 1999 and 2003 respectively (millions US dollar in current prices)

Notes

1. We are pleased to acknowledge the help of Rob Bauer, our co-author on this chapter.
2. Tobin's q was calculated as ((Total Assets−Book Equity) + Market Value of Equity)/Total Assets (Doidge 2004).
3. What could further complicate the relationship between cross-listing and corporate governance are the spillover effects. According to Stulz (1999) financial globalization increases the monitoring of management also in these firms that do not take part in global capital markets. This is because non-participation sends a negative signal to markets. If non-cross-listed companies indeed adjust their corporate governance not to lag behind the cross-listed companies, the higher corporate governance rating of cross-listed firms in relation to those non-cross-listed should decrease or even fade away with time.
4. For the purpose of this chapter no distinction is necessary between ADRs and Global Depositary Receipts or between sponsored and unsponsored ADRs.
5. For the role of export orientation in cross-listing decisions, see also Saudagaran and Biddle (1995).
6. We did additional tests for multicollinearlity by analysing covariance coefficients and Variance Inflation Factors. No problems were identified. We have also performed regression analyses with block variables and found that the addition of corporate governance variables adds to the explanatory power of the model. Finally, we performed regressions without country dummies. The values of coefficients were changed, but our conclusions regarding their significance remained unchanged.
7. Though the extent to which the SOA applies to foreign issuers is limited, some new stringent corporate governance rules do apply. Examples include the certification of periodic disclosures by directors, and the increased responsibility of auditors. Our time series covering 2003 ratings is too short to test the impact of SOA. See the case of the Swiss company Adecco, cross-listed in the USA, facing increased legal and reputational pressure in terms of corporate governance after the introduction of the SOA (Simonian 2004).
8. Chemmanur and Fulghieri (2004) propose a model predicting neither a race for the top nor to the bottom, but rather a natural segmentation among exchanges based on optimal regulation. According to the model exchanges with different reputations and listing standards can coexist. A double equilibrium has also been suggested by Coffee (2002). It is puzzling however to find evidence

suggesting that the whole Europe is a cross-listing regime that involves low corporate governance standards.

9. Claessens, Klingebiel, and Schmukler (2002) show that the level of domestic stock market development of a country and the level of this country's stock market internationalization are both related positively to economic fundamentals including country-specific corporate governance. They conclude that firms do not internationalize to escape poor domestic environments but rather 'better country fundamentals permit firms to internationalize' (Claessens et al. 2003: 1). Our results seem to confirm their findings at a microeconomic level by suggesting that companies with more minority-shareholder-oriented corporate governance are more likely to internationalize in the form of cross-listing in the USA.

7

Global Financial Markets as Standard-Setters

Over the 1990s, global capital market integration focused on firms and industries was widely perceived as inevitable (see Litterman et al. 2003). In the aftermath of the 1990s bubble and scandals of corporate governance, the prospect of a 'one-world' market has receded (Stulz 2005). The crisis of confidence in national systems of corporate governance raised doubts about the integrity of the available market information on corporations' circumstances and prospects. One response has been to enhance national regulations; another response by institutional investors has been to monitor more closely corporate decision-making across jurisdictions (Clark and Hebb 2004). At the time of negotiation over the design of a global financial accounting reporting system, these scandals strengthened the hands of those committed to independent global reporting system eschewing the compromises evident in local standards and traditions. This chapter follows-on from Chapter 6 on cross-listing to evaluate the roles played by institutional investors in disciplining corporate management in the global environment.[1]

Royal Ahold is one of just a handful of global players in the food retailing and wholesaling industry (see Wrigley 2000; Wrigley and Currah 2003; Coe 2004). Over the 1990s, it accumulated enormous geographical scope, reporting in Amsterdam market share and revenue from all corners of the world (Wrigley and Currah 2003). However, as doubts surfaced about the integrity of market information regarding Ahold's prospects and the robustness of its internal controls in its far-flung empire its market price became more volatile. In the end, this led to a crisis of corporate governance and the resignation of its CEO, retrenchment in its global ambitions, and a significant loss of 'reputational' capital among institutional investors. To illustrate Ahold's standing among institutional investors,

GovernanceMetrics International (GMI) attributed it a 2004 overall low rating of 4.5 (against its industry peers) and a low regional rating of 3.5 (against its European peers) (each against a possible score of 10). The Ahold story, like related stories of crises of governance, has been told in a variety of places; it is not our intention to go over well-trodden ground.[2] Rather, our goal is to look more carefully at the stock market response to Ahold's crisis of corporate governance in the light of inter-market arbitrage *and* the response of Ahold management to negative market sentiments. More generally, we draw implications for global capital market integration and the prospects for global convergence in national standards of corporate governance.

Information was collected on the Amsterdam daily Ahold stock market closing price for the period 1973–2004 (over 10,000 observations). We sought to characterize the history of Ahold as seen through the Amsterdam stock market, paying particular attention to the existence of distinctive episodes as well as crucial inflection points marking off the beginning and end of different episodes in market trading and expectations. Each episode was analysed in terms of its volatility and its underlying time-series properties. Having demonstrated significant discounting in Ahold stock prior to the official announcement of accounting irregularities, the view from New York was analysed utilizing Granger tests of causality. Prior to the crisis, New York trading in Ahold stock contained information in its own right whereas after the crisis New York–based traders relied exclusively on Amsterdam market information. It is also shown that Ahold management responded by increasing the disclosure of market sensitive information so as to 'manage' global financial market expectations. Here, we rely on Deminor's proprietary database of European corporate governance ratings sensitive to the interests of financial markets (explained elsewhere in this book).

Ahold's 'problems' are representative of a classic issue—the power of incumbent managers when owners are unorganized and their holdings small and dispersed over many institutions (see Roe 1994). In the Ahold case, it assumes greater significance because of the claimed distinctiveness of continental European traditions in the context of a global market for price-sensitive information across jurisdictions. Over the 1990s, ownership of Ahold was fragmented and spread over a number of markets through cross-listing (including New York). Geographically dispersed ownership, partly the result of domestic disengagement and portfolio globalization by large Dutch investors and pension funds, provided managers room to manoeuvre. Problems of accountability and management

within Ahold were registered as 'surprises' on global stock markets with precipitous changes in Ahold stock prices. Thereafter, Ahold sought to reassure institutional investors by significantly improving disclosure related to standards of corporate governance.

The Ahold story is consistent with those that argue there is a relationship between corporate governance and market value (Gompers et al. 2003; Bauer et al. 2004). We link this issue to the ongoing debate in this book and elsewhere about convergence of national standards of corporate governance. In part, our argument is negative in the sense that the evidence suggests that Ahold's problems were first registered in their home location notwithstanding cross-listing between markets. In another sense, however, our argument is positive in that the response of Ahold to investor sentiment was conceived to meet expectations of higher standards in global capital markets. Ahold's response is consistent with the increasing willingness of institutional investors to intervene in poorly governed companies whatever their home jurisdictions: corporate engagement may be a vital ingredient in the transformation of company-specific standards of governance in relation to global standards (as suggested by Clark and Hebb 2005; Hebb and Wójcik 2005).

The Geography of Finance (Again)

The mapping by La Porta et al. (1997, 1998) of the legal and institutional foundations of nation-state financial markets has been widely accepted as an appropriate reference point in understanding market-by-market differentiation and the prospects for global integration. Recall La Porta et al. demonstrated that there are distinctive groups of financial markets rather than just one kind of financial market or one kind of institutional structure. They mapped the historical importance of different legal traditions with respect to the rights and privileges of insiders versus outsiders and worked 'forward' to current market structure and performance. They also argued that market liquidity can be explained by reference to these legal institutions and the degree of protection afforded 'outsiders' investing in listed companies. Their mapping exercise was, in part, an exercise in documenting the obvious just as it was an exercise in explaining the relative performance of one kind of financial market (Anglo-American) against the rest (and in particular continental European markets). Their project had a number of important consequences not least of which

has been the development of related research programmes on systems of corporate governance.

At the same time, we should take care not to exaggerate the separate existence of financial markets nor should we ignore the fact that financial institutions can trade in and across these markets almost every minute of every day. There are benefits in global financial trading not least of which is the return to be had from arbitrage between markets given perceived pricing anomalies. With the rise of global portfolio managers, asset managers have taken the map of MC weighted, in many cases, by institutional risk as a ready-formula for the allocation of investors' assets (Hebb and Wójcik 2005). Not surprisingly, financial institutions have developed methods of risk-management across markets designed to protect, at least, their own positions if not integrity of the whole global trading system. In this respect, the geography of finance is about financial centres, capital flows between those centres, and the channels and networks that collect, organize, and manage information about those flows in relation to projected risk and return (Clark 2005*b*).

Any study of inter-market arbitrage must be sensitive to the coexistence of local opportunities with global opportunities for profit. All things being equal, including industry structure and economic growth potential, the larger the economy, the larger the volume of domestic assets to be invested.[3] All things being equal, including property rights and market transparency, domestic assets are more likely to be invested locally than globally. In part, this is because it is more cost-effective to collect and assess domestic market information than it is to reach out to the ends of the world and rely on third-party providers of distant market information (Currah and Wrigley 2004). As Wilhelm and Downing (2001) point out, financial markets are enormous information processing systems that rely on the cost, quality, and quantity of information for efficient decision-making.

This suggests two crucial observations relevant to the chapter. In the first instance, if we assume a large proportion of assets stays local then the institutional structure of markets need not converge. If we assume, by reason of geography and history, that there are systematic differences between markets in terms of their institutional structures and legal traditions, coexistence rather than convergence is a plausible scenario. In other words, the rules regulating corporate governance could remain much as they were over past decades as long as these rules were not seen to be impediments to long-run economic growth and, at the limit, a price on the 'loyalty' of domestic investors to local capital markets. In the second

instance, however, a settled map of corporate governance and financial market performance may not benefit all investors in their home location. Some firms may be tempted to list on other markets in the hope of obtaining a lower cost of capital and the interest of minority shareholders who share neither the expectations of domestic investors nor the assumption of a settled landscape of firm-specific growth opportunities in the global marketplace.

This introduces the prospect of internal differentiation within markets in that some firms may adopt higher standards of reporting consistent with their strategy of cross-listing in other markets. This is unlikely to benefit investors in their domestic markets, recognizing that local expectations are formed around existing channels of public information, market gossip, and history of the firm. However, investors from other markets may be less aware of the codes of practice (formal and informal) governing the transmission of information in the home market of the firm and they may rely, as they have always relied, on the rules and regulations governing the transmission of market-sensitive information in their own market. This assumes, of course, that neither cross-listing firms nor their agents seek to exploit such differences in the nature and efficiency (for outsiders) of the channels of information between markets. In sum, the cross-listing by firms in different markets carries with it the possibility of significant geographical information asymmetries notwithstanding the confident expectations in markets normally thought better regulated and more transparent than the home markets of the firms that come to cross-list.

In a settled landscape characterized by the coexistence rather than convergence of market-specific rules of disclosure, market agents may become skilled at valuing the available information for cross-listed firms. Repeated trades allow analysts to measure the costs and benefits of informational discrepancies and test the integrity of related rules and regulations. They may also become skilled at adjusting to market volatility, using their own resources and that of market intermediaries to bridge the space-time lags in information diffusion. Institutional risk can be assessed and priced. But there may be events that fall outside customary practice, just as there may be events so significant that trading on dispersed knowledge runs the risk of large losses. In these circumstances, customary practice may either fail (directly) or be circumvented (indirectly) by shifting back to the 'origin' of market-sensitive information. In these situations, not only is there a short-term issue of managing market trading there is also a longer-term issue as to the manner in which customary practice (inter-market arbitrage

and trading) may or may not be re-established after coping with a crisis in market-specific expectations.

In this chapter, we focus on one firm cross-listed between Amsterdam and New York—straddling two different institutional settings and expectations regarding the integrity of market-sensitive information. We do not mean to idealize either the Amsterdam market or the New York market. As events have shown, at the peak of the 1990s boom many investors on both sides of the Atlantic were taken for a ride. However, we would argue that the New York market has traditionally protected minority investors better than the Amsterdam market. The issue, empirically speaking, is how this worked for one firm where it appears senior managers exploited the gap between the two markets in terms of information richness and in terms of the integrity attributed to market-sensitive information. After the denouement, we focus on the response of Ahold in terms of its home policies of corporate governance. We show that senior managers were forced to reform their disclosure policies in line with the expectations of global investors. In effect, this prompted the convergence in firm-specific standards of corporate governance between jurisdictions if not convergence between whole countries' standards of corporate governance.

Background to the Ahold Story

Ahold was first listed on the Amsterdam Stock Exchange in 1948 with its initial acquisition in 1951. The successor company Ahold N.V. was founded in the 1970s, and dominated the Dutch retail market with forays into the US market through the acquisition of the Bi-Lo supermarket chain with stores in the Carolinas and Georgia. In the 1980s, Ahold expanded again acquiring another two supermarket companies in the USA. With the first non-family chief executive appointed in 1989, Ahold broadened its base by establishing a holding company and acquiring a supermarket chain in eastern Europe.

The appointment in 1993 of Cees van der Hoeven as CEO as well as cross-listing on the NYSE (and Zurich and Brussels) were the next steps in an aggressive global acquisition strategy. Over the second half of the 1990s and the first couple of years of the new millennium, Ahold acquired or established a number of supermarket chains in Asia, eastern and western Europe, South America, and the USA. By 2002, Ahold recorded sales of €72.7 billion and operated worldwide with more than 5,000 stores and

over 280,000 employees. One hundred years or so after Albert Heijn opened his first store in Amsterdam, Ahold had become a national champion in a global industry and a firm recognized by portfolio managers as being representative of a putative new generation of global corporations (*contra* Doremus et al. 1998).

Ahold's acquisition strategy was fuelled by the lower cost of capital sourced through the NYSE, combining new stock offerings with the assumption of an enormous debt load. In fact, Wrigley and Currah (2003) estimated that by the end of 2001, Ahold's net debt stood at about €22.4 billion (taking into account the capital value of leases). Its massive debt load was noted by many industry analysts; its aggressive growth strategy, its reliance on joint venture partners, and its spatially elongated administrative networks were all cause for wonder and alarm. In the 1990s world of global integration and seemingly unlimited growth prospects, any alarm bells were ignored or, at best, selectively registered. However, in the aftermath of the 1990s bubble, events such as 9/11, and recognition of similar levels of unsustainable debt leverage in other 'global' industry leaders, Ahold's stock prices fell precipitously. Revelation of problems of corporate governance and a lack of transparency with respect to financial reporting turned stock-price discounting into a corporate crisis.

In this context, February 2003 was an important turning point in Ahold's history. Significant accounting irregularities at Foodservice (USA) and at Disco (Argentina) led to the resignation of the CEO and the CFO. Later that year, other irregularities at joint ventures in Portugal and Scandinavia were also reported. In the aftermath of the crisis, and in particular with the appointment of a new CEO Anders Moberg, the key words in Ahold's so-called 'Road to Recovery' were corporate restructuring, corporate governance, and divestment. Thereafter, Ahold announced major divestments in South America and Europe followed by the announcement of planned US disinvestments. With the announcement of other accounting irregularities, shareholders 'voted with their feet' discounting, yet again, Ahold stock. In response, institutional shareholders demanded greater disclosure and transparency on governance issues such as remuneration policy, and the rights of shareholders (see below). But the damage was done.

According to informed Dutch observers, the governance culture at Ahold and the Dutch legal setting had allowed the CEO (van der Hoeven) to build a global retail company rather than focusing on maximizing shareholder value. The promise of longer-term growth was sufficient, at the time, to discount investor unease in favour of short-term value.

Furthermore, over the 1990s many large Dutch institutions had deliberately run down their holdings in Ahold and in other large Dutch companies as part of their own global portfolio investment strategies (designed to capture higher growth expectations in other markets). Even so, before the crisis a few Dutch institutional shareholders (pension funds) with still sizeable stakes in Ahold were uneasy about the governance of the company with pointed interventions at the 2001 AGM (15 May). Criticism was made about the lack of transparency of managers' compensation plans (options schemes) and the apparent breach of the 'one share-one vote-one dividend policy'. Most shareholders, however, did not support these interventions. At the time, Ahold was widely admired as a Dutch company that had become a global champion just as its CEO was lauded for his corporate leadership and his vision of progressive corporate governance.

Data and Methodology

Having introduced both the issue of stock market differentiation and the crisis at Ahold, we now turn to modelling these effects. Two types of data were used in the analysis: stock market data and corporate governance data. The former involved the daily closing price of Ahold's ordinary shares listed at Euronext Amsterdam over the period 1 January 1973–22 March 2004 as well as the daily closing price of Ahold's American Depository Receipts (ADRs) listed at the NYSE between 31 December 1993 and 22 March 2004. The start dates represent the first dates for which data were available and the end date represents the point of data collection after Ahold's new management instituted their recovery plan. In order to compare the performance of Ahold's shares against a benchmark, we used data on the daily closing values of the Euronext Amsterdam Stock Exchange (AEX) index for the same time period. The AEX index is based on a weighted average of the prices of the twenty-five largest Dutch companies in terms of MC, and is meant to represent the overall trend of the AEX.

Proprietary data on corporate governance was provided by Deminor Rating SA, the corporate governance rating agency headquartered in Brussels, with offices in major European cities (recently acquired by ISS). As we have noted in previous chapters, the objective of Deminor ratings is to provide information to investors about a company's corporate governance standards and practices. While selected Deminor ratings are available

in the public domain through published reports and the website, the most useful data are only available on a subscription basis. The main users of Deminor ratings are institutional investors, both European and non-European, who use the ratings to inform their investment decisions. Deminor's customers are typically institutions like ABP (the large Dutch public sector pension fund) that invests assets on behalf of pension fund beneficiaries and participants. The structure and coverage of Deminor ratings were discussed in detail in Chapter 2.

In the next section, we report the results of quantitative analysis of Ahold's stock price identifying distinctive periods in the time-series. The following section extends the quantitative analysis by investigating the relationship between Ahold's prices in Amsterdam and New York. Thereafter, we focus on corporate governance at Ahold in relation to industry, country, and European benchmarks—making the link between stock price volatility, inter-market arbitrage, and management response to market sentiments.

Ahold Stock Market Prices

The upper part of Figure 7.1 presents the daily Euronext Amsterdam Ahold stock prices between 1 January 1973 and 22 March 2004. On first inspection, we can observe a period of rather stable prices until 1982, steady growth in stock prices between 1982 and 1995, turning into exponential growth that continued until about 2000. Notice that stock price growth in the second half of the 1990s became increasingly volatile with a period of sustained stock price discounting towards the end of the period and a disastrous single-day drop of 63 per cent on 24 February 2003.

We used a wavelet analysis to quantify the path of Ahold stock prices. The wavelet method originates from geophysics (Foufola-Georgiou and Kumar 1995) where it is used to analyse the time-series of climate data, including the cycles of El Niño (Wang and Wang 1996). The method involves a transformation of a one-dimensional time-series into a two-dimensional frequency-time image. For each point in time over the series we estimate the extent to which the time-series around the point resembles a theoretical wavelet function with a given period (frequency). Wavelet analysis has been of interest in finance for two reasons. First, if there is a statistically significant similarity between a financial time-series and a wavelet function, it implies that the data are not totally random. Second, being able to estimate the degree of randomness over time as

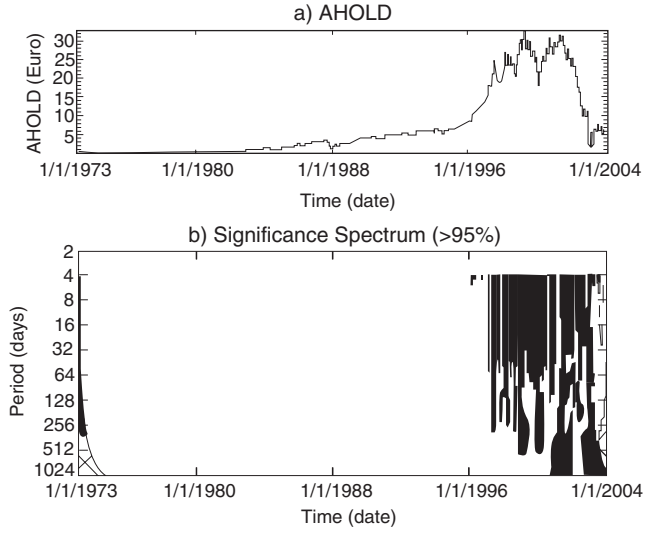

Figure 7.1. The historical stock market price of Ahold as listed in Amsterdam and its wavelet significance spectrum

Source: Authors' calculations based on data provided by CSFB, London.

well as the period (frequency) of the underlying wavelet function, we can divide the time-series into sub-periods representing different regimes or episodes (along the lines suggested by Mankiw, Romer, and Shapiro 1991).

The bottom part of Figure 7.1 presents the results of the wavelet analysis of Ahold Amsterdam stock prices. We used a derivative of the Gaussian function as our wavelet function although the results would be similar if we used other specifications (see for details Torrence and Compo 1998). The shaded area on the graph represents the period of time for which the Ahold time-series was correlated with the wavelet function at the level of significance of at least 5 per cent. If we zoom in on the edges of this area of significance, we can establish that it starts approximately on 25 February 1997 and finishes on 21 February 2003, the last trading day before the crash on 24 February 2003. Within this six-year period of time Ahold Amsterdam prices exhibit some periodicity, oscillating in a way that is not totally random. In contrast, before and after this period we can find no statistically significant traces of non-randomness.

Let us take the analysis further by investigating the volatility of Ahold prices within and between the identified three periods of its stock market history (we call these periods I, II, and III). Table 7.1 contains descriptive statistics on the absolute daily changes of Ahold stock price compared to

Table 7.1. Daily absolute basis point changes for Ahold stock price (Amsterdam) and AEX Index

Period Ahold	I–III 02/01/73– 22/03/04	I 02/01/73– 24/02/97	I′ 13/10/92– 24/02/97	II 25/02/97– 21/02/03	III 22/02/03– 22/03/04
n	8,145	6,300	1,140	1,564	281
Mean	124	104	86	170	304
Median	73	57	65	121	218
Std. dev.	173	139	81	171	476
Kurtosis	213.2	11.7	5.3	7.8	92.9
Skewness	8	3	2	2	8
Minimum	0	0	0	0	0
Maximum	6,297	1,623	587	1,456	6,297
AEX index	I′–III 13/10/92– 22/03/04	I NA	I′ 13/10/92– 24/02/97	II 25/02/97– 21/02/03	III 22/02/03– 22/03/04
n	2,902		1,108	1,519	275
Mean	99		57	125	131
Median	70		47	94	93
Std. dev.	103		46	116	131
Kurtosis	9		2	4	9
Skewness	2		1	2	2
Minimum	0		0	0	1
Maximum	998		254	774	998

Note: The Ahold means for periods II and III are significantly different at 1% level from the Ahold mean for I–III; the AEX means for periods I, II, and III are significantly different at 1% level from the AEX mean for I–III; the Ahold means for periods I, II, and III are significantly different at 1% level from the AEX means for periods I, II, and III respectively.

Source: Authors' calculations based on data provided by CSFB, London.

the values of the Amsterdam Euronext stock market AEX index. Since data for the AEX index were only available from 13 October 1992, the results are not quite comparable prior to this period and so a fourth period from 1992 to 1997 was introduced for Ahold data (referred to as I′).

The first observation to be made is that the average daily absolute change was significantly higher for Ahold than for the AEX index throughout the whole period of analysis. This is not surprising, given that the index amalgamates changes in the stock prices of twenty-five different stocks. Second, the volatility of both the AEX index and Ahold prices grew over time between 1992 and 2003. In fact, the average absolute daily change in Ahold price in periods II and III was significantly higher than in the whole period of analysis I–III. Similarly, for the AEX index the average absolute daily change was significantly lower in period I′ and significantly higher in periods II and III than in the period I′–III. The

temporal pattern and the magnitude of volatility was, however, strikingly different between Ahold and the AEX index. For the AEX, the mean and median daily absolute changes approximately doubled from period I′ to period II, with no further significant growth in period III. By contrast, for Ahold the growth in volatility (re. daily price changes) continued in period III. When we relate the average (median) absolute daily change in Ahold price to the average (median) absolute daily change in AEX, the resulting ratio grew from approximately 1.4 before February 2003 to 2.3 afterwards.[4]

Ahold Stock Market Prices—Amsterdam versus New York

In this section, we model the relationship between Ahold stock market prices on Euronext Amsterdam and on the NYSE, using the Granger (1969) causality test. In general, the test measures the significance of past values of variable X in explaining variable Y, taking into account the effect of past values of variable Y itself. Usually causal relations are tested both ways, from X to Y and from Y to X. Specifically, we estimated the following two regressions:

$$\mathrm{AMS}(t) = \mathrm{c1} + \alpha \times \mathrm{AMS}(t-1) + \beta \times \mathrm{NYSE}(t-1) + \mathrm{u1}(t)$$

$$\mathrm{NYSE}(t) = \mathrm{c2} + \gamma \times \mathrm{NYSE}(t-1) + \delta \times \mathrm{AMS}(t) + \mathrm{u2}(t),$$

where AMS(t) (AMS($t-1$)) are the daily closing price on day t (day $t-1$) for Ahold shares listed on Euronext Amsterdam; NYSE(t) (NYSE($t-1$)) are the daily closing price on day t (day $t-1$) for Ahold ADRs listed on the NYSE; c1 and c2 are constants; α, β, γ, and δ are regression coefficients; and u1 and u2 are residual terms. In our analysis, NYSE(t) was regressed on AMS(t) instead of AMS($t-1$), since the time difference between New York and Amsterdam is so significant that the NYSE closes four or five hours after the close of trading in Amsterdam.[5] Causal relations in the Granger sense are inferred through statistical significance of coefficients β and γ. In other words, we estimate the equations to determine whether NYSE($t-1$) (AMS(t)) provides any significant information about AMS(t) (NYSE(t)) in the presence of AMS($t-1$) (NYSE($t-1$)).

The test was conducted for four periods of time. The first period covers the whole time-series for which data on the NYSE prices are available from the end of 1993 to 22 March 2004. The division of this period into three sub-periods is based on the earlier findings establishing 25 February 1997 and 21 February 2003 as major cut-off points in Ahold's stock market

Table 7.2. Granger test results

Period		α	p-Value	β	p-Value	γ	p-Value	δ	p-Value	*F*-test statistic AMS	*F*-test statistic NYSE
31/12/93–22/03/04	∼I′–III	0.91	0.00	0.08	0.00	0.36	0.00	0.75	0.00	14.2	3,826.0
31/12/93–24/02/97	∼I′	0.95	0.00	0.04	0.03	0.71	0.00	0.35	0.00	5.0	279.9
25/02/97–21/02/03	II	0.75	0.00	0.21	0.00	0.14	0.00	1.02	0.00	22.4	6,321.5
22/02/03–22/03/04	III	1.02	0.00	−0.05	0.30	0.56	0.52	0.48	0.00	1.1	200.8

Note: '∼I′ means that this period of time corresponds approximately with period I′ in Table 7.1.
Source: Authors' calculations based on CSFB data.

history. The values of the coefficients and their statistical significance are presented in Table 7.2. In addition, Table 7.2 reports the values of *F*-test statistics for both the AMS and NYSE regressions. For the whole period of the analysis as well as for each of the sub-periods, AMS(t) provides highly significant information about NYSE(t). In contrast, the contribution of NYSE($t-1$) to explaining AMS(t), though statistically significant, is much smaller in terms of magnitude between 1993 and February 2003, and after February 2003 disappears altogether.

Before interpretation, we should compare our results with the findings of previous research. Investigating Italian companies traded over the 1980s on the SEAQ-International in London, Pagano and Röell (1991) found that the London market used prices from Milan to set their quotes. Grammig, Melvin, and Schlag (2005) investigated three months of intraday prices of US-listed German stocks in 1999 to find Frankfurt Stock Exchange's XETRA prices dominated NYSE prices, even though the latter explained almost 18 and 10 per cent of total variation of XETRA SAP and DamilerChrysler prices respectively. However, there is research showing that the home stock exchange does not always dominate price discovery. Hedvall, Liljeblom, and Nummelin (1997) found that for Nokia the NYSE played the dominant price-discovery role, at the same time accounting for a large proportion of Nokia's stock trading volume. Eun and Sabherwahl (2003) found for Canadian stock listed in the US significant price discovery takes place in the USA. In addition, they suggest a positive relationship between the fraction of total trading that takes place in the USA and the contribution of the US market to price discovery.

By contrast, our results underscore the significance of Ahold's 'home base' in the stock market price formation of a cross-listed company reinforcing the results of Halling et al. (2004) on the 'gravitational pull' of home markets expressed through their notion of 'flow-back'. In addition, it was shown that in crisis Amsterdam dominated New York as traders

went back to Amsterdam so as to minimize the space-time information 'gap'. The period when Amsterdam totally dominated New York in terms of price discovery was the period following on from public recognition of Ahold's corporate governance scandal. It was also the period when the volatility of Ahold's share price reached its peak.

In terms of the volume of trading, Citibank (2003) shows that Ahold trade on the NYSE represented only several percent of trading in Amsterdam. Notwithstanding the relative thinness of the NYSE trading in Ahold ADRs, Broekstra, Sornette, and Zhou (2004) reported that Ahold's annual sales in the USA passed annual sales in the Netherlands for the first time in 1996. The consolidated financial statements of Ahold reveal that between 1999 and 2003 the share of the US market in company net sales increased from 65 to 70 per cent while the share of the European market fell from 30 to 25 per cent (Ahold 2004). In the light of the high and growing level of 'Americanization' of Ahold's sales operations, it is striking to see the negligible role of the NYSE in price discovery and its disappearance at the moment of crisis.

Corporate Governance at Ahold

Using proprietary data provided by Deminor, we also analysed Ahold's corporate governance compared with other European retail companies. Table 7.3 represents Ahold's corporate governance ratings, broken down into four building blocks: shareholders' rights and duties, takeover defences, disclosure, and board structure and functioning. Ahold's scores are set against the median scores of Dutch, and continental European retail companies, all continental European, and all European companies. Each of the first three groups is a relevant subset of the universe of European companies rated by Deminor, while the last group represents all companies included in Deminor ratings. The table presents the state and structure of corporate governance in 2004, 2003, and 2000.

The results of Table 7.3 show Ahold's corporate governance in 2000 and 2003 in an unfavourable light. Ahold's scores were below Dutch standards, despite the fact that the latter were low compared to the European benchmark and at best mediocre compared to a continental European benchmark. In addition, Ahold's scores were low in comparison with continental European retail companies. The overall corporate governance rating of Ahold did improve between 2000 and 2003. However, progress was considerably below the typical improvement experienced

Table 7.3. Deminor ratings for Ahold compared to median ratings of FTSE Eurotop 300 firms

Year	Firms	*n*	Total rating	Shareholders' rights and duties	Takeover defences	Disclosure	Board structure & functioning
2004	Ahold	1	21.3	4.3	1.0	8.2	7.8
	Dutch	21	22.6	5.5	3.8	8.1	6.6
	Continental retail	7	21.0	6.6	1.0	6.5	6.7
	All Continental	209	19.9	6.5	1.0	6.7	5.2
	All European	296	22.4	7.0	2.7	7.2	5.8
2003	Ahold	1	15.0	3.7	1.0	6.4	3.9
	Dutch	19	17.6	5.2	1.0	6.7	5.0
	Continental retail	7	17.2	6.1	0.0	6.4	5.1
	All Continental	194	18.3	6.2	1.0	6.3	4.6
	All European	283	21.1	6.5	2.0	6.9	5.6
2000	Ahold	1	12.7	3.9	1.0	4.7	3.1
	Dutch	21	12.8	3.9	0.0	4.7	3.4
	Continental retail	7	13.2	5.8	0.0	3.8	3.4
	All Continental	179	14.9	6.2	1.0	4.0	3.3
	All European	259	17.9	6.6	2.0	4.7	3.9

Source: Authors' calculations based on data provided by Deminor.

in European and particularly Dutch companies (see Chapter 2 in this volume). After the scandal, between 2003 and 2004, measures of corporate governance at Ahold improved dramatically. Within one year, the rating for board structure and functioning doubled and the rating for disclosure increased significantly. As a result, in 2004 both of these ratings for Ahold were higher than the median ratings for Dutch or European companies. The ratings for shareholders' rights and duties and for takeover-defences are still relatively low, but the overall corporate governance rating of Ahold was now above the median figure for continental retail companies (see, for more detail, our results in Chapter 2).

In the light of Ahold's poor corporate governance score sheet in 2000 and 2003, it is perhaps not surprising there was a corporate governance scandal at the company. While we would hesitate to suggest that corporate scandals can be predicted using past corporate governance ratings, we would nevertheless suggest that the Ahold case underscores the value and significance of such ratings (compare Larcker, Richardson, and Tuna 2004). As noted above, Ahold has a relatively dispersed ownership structure. According to Deminor, Ahold's free float increased from 49 in 2000 to 78 per cent in 2003, making Ahold's ownership the most diluted of all continental European retail companies rated by Deminor. Diluted ownership structure does not, of course, necessarily translate into problems of governance or, for that matter, opportunities

for takeover: there are other issues not related to the ownership structure. But ownership dispersion at Ahold limited the effectiveness of shareholders in disciplining management; in effect, there was no other mechanism for governing the agency problem. Moreover, given the inherent difficulties of organizing Ahold's *geographically* dispersed shareholders and the weakness of its board, Ahold's management was on its own.

Consider Ahold's poor corporate governance in conjunction with the previous results on the growing volatility of Ahold stock market prices. Recall our argument in Chapter 3 concerning the relationship between corporate governance and stock price volatility. In our view, poor corporate governance and disclosure (in particular) implies a high premium on the circulation of information; where information is held internally, uncertainty among outside investors with regard to the fundamental value of a company implies relatively high stock price volatility. Empirical support for this hypothesis elicited for Germany can be also found in research commissioned by Institutional Shareholder Services. Covering over 5,000 US corporations, Brown and Caylor's study (2004) established a negative relationship between the quality of corporate governance and stock price volatility.[6] The study showed that the aspect of corporate governance most strongly related to volatility was board composition (lack of independent directors). With a positive relationship between poor corporate governance ratings and stock price volatility, once Ahold's poor governance practices came to light that relationship simply strengthened.

Interpreting the corporate governance scores of Ahold, we need also to consider the significance of cross-listing between Amsterdam and New York. Ahold was the only retail corporation included in the FTSE Eurotop 300 and rated by Deminor that had its ADRs listed on the NYSE. The issue is whether the NYSE listing had any impact on Ahold's corporate governance. As noted above, traders on the NYSE followed Amsterdam prices, particularly after the shock of February 2003. The disadvantages of an overseas or foreign trading location in terms of access to quality information is well documented in the finance literature (e.g. Bacidore and Sofianos 2002). In our analysis, the potential for geographical information asymmetries between markets was compounded by poor corporate governance. We would suggest that US traders having information about Ahold provided through the NYSE, but being far from the headquarters and management of a badly governed Ahold, had little objective reason to trust New York market information. And yet they did, seduced perhaps by the fact that US retail sales accounted for the majority of Ahold's revenue.

It took the onset of the 2003 scandal to reveal the full magnitude of corporate governance problems at Ahold, thereby discounting trust in the available public information.

There is other evidence to substantiate our claim about the relationship between the location of stock market price information and corporate governance. Hupperets and Menkveld (2002) analysed price discovery in mid-1990s for seven Dutch blue chips cross-listed between the NYSE and Amsterdam. They found the contribution of New York in relation to Amsterdam to be high for Royal Dutch Shell and Unilever, low for KLM, Philips, and Aegon, and negligible for KPN and Ahold. Strikingly, if we used 2003 Deminor data and arrayed the above companies in descending order of their overall corporate governance score, their order would be exactly the same. This finding supports our hypothesis about the relationship between price discovery of cross-listed stocks and corporate governance. The poorer a company's corporate governance rating, the more likely that price discovery is best based on information originating in the home stock market of the company.

Implications and Conclusions

This chapter builds on Chapter 6 by providing a framework for analysing inter-market stock price arbitrage using Granger tests of causality to determine the interplay between leading and lagging global stock markets on a 24-hour basis. One contribution of the chapter is its use of proprietary data on corporate governance ratings to measure and assess the responsiveness of one firm to the stock market interests of global investors at home and abroad. Most importantly, we were able to link the substantive fields of economic geography and finance to interrogate the performance of global stock markets, national systems of corporate governance, and corporate response. We show that the economic geography of stock market information has profound implications for the performance of global stock markets even if the expectations imposed by institutional investors on recalcitrant firms are such that the market for information is becoming more global according to common expectations regarding standards of disclosure and transparency (Hebb 2006).

For some, globalization carries with it important positive incentive effects driving nation-state regulatory regimes and the behaviour of larger firms towards best-practice. In our analysis, we found that globalization without rigorous capital market scrutiny based on high standards of

disclosure and transparency between markets can lead to the destruction of corporate value. At a time when corporate managers sought to expand Ahold's global reach, institutional investors sought to discount their Ahold holdings while expanding their global portfolios. In combination, stock-price market information became more important than ever before. Relatively poor disclosure practices and a lack of transparency in terms of managers' goals and objectives meant, however, that market agents could not perform their pricing responsibilities in a manner consistent with the needs of the average shareholder whether located in Europe or in the USA. Consistent with Goldstein and Kavajecz (2004), as Ahold became embroiled in crisis over its projected revenue figures, market agents retreated to Amsterdam and the gossip networks so important, it appears, when making judgements about the integrity or otherwise of corporate management in conditions of uncertainty.

Our findings are also consistent with those of Stulz (1999: 28–9) who noted 'it is not the case, however, that all effects of globalisation necessarily increase the monitoring of management in the short run. The reason for this is that globalisation can disrupt existing relationships within a country that led the monitoring of management or large shareholders.' Based upon an analysis of the circumstances when Japanese banks relaxed the standards used to assess domestic debt offerings in the face of competition from foreign banks, he suggested 'in the case of Japan, therefore, globalisation in the short run reduced the power of banks, but did not replace that power by the power of the market'. See, more generally, Stulz (2005) on the limits of globalization. The Ahold case exposed investors to a series of risks that were not well-appreciated in Anglo-American markets and were discounted by Dutch analysts who neither represented the interests of Anglo-American markets nor, perhaps, had the independence of judgement necessary to be critical of popular corporate officials. Cross-listing on the NYSE did not add to market information; quite the contrary, in New York investors followed Amsterdam prices when circumstances began to spin out of control.

The Ahold case reminds us that whatever the significance of globalization in terms of corporate strategy, the nation-state remains important for setting the terms and conditions of corporate governance. In the European case, where pressures have been brought to bear to discount the power of majority investors, Becht et al. (2003: 114) concluded their survey of European corporate governance and control noting 'limiting the power of large investors can also result in greater managerial discretion and scope for abuse'. Here, there are two options.

Europe could continue along the path of de facto inter-jurisdictional competition, using the UK and the USA as reference points for incremental reform on the basis of country-specific corporate governance problems. To do so, would be to hope that the lure of global capital markets combined with the power of institutional investors will be sufficient to prompt Europe's *largest* firms to improve their governance regimes. Alternatively, a pan-European regulatory regime could be established in favour of the interests of national and international portfolio investors. This 'solution' is an issue of political economy that would put in play national regimes of accumulation and the relationships between competing claimants for corporate income such that 'national models' may be jettisoned in favour of the Anglo-American model. This prospect is viewed with alarm in some quarters (witness Dore 2000).

Finally, the Ahold case could be thought as an instance of what Clark and Hebb (2004) referred to as 'pension fund corporate engagement': an instance where major institutional investors intervened directly with the firm to force through reform in the interests of prompting better stock market performance. It seems that domestic and EU regulatory agencies came last to the Ahold crisis; while legal proceedings were instituted to assess the liability of Ahold's auditors and the like, the swiftest response to the crisis came from those with the biggest ownership stakes in the firm. Consistent with the interests of minority global investors, management's 'reforms' sought to improve the capacity of those investors to assess public information about current circumstances and prospects. This is not unlike the impact that institutional investors have had on Royal Dutch Shell and Unilever and the pressures on those companies to improve their internal accountability and external transparency. These types of actions by institutional investors are arguably consistent with their role as 'universal owners' (Hawley and Williams 2005).

Notes

1. We are pleased to acknowledge the help of Rob Bauer, our co-author on this chapter.
2. There are many academic and industry studies of the corporate governance scandals at Enron, WorldCom, Parmalat, and to a lesser extent Ahold. See Broekstra, Sornette, and Zhou (2004), De Jong et al. (2005), and Wrigley and Currah (2003*b*) on Ahold, Coffee (2003) and Gordon (2003*b*) on Enron, Melis (2004) on Parmalat, and Sidak (2003) on WorldCom. Most of these citations were taken from www.ssrn.com—there are other such commentaries available.

3. Of course, this is hardly an accurate characterization of the global flows of financial assets. Funded pensions (defined benefit and defined contribution) in many Anglo-American countries have meant that there are significant differences in the volume of assets and the institutions of investment even among OECD countries, let alone the rest of the world.
4. Based on closing monthly prices, in 2003 Ahold was the single most volatile stock in EuroStoxx 50, and had the worst shareholder return of all companies included in the index. Between 1997 and 2003 Ahold lost more market value than all but a few European companies (Fernández and Villanueva 2004).
5. We could model the hour or two of overlap between markets, using intra-day data (compare Hupperets and Menkveld 2002). While it may add insight about the intra-day sensitivity of the trading process, the point we are making here is entirely (market) functional: in the first instance, having to do with the relationship between the two markets, and in the second instance, having to do with the order or temporal and spatial sequencing of daily stock price information across markets.
6. Considering the relationship between corporate governance and stock market volatility it is interesting to mention that Fernandez and Villanueva (2004) show that between 1998 and 2003 the EuroStoxx index was much more volatile than Dow Jones Industrial Average or the S&P500.

8

The Language of Finance

A commonly made observation exploited in this book is that the theory and practice of finance is based on information (Wilhelm and Downing 2001). Market agents make trades and plan strategies on the basis of observed market prices. By this logic, information not only greases the wheels of global financial transactions, it also goes to the very heart of the practice of finance that has come to dominate investment management itself. The language of finance revolutionized Anglo-American financial markets, and guides portfolio investment managers as they circle the world looking for investment opportunities. In part, the presumption in favour of portfolio diversification has taken institutional investors to other markets around the world, though based on very different historical circumstances, customs, and conventions (i.e. political economies). One consequence has been the drive to standardize information disclosure in each and every market against various public and private templates, including those developed by the International Accounting Standards Board. Another consequence, however, has been to re-conceptualize the role and status of portfolio investors especially as regards their role in affecting the governance of global corporations (Clark and Hebb 2004).

In fact, it could be argued that the *object* of institutional investment managers is what Chandler (1990) referred to in the US context as managerial capitalism and what we have referred to as 'insider' capitalism. To the extent that insider or managerial capitalism is the object of institutional investors, their goal is to wring out from those institutions the value held by managers and the untraded benefits that flow through the relationships between insiders as opposed to the property rights of outsiders. If this was the guiding logic for institutional investment in Anglo-American markets over the past thirty years or so it has become the motive force for corporate restructuring in continental Europe at the turn

of the twenty-first century (see Chapter 5 in this volume). Understanding how and why this came to pass as well as the response of national champions to these pressures has been an overriding theme of the whole book.

In this, the final chapter of the book, we argue that the language of finance seems to have come to a dead end. The TMT bubble and the crisis of confidence in corporate governance have conspired to undercut the hegemony of the language of finance while putting in play a burgeoning market for information that goes well beyond the parameters set by modern portfolio theory. Even those most committed to the theory of efficient markets have conceded that the intellectual scaffolding underpinning the language of finance hardly ever works as expected or desired (compare Fama 1970 with Fama and French 2005). Inevitably, investment managers have sought alternative routes for extracting value from financial markets around the world. One way of doing so requires a better appreciation of the empirical relationships that might be found between corporate governance and market value (however both are measured and described). But this goes well beyond the reference points of finance theory that held sway for a couple of generations (e.g. Ho and Lee 2004).

As institutional investors take seriously their global investment responsibilities, the information required to make judgements about those responsibilities has begun to take into account a variety of issues previously excluded including social and environmental concerns. In a sense, the failure of the language of finance has given the market for information a remarkable boost and with it the opportunity to establish new metrics for judging the performance of global corporations over the short-run and long-run (Clark and Hebb 2005). Institutional investors have sought to expand the metrics used to judge performance and have played crucial roles in fostering the development of new intermediaries providing this kind of information (Salo 2005). All this suggests that conventional metrics such as those conceived in finance theory and those proposed by the IASB are now necessary but not sufficient for investment practice.

The chapter is organized in the following manner. The next section presents a brief history of the rise and fall of managerial capitalism. Therein, we refer to the Anglo-American world with contrasts drawn to continental Europe—a useful way of summarizing the argument of the book. We move on to the intellectual roots of finance, noting its principles as well as its implications for institutional investors. Thereafter, we argue that this language became hegemonic, spreading around the globe and in particular being a means of valuing European institutions. This leads

to an analysis of the burgeoning market for information in the face of acknowledged problems with the language of finance, noting its implications for national and international investment practice. In general, our strategy in preparing this chapter has been to identify the 'big' issues rather than repeating the results of our research. In the interests of looking forward beyond the book, technical precision has been eschewed in favour of principles and practices. As a result, the chapter is designed to set a framework for research and a means of taking forward the geography of finance.

Recent History (Again)

According to Chandler (1990), by the early years of the twentieth century much of the US economy had assumed the organizational form of managerial capitalism that was to dominate the century. For Chandler, centralized corporate administration, combined with vertical integration, was the operative solution to the competitive pressures associated with the geographical scope of the continental economy. Whereas financiers played crucial roles in the formation of conglomerates, Chandler argued that their significance was quickly discounted as the expanding scope and scale of corporate activities empowered managerial elites. He compared US managerial capitalism with other forms of capitalism in developed economies, distinguishing, for example, between Britain (personal capitalism) and Germany (co-operative capitalism). Most importantly, he suggested that public distrust of banking over the nineteenth century and early twentieth century was such that the US finance industry remained decentralized, fragmented, and the fiefdom of individuals rather than national institutions (in contrast to Germany and Britain).

After the great depression and the Second World War, a large portion of financial assets were controlled by governments, nationalized industries, and large corporations. Moreover, the mobilization of financial assets for the Second World War had effectively remade the USA into the international bank (and creditor) of last resort. In this respect, macroeconomic identities like the components of real national income rather than the structure and performance of stock markets dominated economic calculation. The Keynesian-cum-neoclassical synthesis which held sway in economic textbooks for nearly forty years hardly ever mentioned finance except when discussing the causes and consequences of the 1929 crash and the coordination of international trade. By the early 1980s, however,

the financial system and stock markets had re-emerged as important to Anglo-American economies: pension funds were growing fast in terms of the volume of net contributions and accumulated assets; and the deregulation of the banking industry during the 1970s and 1980s combined with recurrent waves of mergers and acquisitions in manufacturing industries prompted the growth of new kinds of financial intermediaries as well as the demand for new kinds of financial products (Allen and Gale 2000).

Over the second half of the twentieth century, Anglo-American managerial capitalism was overtaken by financial capitalism. New kinds of national and global institutions were formed with access to financial resources far surpassing those available to hitherto largely self-financing manufacturing corporations. Not only were these institutions increasingly important for corporate restructuring on behalf of ambitious corporate raiders, they had become important owners of corporate stocks and bonds in their own right even if their holdings of individual companies were quite small (compared to the German practice of financial institutions holding large blocks of preferential voting stocks in closely related companies). Most importantly, these financial institutions became increasingly active agents in hostile mergers and acquisitions funding, in effect, the market for corporate control (Jensen 1993). Instead of supporting entrenched corporate managers, financial institutions focused on releasing corporate value to stock owners—an organizing principle that has taken many forms including 'corporate engagement' in the aftermath of the 1990s bubble and corporate governance scandals (Clark and Hebb 2004).

Underpinning the emerging power of financial capitalism has been a set of rules, regulations, and practices as well as iconic glass and steel office blocks. For example, Anglo-American pension funds are governed by the principle of fiduciary duty inherited from the common law of trust albeit formalized in statute and regulation (Clark 2006*b*). Importantly, regulations requiring the full-funding of expected obligations against market value, combined with a required (if not always enforced) separation between the financial interests of the plan sponsor or sponsors and plan beneficiaries, created large pools of 'independent' investment capital. By contrast, the book reserve system of pension funding left German corporate pension plans largely 'underfunded' and hostage to the interests of corporate managers in building plant and equipment rather than the interests of employees in diversifying the risks of such investments (Clark 2003*a*). Furthermore, the enormous growth in pension fund assets,

combined with an increasing concern for the cost-efficient administration and management of pension fund assets, encouraged the development of a global financial services industry centred on the Anglo-American world whose principal clients are neither corporations nor governments (Hayes 1993).[1]

The rules governing the theory and practice of investment were also transformed over the past fifty years. Bernstein (1992) traced the recent origins of the theory of finance to Markowitz's seminal paper (1952) on 'portfolio selection'. That paper was one of a small number of related papers published around that time that provided both the conceptual apparatus for valuing stocks and the rudiments for optimal portfolio design (see also Roy 1952). Bernstein noted that Markowitz's paper was not an immediate citation classic. It was to remain unknown to most academics and practitioners for some decades before coming to the attention of new generations of scholars working on option pricing and the capital asset pricing model. In this regard, it set the terms of reference for the application of advanced mathematical methods to the analysis of risk, assuming efficient financial markets. Arguably most important was the realization twenty-five years or so ago that Markowitz's paper provided a recipe for investment practice for the 'new' institutions of financial capitalism. There has been a close, even reciprocal relationship between academic research on these issues and the growth of the sponsoring investment institutions.[2]

For many years, fiduciaries had been governed by the so-called 'constrained' prudent man rule. By this interpretation of trustee responsibility, each and every investment was to be evaluated with respect to expected risk, and those investments deemed too 'risky' were to be avoided as a matter of principle (Gordon 1987). One of the implications of Markowitz's paper on portfolio design and subsequent developments in portfolio investment theory was the recognition that the risk of any investment or asset class should be assessed against the risk profile of the whole portfolio. Moreover, given the demonstrable positive relationship between risk and return, there were objective reasons to take on risk in relation to desired rates of return. The principles of portfolio diversification combined with the removal of implicit and explicit restrictions on investment in certain asset classes and jurisdictions revolutionized financial markets. A global marketplace has developed for financial innovation—key features of modern investment management have extended asset allocation from stocks and bonds to alternative investments such as hedge funds, private equity, venture capital, and the like.

A Universal Language

At the core of Anglo-American economies are the institutions of finance capital; this is a structural feature of modern economies carrying with it particular forms of behaviour and social practice (Beunza and Stark 2004). If the early years of the twentieth century saw the rise of a corporate elite claiming power at the very centre of their organizations, by the start of the twenty-first century a new elite were operating within and without the modern corporation using the tools of finance to claim control of managerial capitalism. This is a story commonly told about Anglo-American economies. And it is a story told in this book about continental Europe even if a great deal of academic research has been devoted to justifying the coexistence of very different systems of capitalist accumulation in the face of the emerging power of global financial institutions and their financial engineers (see Stulz 2005).

Here, we take the argument in a slightly different direction emphasizing the practice of finance—its logic, rules, and types of calculations made about risk and return that have come to represent not only the prospects of individual corporations but also the prospects of whole industries and indeed whole countries (Hebb and Wójcik 2005). One of the most important differences between the finance capitalism of the twenty-first century and the financiers of the late nineteenth and early twentieth centuries is the fact that finance is an industry populated by many thousands of skilled employees who share, more often than not, a common language about the theory and practice of finance. Whether located in New York, Tokyo, London, or Frankfurt and whether employed by Goldman Sachs, the Bank of Tokyo, or Deutsche Bank, they all know about the capital asset pricing model, the Black–Scholes option-pricing theorem, the Sharpe ratio and the information ratio, etc. (elementary reference points in any discussion about modern investment theory). This has had significant implications for understanding the spread of Anglo-American financial practice to distant shores just as it has significant implications for understanding the standards set by institutions such as the IASB.

The language of finance is built on three axioms derived from modern portfolio theory (Houthakker and Williamson 1996). First, financial markets are efficient in the sense that they embody all available information relevant to the formation of prices; second, market arbitrage inevitably drives out market imperfections such that market inefficiency is idiosyncratic rather than systematic; and third, market behaviour is rational in the sense that rational agents dominate irrational agents through the

exploitation of the latter by the former. Of course, the 1990s bubble and the systematic misleading of the market by those with a stake in market speculation have challenged the plausibility of these axioms (Shiller 2000; Clark et al. 2004). Furthermore, the application of the results of experimental psychology to understanding market behaviour has brought to light what appear to be systematic anomalies undercutting the hegemony of the rational actor model (see Clark et al. 2006*a*, 2006*b*; Hilton 2003 on the implications of these findings for the study of financial markets). Notwithstanding the significance of these empirical objections, the theory of efficient markets stands as a reference point uniting the practitioners of finance (Lo 2004).

The language of finance is also built on three stylized facts about the world: first, as core markets become ever more efficient, opportunities for higher rates of return are to be found in markets that are relatively less efficient; second, in a world of economic globalization, competition is more about industries than countries, suggesting that investment inevitably flows to lower-priced sites of production; and third, there is a premium to be had for those capable of identifying imperfections and being able to move on to new opportunities as the rest of the market catches up. One does not have to be a believer in the 'strong' version of market efficiency to agree that these stylized facts about the world are at least *one* plausible scenario for the future. Each is, of course, quite contentious, especially in terms of the claimed declining significance of national borders (see Chapters 3 and 4 in this volume). Significantly, the combination of axioms and stylized facts provides both a recipe for short-term and long-term investment strategy recognized as such by the Goldman Sachs textbook on investment management as well as the Goldman Sachs report on global growth prospects over the next fifty years (see, respectively, Litterman et al. 2003; Wilson and Purushothaman 2003).

The language of finance as a shared language of practice is also built around the education of financial analysts. Not only is there virtually a common finance curriculum around the world, finance has become a core component of MBA education. Furthermore, when staffing finance functions, institutions often sort among applicants according to the extent to which shared education is likely to reinforce the competence of existing teams. In these institutions, there is often an implicit or explicit hierarchy of authority calibrated according to finance-related skills. Just as importantly, clients have come to expect financial service providers to sell their services according to the expertise assumed embodied in certain types of people (their training and education). In many cases, clients do

not understand modern portfolio theory. But they are convinced that adherence to its axioms is a measure of quality differentiating between competing financial service providers. Most importantly, the language of finance is almost always the language of legitimization—the reference point used to explain how and why investment strategies may or may not have worked as expected.

The language of finance as a shared language of practice has three qualities. First, it is a comprehensive language, providing a recipe book for decision-making down through hierarchies of tasks and skills. It has been internalized into everyday practice such that it is a point of reference for the execution of tasks in large and small organizations (Clark and Thrift 2005). Furthermore, it is the reference language for those in authority: to rank-order competing claims for action while excluding those claims that do not fit either the parameters or indeed the shared world view that underpins these terms. At the limit, the language of finance is exclusive of other views about the world: among its adherents, it promotes cultures of practice and homogeneous market expectations.

Most remarkably, the language of finance is first and foremost English. Whereas ten or twenty years ago dictionaries of translated financial terms proliferated, as new generations of financial analysts have joined global financial institutions English has become *the* reference language for texts uniting terms and functions. Dictionaries have become more complex, more detailed, and more technical as opposed to conceptual. A commitment to English as the lingua franca of finance has made this possible.[3] By contrast, local languages have remained the languages for marketing and client relationships, although, even in these circumstances, English terms have found their way into discussions with clients about the latest innovations in financial engineering. This being the case, the language of finance may be thought hegemonic, in ways similar to those Power (2004) attributes to related concepts such as 'enterprise risk management'.

Portfolio Design and Investment Management

Like many others who have sought a break point in the post-war record of economic growth, Clowes (2000) identified 1973 as the moment where the balance of power shifted in favour of investment management firms and away from bank trust departments.[4] He suggested that these new institutions had two related goals: achieving higher rates of risk-adjusted return on growing assets; and rates of return in excess of that measured

by accepted benchmarks such as the S&P500. He contended that bank trust departments offering similar investment functions were more risk-averse and often unwilling to embrace the new language of finance. In any event, by his account bank trust departments clung to their traditional relationships with large manufacturing corporations failing to respond to the emergence of new kinds of financial institutions shorn of alliances with those kinds of corporations. Similar banking–corporate relationships were to hold sway in much of continental Europe through to the end of the 1990s.

With a recipe for portfolio design and a rapidly growing volume of assets to be invested, investment management became a highly competitive *and* structured exercise. Instead of placing large tranches of assets with selected stocks underpinned by personal or long-term cross-institution relationships with target companies, portfolio designers eschewed past relationships in favour of diversifying investment across the market of traded securities. Of course, there were constraints (as there remain constraints) on this kind of investment strategy. If expected performance is benchmarked against a market index, assets must be distributed such that stocks that dominate the index are appropriately represented in the portfolio. Otherwise there is a real risk of underperforming the market. In any event, the smaller the MC of a company, the lower its market liquidity and consequently the higher the risk of being trapped holding that stock relative to other opportunities. As the investment management industry matured, the practice of investment became subject to scrutiny by peers and clients alike utilizing the tools of the new orthodoxy (Litterman et al. 2003).

To illustrate, assume a client has £1 billion in assets to be invested, and assume that the client faces the prospect of a net inflow of contributions year-on-year over the foreseeable future. If we also assume the client underwrites the expected value of benefits or in some way provides a capital guarantee, risk and return over the short-run and long-run are crucial metrics in any investment decision-making process. By convention, three types of decisions are made (in the following order): the allocation of assets to different asset classes, the allocation of assets to specific types of investment products or strategies within asset classes, and the allocation of those assets to financial service providers (Campbell and Viceira 2002). We also assume, for the moment, that assets are allocated only to domestic stocks and bonds (as was certainly the case thirty years ago). If there is a 50/50 split of assets between stocks and bonds, the allocation of assets is weighted towards the largest capitalized stocks.[5] This kind of logic works

even if we segment the stock market into large cap, medium cap, and small cap components (with their own benchmarks for assessing risk and return).

Also assume total MC is £1 trillion and that the average large institutional investor has £1 billion to invest. This suggests the following. First, by spreading assets widely across the market (subject to the constraints noted above) the capacity of such institutional investors to monitor the performance of individual stocks is very limited. If we assume, in any event, that monitoring performance of individual stocks is expensive for any investor, this function is likely delegated to investment managers in accordance with the investment mandate. Second, by spreading assets across the market, few institutional investors will own a significant portion of any stock. Notwithstanding the allocation of assets by MC, only the largest institutional investors are likely to hold more than 200 basis points of any traded company security. The average holding is likely to be trivial (in relation to the outstanding stock). Third, by spreading assets across the market, institutional investors inevitably rely on the market for pricing the value of traded securities—in turn, the pricing of any market security relies on investors responding to positive and negative market signals as to its current and expected value. Since information is very expensive if sought for the entire portfolio, the cheapest strategy is to trade on publicly available information (Davis and Steil 2001).

By this logic, the integrity of market information is an essential ingredient in the performance of investment managers and for the performance of entire securities' market. If information were private, if it flowed first to large shareholders and then was distributed to the market *after* its meaning had been digested, there would be enormous advantages in being an 'insider' as opposed to an 'outsider'. It is hard to imagine how the recipe for portfolio design owed to the pioneers of modern financial theory could survive such a harsh reality. Not only would market pricing be thoroughly distrusted, the rebalancing of market portfolios would always lag the real state of play in the company stock that made-up those portfolios. Enormous attention would be focused on the largest capitalized stocks, leaving behind even medium-sized stocks to fend for themselves. In such circumstances, the stock market could shrink in terms of the numbers of listed companies and the volume of transactions. This is one way of accounting for the relatively concentrated structure of most continental European stock markets and, by contrast, the growth of Anglo-American stock markets over the past thirty years or so.[6]

Opportunism inside and outside the market is a real threat to its integrity. The history of market information in the Anglo-American world can be written as a history of increasing regulation as to the desired nature and volume of publicly available information. This trend accelerated in the years following the 1929 stock market crash and the great depression (as many aspects of the economy were brought into the ambit of national regulation). More significantly, perhaps, after 1970 the US Securities Exchange Commission (SEC) brought forth a string of regulations broadening the scope and timeliness of information disclosure enhancing the information content of market prices and thereby promoting market efficiency. Underpinning these regulations have been the related disclosure rules and regulations of professional bodies such as the Financial Accounting Standards Board (FASB). Whether cause or effect, public and private regulation of market disclosure has provided US capital markets sufficient third-party information to make portfolio investment a viable and expanding industry. Not surprisingly, these types of rules and regulations have been emulated in other Anglo-American jurisdictions sharing a similar commitment to market efficiency. Even the European Union has come to believe that the quality and quantity of information disclosure are essential ingredients for the long-term development of the EU economy.

However, it would be misleading to suggest that the Anglo-American regime of information disclosure has been without fault. On one hand, the political vulnerability of FASB on the disclosure and market pricing of stock options was a contributing factor to the 'irrational exuberance' of the late 1990s affecting all developed stock markets (Shiller 2000). And the common practice of counting investment income from pension assets as corporate income suggests that there remains a political economy of market efficiency never far from the surface.[7] On the other hand, the volume of disclosure has been such that a market for information processing and valuation has developed matching the interests of the largest institutional investors. Ironically, because of the cost of processing information smaller investors have been sidelined in the market for information, being reliant on the free-to-air, cable, and print media and all their foibles with respect to the competition for market share and the like (see Clark et al. 2004). In these circumstances, many of the largest institutional investors have sought to exploit the enormous volume of public information believing that superior computing capacity and analytical routines allow for the identification of arbitrage opportunities that go unrecognized in the day-to-day flow of information.

On to the Rest of the World

Institutional investors have come to dominate Anglo-American stock markets, and through them the nature and practice of corporate governance especially among the largest firms. Institutional investors have sought to extract stock value from incumbent managers and their relationships with other groups inside and outside the corporation. There has been widespread debate about this strategy, recognizing that the long-term growth of large corporations may require short-term sacrifice in the terms of less than optimal earnings and stock price value. Equally, it has become an article of faith among many academic and industry analysts that corporations are 'clubs' for well-paid but underperforming elites (Bebchuk and Fried 2004). It is clear, whatever the merits of each argument, that in making corporate elites the object of institutional investor strategy, the future of many firms, regions, and industries have become issues for market speculation.

The future of capitalism has also become the object of investment decision-making. Whereas focus on the firms of the DAX 30, the S&P500 and the FTSE100 is often an exercise in reassigning corporate value from managers (income) to owners (stock price value), institutional investors have also sought to anticipate the next frontier and the next set of market opportunities. It is characteristic of financial institutions to anticipate the creation of value especially in circumstances where there are high potential pay-offs compared to the hard graft associated with extracting value from mergers and acquisitions. In fact, it is arguable that Anglo-American financial markets are so efficient that only those institutions with the biggest investment in data-processing technology, talent, and organizational capacity are able to systematically add value. Even in the best of circumstances, relatively low expected rates of return and the squeeze on the equity premium suggest that Anglo-American financial markets have become difficult environments in which to add value (and claim a premium on fees).

In this context, institutional investors have moved towards either information intensive or relationship intensive sectors like hedge funds, private equity, venture capital and related forms of alternative investment. Capital-intensive quantitative analysis of market information and patterns has become big business. Equally, fleet-of-foot investment in areas outside the core competence of most market agents has also become an important refuge from low rates of return in conventional markets. One

consequence has been a shift of geographical focus from an overwhelming concentration on Anglo-American markets to a renewed interest in the rest of the world including Europe. All kinds of investment strategies have been deployed, including conventional portfolio investment in continental European stock markets and private placements in China. The tension apparent in these strategies is a tension between information intensive data processing (portfolio investment) and third-party relationship management (growth-based strategies in far-off markets). If executed efficiently, the costs of the former are far lower than the costs of the latter.

Using many of the same theories and investment strategies honed in Anglo-American markets, institutional investors have come to European markets to find value. In the short run, investment houses have often treated European markets 'as if' they were amenable to these types of methods and techniques (Chapter 3). So, for example, investment firms have built virtual investment portfolios across Europe focusing on firms and industries rather than firms and countries. Here, the European single market has been taken as the current and future reference point for information-intensive capital market investment strategy. As we have seen, investors have taken large stakes in local firms hoping to precipitate corporate restructuring, mergers, and acquisitions on the scale experienced in Anglo-American markets. Governments have been resistant, however, to the idea of 'putting in play' their national champions; notwithstanding lower rates of economic growth in much of continental Europe over the past few decades, nation-states have been, more often than not, defensive in terms of the European Commission's campaign to accelerate capital and labour market integration. Nevertheless, there are high fees to be had and potential windfall profits to be gained by anticipating the pricing of changes in past relationships.

It would be misleading to imagine that European stock market inefficiency combined with nation-state defensiveness has stymied global investment managers in their attempts to manage portfolios across Europe. The evidence presented in previous chapters suggests just the contrary. Waves of new entrants into the European financial services market have empowered somnambulant local investors while giving new firms and new industries a chance to break into financial markets that were otherwise closed to outsiders (see Chapter 4 in this volume). Furthermore, global investments managers have taken deliberate aim at local and national banking institutions drawing on their experience in the Anglo-American world to attack the nexus between finance and insider

capitalism. Based in London, but drawing on financial resources and talent from across the world, these institutions represent for many European academic commentators the new world of financialization (see Clark 2003*b* in response to Engelen 2003).

Anglo-American financial institutions have sought information and data resources consistent with their experience and investment philosophies. This has prompted the growth of private information and corporate ratings agencies, as well as a drive within the European Commission to encourage European adoption of international financial accounting standards consistent with the needs of global portfolio investment managers. As information has become more readily available across markets built on accepted metrics, portfolio managers have used their data processing capacities to exploit hidden market inefficiencies. In part, this has forced insiders to act more like outsiders in that their own investment strategies have come to replicate rival Anglo-American corporations rather than reinforcing practices associated with bank-based insider capitalism. By discounting cross-holdings, old loyalties have been put in play in response to the actions of global financial players (see Chapter 7 in this volume).

Here lies, of course, one of the objections to the increasing role of portfolio managers in continental Europe. Not only is insider capitalism the object of portfolio managers, the language of finance is the language of shareholder capitalism rather than continental stakeholder capitalism. This has significant implications for the status of the various classes of corporate stockowners and bondholders, while discounting union, community, and regional alliances that have traditionally underpinned industrial corporations. In effect, stakeholder capitalism gave these groups a legitimate voice in the affairs of the corporation. By contrast, the language of finance empowers portfolio managers located outside the region (and often outside the nation-state) to act on behalf of 'owners' who have little commitment to the welfare of those affected by corporate restructuring, mergers, and acquisitions, etc. In this respect, the language of finance is a language that excludes traditional stakeholders from 'governing' the corporation (Dore 2000).

For critics of financialization, the language of finance is all about the putative global hegemony of Anglo-American institutions and practices affecting the economy, society, and culture (Jameson 1997). If there is regret about the passing of an era, there is also resistance to the claims of privilege of the new global financial elites relative to those pushed aside by the imperatives of portfolio management.

Metrics of the Global Marketplace

We have suggested that the entry of Anglo-American financial institutions into continental Europe is best understood as an instance of pricing insider capitalism (Chapter 1 of this volume). In this respect it is not unlike the experience of Anglo-American countries over the past thirty-five years or so even if it comes relatively late in terms of European experience. Inevitably, this kind of value investing is closely associated with the quality and quantity of the available information. Assessing investment opportunities requires detailed disclosure especially if value is to be wrung out of firms in order to pay for the costs of acquisition. Just as importantly, growth or momentum investment strategies make strong assumptions about the integrity of market prices. On the one hand, there is a premium on due diligence. On the other hand, there is a premium on data processing. Not surprisingly, there are strong pressures for convergence in terms of the rules and regulations governing disclosure of market-sensitive information around the world.

Even so, the 1990s bubble precipitated a crisis of confidence in Anglo-American financial markets and, by extension, confidence in the theory of finance honed and articulated over the second half of the twentieth century (Lo 2004). The basic premise underpinning the bubble was the emergence of a 'new economy' based on technology-driven labour productivity and new forms of industry and organization. As speculation took over stock-by-stock valuation, companies like Microsoft claimed an increasing share of total MC being, at one point, valued more than half a dozen of the largest industrial corporations, including GE, GM, Ford, etc. Many in the market believed there was a free ride to be had on the momentum of the market subject to claimed superior techniques of market timing, entry, and exit. At a height of the bubble, advocates of the new economy peddled rosy forecasts of unending growth and a Dow–Jones industrial index of 36,000. Although there were some analysts, at the time, who suggested that the bubble would collapse, it is clear that neither market prices nor the language of finance provided adequate reference points for attributing 'value' to firms and industries.[8]

Much has been written about the consequences of the 1990s bubble. We do not intend to go over well-trodden ground. But it is worth emphasizing that at the height of the bubble, Anglo-American markets attracted enormous inflows of capital particularly from European and Asian investors seeking their share of the new economy. The assumed integrity of market prices combined with widespread confidence in American financial

accounting practices and regulations gave investors a false sense of security. And underpinning this confidence was confidence in the language of finance which is, in so many respects, a home-grown institution built on the success of Anglo-American markets over the past few decades. It was common to see investment company 'roadshows' in continental Europe and East Asia dominated by young American analysts featured as knowing representatives of the new economy. They were perceived to be representatives of a world of finance far superior to that indigenous.

The collapse of the bubble and the crisis of confidence in corporate governance prompted significant legislative and regulatory responses (Coffee 2003; Gordon 2003*b*). Indeed, it could be argued that the resulting (but disputed) SOA re-established American standards of corporate governance as the global market leader. Furthermore, the current valuation of stock options, so often debated through the 1990s run-up in American markets, has been part of the reform process (notwithstanding continuing objections from Silicon Valley). These initiatives have focused on the integrity of disclosure, including the nature, volume, and certification of the quality of market-sensitive information. Significantly, Sarbanes-Oxley and related reforms through FASB were concerned with reassuring national and international investors of the integrity of market signals as expressed through relative pricing even if there had been doubts about the practical value of the language of finance in the real world. It remains, nonetheless, a widely accepted reference point for 'explaining', if not practicing, investment (Zingales 2000).

However, investors have sought other kinds of metrics not so obviously derived from the language of finance. Most importantly, ratings firms based on scoring corporate governance have discovered a large and growing market among institutional investors. In part, institutional investors use these ratings firms to synthesize and sort the available information thereby circumventing the heavy costs associated with making sense of the avalanche of information disclosed. But, as well, recognizing the limitations of market prices, there has been growing interest in empirical relationships rather than theoretical logic. For example, institutional investors have sought information about the relationship between the measured quality of corporate governance, long-term performance, and market value. Furthermore, there has been increasing interest in the geography of finance in that the scoring of governance practices has had a significant comparative component—using the metrics to evaluate firms in their home jurisdictions against the standards now expected by global investors (Chapter 6).

The market for metrics has become highly differentiated over a short period (see generally Salo 2005). For example, some institutional investors seek quite narrow metrics based on the constitution of corporate boards of directors and the process whereby disclosed information is certified. Some institutional investors have extended the range of metrics on the assumption that the formal constitution of the board of directors need not provide adequate information about the likely performance of the company over the longer term. In fact, some ratings companies have sought metrics on the performance of boards themselves arguing that they may be able to identify poor-performing boards before a crisis in the reported performance of the company. Some ratings companies have relatively few indicators amenable to quantitative analysis. Other ratings companies use enormous databases, combining quantitative and qualitative information gleaned from company reports and detailed interviews sensitive to the jurisdiction of incorporation.[9] By taking seriously jurisdictional differences in corporate governance, La Porta et al.'s maps (1997, 1998) of finance have assumed greater significance in setting expectations about past, present, and future practice.

The crisis of confidence in corporate governance has been one element driving the expanding range of metrics used to judge corporate performance. Perhaps just as important has been the response of institutional investors to increasing pressure to be responsible investors in the sense of actively voting their proxies in annual general meetings. If this appears to be an issue only relevant to the Anglo-American world, we should take care not to underestimate the growing interest of continental European regulators in encouraging such notions of responsibility. In effect, as portfolio investors have moved on to the rest of the world they have also carried with them the responsibility to act in other jurisdictions in ways that go beyond simple entry and exit strategies. Responsibility is sometimes assessed against corporations in their home jurisdictions with respect to their actions in other jurisdictions. At the same time, experience with voting proxies in the USA has encouraged foreign institutional investors to look again at related practices in their home jurisdictions. This has prompted the development of rating companies that specialize in assessing these issues of corporate social responsibility and providing informed judgement as to the proper course of action.

Of significance have been the attempts of investor activists to use annual general meetings to hold companies to account for their actions in Third World jurisdictions. Here, coalitions of institutional investors have provided activists a platform to raise searching questions about the

environmental and social standards used by companies where legislative frameworks are poor or non-existent. The language of finance as inherited from the portfolio investment is silent on these issues (even hostile to raising these issues). Here again, measuring performance, providing justifiable metrics by which to judge performance, and assessing performance against accepted and justifiable environmental and social reference points have prompted institutional investors to seek third-party providers of those metrics (Clark and Hebb 2005). As a consequence, there is a market for a broad range of global metrics, and those metrics must be certified. By contrast, more often than not there is little in the way of agreed robust 'public' standards through which to judge these issues.

The political economy of global finance is driven, in part, by the search for standards by which to judge investment performance. But investment performance is increasingly a political issue as well as an issue of risk-adjusted rates of return. Our observation, in this regard, is relatively straightforward: as the language of finance has lost its hegemony in the aftermath of the 1990s bubble and the crisis of confidence in corporate governance, issues once excluded are now coming back to centre stage in debate over corporate responsibility. All this requires measurement for management (Lowenstein 1996). But it also requires a form of measurement that goes well beyond market prices and the conventional techniques associated with portfolio investment management.

Implications and Conclusions

Modern portfolio theory is widely acclaimed as the most important innovation in finance theory over the twentieth century (Bernstein 1992). It provides a rationale for diversifying risk through spreading investment across a broad range of market securities. It provides a model for option pricing with many sophisticated versions developed over the past twenty-five years. It also provides a recipe for public policy especially as regards to enhancing the quality and quantity of information on traded securities such that market pricing is more efficient. On these grounds alone, it became *the* language of finance squeezing out traditional forms of investment as well as challenging models of industrial organization that privilege insiders over outsiders. For some, it threatens the very future of continental European inherited systems of accumulation and income distribution. For others, it is thoroughly modern and a normative reference point for the future—where economic agents whatever their home

jurisdictions will converge on the most efficient form of economic and social organization.

Being a recipe for investment, the language of finance relies very heavily on the quality and quantity of information provided to market agents. The quality of information could be characterized in terms of consistency, comparability, and continuity: *consistency,* in that information by category is presented in ways that allow for summation and scoring; *comparability,* in that information allows for the direct comparison between firms whatever their industries or jurisdictions; and *continuity,* in that information is referenced to stable criteria such that market agents can look backwards and forwards over time. Market expectations are all about making judgements about current circumstances in relation to prospective opportunities. Similarly, the quantity of information refers to its *comprehensiveness* covering the relevant firms, markets, and issues judged crucial in making investment decisions. The public and private rules and regulations regarding the disclosure of information have fostered the efficiency of Anglo-American markets.

For some, more information is necessarily good. Likewise, improving the consistency, compatibility, and continuity of information adds value to investment decision-making. But information processing costs money. Indeed, it could be argued that one comparative advantage of institutional investors over individual investors is the capacity of the former to process information in ways that can uncover arbitrage opportunities hidden from individuals who have neither the computing power nor the analytical tools to make sense of the available data. More importantly, information need not lead market pricing but be a form of *ex post* rationalization which explains how and why an investment strategy may have succeeded or failed. We must take care not to idealize investment strategy as if it is and is always led by information as opposed to being subject to information channelling according to institutional imperatives. Finally, as information reflects past, current, and expected events, information must be valued. And the most obvious point of reference in valuing information is a theoretical conception of market performance.

However, this was precisely the problem revealed by the 1990s bubble and the crisis of confidence in corporate governance. Not only are markets different from one another in terms of their underlying political economies, for all the arguments in favour of convergence to one ideal form of the market economic and political interests remain embedded in those markets such that adaptation is the more likely response rather than wholesale structural change as illustrated by Chapter 5. This is

apparent in the cross-listing of firms from one market to another. It is also reflected in the geographical inertia of some types of market agents compared to others. In any event, markets are quite unstable over time in terms of the motive forces or imperatives driving market trading. Therefore, information may be more or less relevant for trade between different markets, and more or less relevant over time for trade within markets. Inter-jurisdictional differences in market structure combined with unanticipated shifts in market-specific sentiment are likely to mean that disclosure is always less than optimal and is always being 'reformed' in relation to past failings.

We have argued that the language of finance has given way over the past few years to a more complex and empirically based investment practice. While it remains as a test of legitimacy for any investment professional, it is widely acknowledged to be at once too abstract and at another level too often exclusive of market relevant actions and sentiments (Shleifer 2000). At the limit, it supposes that it is virtually impossible to make money as an active investor, and suggests that there is only one kind of market, where in fact other kinds of markets have persisted even if challenged by the power and influence of Anglo-American markets. If quietly developed in the shadow cast by the language of finance, in the aftermath of the 1990s bubble these new approaches to investment management have come out into the open. Using information asymmetries between market agents who have access to nominally the same information is an important element in market arbitrage. Likewise, being fleet-of-foot in relation to unpredictable and unanticipated shocks has become one response to the apparent difficulties of sustaining superior performance.

Recognizing these trends, there is a burgeoning market for third-party information processing and valuation. There are many kinds of service providers in this market, some of which focus on quantitative scoring while others focus on qualitative assessment. In between, there are all kinds of ways of combining qualitative and quantitative information such that institutional investors' interests in tailored information products can be met. By this logic, the rules and regulations governing information disclosure simply set the stage for market agents that specialize in information processing rather than representing sufficient quality for market agents to trade in their own right. If so, national and international accounting standards relevant to financial markets may have a public benefit but be much less than that required for market agents to be competitive. By this logic, as the language of finance dissolves into a wide array of investment strategies, information itself will become increasingly

variegated and private. Ironically, institutional investors may use their market power to claim the privileges accorded European insiders of an earlier era.

Notes

1. These developments have been described in various ways. Most importantly, Clark (2000) suggested the phrase 'pension fund capitalism' while Hawley and Williams (2000) referred to these developments as 'fiduciary capitalism' (compare with Drucker 1976 where he first raised the prospect of 'pension fund socialism').
2. This can be thought instrumental in that academic research is, sometimes, applied to pricing stocks and modelling market patterns. But we would contend that there is another less instrumental side to the story. Once we focus on market institutions and behaviour, there are important conceptual puzzles to be resolved that go to the heart of social science—such as the predictability of behaviour over time and space in a global economy (Shiller 2003).
3. Reinforcing our point was the announcement in late 2004 that the Deutsche Börse would adopt English as the 'official' language of the Frankfurt market, to be used in all shareholder communications, trading, and announcements. No doubt this announcement was spurred by the takeover offer for the LSE. Equally, it reasonably reflects the actual practice of the global financial industry.
4. In much of the academic literature, 1973 is seen as the end of the post-war 'golden era' and the emergence of a new regime of accumulation commonly referred to as post-Fordism (see Amin 1994). We are agnostic on this notion of a binary structural transformation while agreeing with Clowes that the rise of financial capitalism and the decline of managerial capitalism can be conveniently captured by a date such as 1973—the point where two trends cross over one another (see also Webber and Rigby 1996).
5. For a useful analysis of this type of simple formula for asset allocation, and its consequences for investment returns comparing 1987 with 2004 see Ambachtsheer (2004).
6. Of course, the growth and development of Anglo-American stock markets is also due to the inflow of financial assets from funded pension plans prompting more efficient systems of capital allocation and, at the limit, higher rates of real economic growth (Davis and Hu 2005).
7. The rules and regulations governing the disclosure of pension assets and liabilities have varied greatly between Anglo-American jurisdictions and between those countries and continental Europe (see generally Clark 2003*a*). Just as income on pension plan assets have been counted as corporate income in the USA, the rules regarding the disclosure of current and expected pension plan shortfalls have been opaque to many financial market institutions. For all the sophistication in reporting on these issues by specialists, governments and

accounting standard institutions have been reluctant to 'come clean' on these issues—there is an interesting story to be written on the origins of these very different reporting policies and their implications for estimating current and expected liabilities (Arnott 2004).

8. In fact, Dale (2004) argues that 'over confidence' in the metrics of market valuation combined with an inability or unwillingness to recognize 'discrepancies' in market pricing is characteristic of all speculative bubbles. His research focused on the South Sea Bubble, drawing instructive lessons and commonalities with the TMT bubble.
9. Some companies are entirely focused on public information assuming that this is what moves markets. Other agencies are focused on 'inside' information assuming that public information is fully priced even if not always fully used. Yet other agencies are entirely quantitative while others are entirely qualitative. In play are very different sources of information and theories of finance and market pricing, going well beyond the axioms of the efficient markets hypothesis.

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