

**Financial System Design and Industrial Development:
International Patterns in Historical Perspective**

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Chapter 1: Introduction

Financial systems arise to intermediate between capital owners seeking productive investments and entrepreneurs with profit-making ideas but with insufficient funding. Why they emerge at particular points in time, and why they are organized as they are, remains to be understood in its entirety. From a theoretical standpoint, we have a number of explanations for the endogenous evolution of institutions to bridge the gap between the supply and demand for investment capital.¹ Beyond this simple brokerage function, financial intermediaries also change the nature of assets between borrower and lender; hence, the notion of ‘qualitative asset transformation,’ or QAT. For the institutions of interest in this book, QAT typically means the alteration of the maturity or liquidity of assets—allowing investors to take part in large-scale, illiquid, and possibly high-risk and extended industrial investment with either a relatively low-risk, high-liquidity, short-maturity (even on-demand) depository account or a moderately-risky, yet relatively liquid—that is, tradable—equity position in the bank itself. This sort of QAT is effective, in large part, because the intermediary can invest in a wider range of projects than is feasible for the individual and thereby diversifies away some portion of the risk inherent in any one project.

The very fact that brokerage functions are necessary—because suppliers of capital may often be unacquainted with the full range of investment opportunities—raises another potential way that financial intermediaries alter assets: risk profile. In addition to diversifying away the natural risk of industrial investments, banks may also mitigate the problems that can arise when

¹ See Freixas and Rochet (1998) for a technical treatment of financial intermediation theory.

investors have poor information about the quality of investments or their true returns. Banks are well suited to serve this function by screening entrepreneurs before investing and monitoring the progress and performance of projects after investing. In all of these cases, financial intermediaries provide a key service to wealth-holders and entrepreneurs, and the premium on their stock or the interest they earn on lending (net of their payments for deposits) constitutes their payment for this service.

Entrepreneurs, of course, can fund their projects in a number of ways, using internal cash flows, borrowing from either associates or intermediaries, or selling off ownership stakes in the venture. These options, and their maturity and liquidity profiles, parallel the offerings of a bank, where deposits to a bank represent borrowing by that bank. In a world of imperfect information, and where conflicts of interest can arise, the choice of financing type matters to entrepreneurs.² Indeed, in the worst case, these problems can prevent investors from providing funds altogether or cause entrepreneurs to use only internal funds. In deciding between debt and equity, or between bank lending and securitized debt, firms and investors face certain tradeoffs. Equity can appreciate unbounded, and stakeholders therefore care much more about the firm's choices of projects and efforts to increase equity values. Because debt returns are limited to a contracted payoff, investors need only be convinced that the firm will perform sufficiently well to pay back the debt, and that they will repay. Clearly, then, debt and equity holders' interests, particularly risk tolerance, often diverge. The choice between bonds and bank debt hinges on similar, if milder, issues of information. Bank debt is thought to be subject to tighter control and monitoring and therefore represents the presumed first step in the pecking order of external funding.

² Modigliani and Miller's (1958) well-known proposition that firms cannot alter the total value of their securities by varying the mix between debt and equity, depends of course on assumptions of perfect information and markets. Many doubt the extent to which the real world fits these ideal assumptions.

Intermediaries may therefore facilitate transactions, allowing external finance, by providing efficient monitoring services, credibly transmitting information, or resolving conflicts of interest among contracting parties.³ Such observations may also imply that the efficiency of financial intermediaries and their impact on the real economy may depend partly on their structure and practices—in particular, the range of services provided within one institution, the type of financing used to fund bank operations, and the extent and intimacy of relationships built up between banks and their clients.

Financial institutions and markets comprise the building blocks of financial systems. For the past century, economists have debated the relative advantages and disadvantages of different systems of finance and governance; many taking strong views. The universal banks are thought to have mobilized the financial resources that made industrialization possible for continental Europe—especially in Germany and Italy. The original statutes of one such bank in Germany, for example, empowered the bank “to bring about or participate in the promotion of new companies, the amalgamation or consolidation of different companies, and the transformation of industrial undertakings into joint stock forms.”⁴ As Chandler explains, “...these banks provided initial capital for new industrial ventures and helped guide them through their early years of growth...They supplied much of what today would be called venture capital.”⁵

The view that, until very recently, heavily favored the universal banks gathered steam in the mid-twentieth century as countries with these systems rebuilt themselves in the wake of World War II. Surrounded by this apparent success, authors adopted many of their views from

³ Jensen and Meckling (1976) is the classic article on problems arising from the separation of ownership from control of firms. Theoretical models comparing the costs of debt and equity finance include Myers and Majluf (1984), Diamond (1984), Gale and Hellwig (1985), and Townsend (1979). See Harris and Raviv (1991) and Hellwig (1991, 1997) for reviews of this and related literature.

⁴ The clause referred to was Article III K of charter for the Bank für Handel und Industrie in Darmstadt. Translated and quoted by Whale (1930), p. 12.

⁵ Chandler (1990), p. 417-419.

the late nineteenth and early twentieth century literature on industrialization. Among the contemporary observers of the rapid growth of pre-World War I Germany was Werner Sombart, who proclaimed, “Doubtless, a good portion of the increase in economic life in Germany is attributable to this interest of the banks and bankers in productive, economic activities. The banks have become the direct promoters of the spirit of enterprise, the pacemakers for industry and trade.”⁶ This sentiment was widely shared by his contemporaries and finds continued support among modern economists and historians—many of which use the German case to illustrate the great benefits of universal-relationship banking.

INSTITUTIONAL DESIGN AND FINANCIAL SYSTEM STRUCTURE

The theoretical literature places heavy emphasis on the costs of information asymmetry and the need to equalize it. These considerations lead naturally to the hypothesis that universal banking—combining as it does the range of financing options needed by any one firm—benefits from economies of scope; mostly from the reusability of firm- and market-specific information across time and products, but also from the reputation spillovers among branches of financial services.⁷ Universal banking can arguably lead to, or even require, the formation of long-term relationships between banks and firms, since these relationships theoretically enforce the repeated interaction that allows information cost savings. Even aside from their role in promoting and sustaining efficient universality of services, banking relationships might enhance banks’ access to firm-specific information and thereby improve the accuracy of screening,

⁶ Sombart (1909), p. 203, my translation. For a thorough bibliography of contemporary literature, primarily in German, see Riesser (1910 [German original], 1911[English translation]). Whale's (1930) bibliography is a useful supplement and covers later works.

⁷ See Greenbaum, Kanatas, and Venezia (1989) on theoretical economies of scope resulting from information reusability.

monitoring of projects, and enforcement of repayment obligations. These information improvements may lessen the risk of investing in individual ventures and reduce the need for rationing of credit. Relationship building may also permit firms to take a longer term view of their investment projects and possibly undertake investments that yield higher returns but over a longer horizon.⁸ Similarly, information-yielding relationships can work as a certification device, enhancing a firm's appeal in equity markets and reducing the cost associated with adverse selection—that is, the problem that outsiders assume that insiders will only issue new equity when it is overvalued.

The theoretical literature indicates that financial intermediaries generally increase both the quantity and the quality of investment in the economy. More specifically, there is theoretical support for the argument that universal and relationship banking further raises the quantity of funds provided to industry and may also increase both the quality of projects undertaken and the long-term returns to investment. These benefits come with potential or hypothetical costs, such as systemic fragility, unwarranted concentration, excessive conservatism, and conflicts of interest (such as underwriting securities for poor-quality debtor firms). In other words, it is far from clear, even theoretically, what the net impact of financial structure might be at either the firm or economy-wide level.

The structure of financial intermediaries, particularly commercial banks, may influence real variables, since different institutions may handle their tasks with varying degrees of efficiency. Theoretical differences in growth effects may be inferred from some other recent work. Relative to specialized, arms-length systems, for example, universal and relationship banking may be better suited to perform the growth-enhancing functions described by King and

⁸ Narayanan (1989), Stein (1989), Dewatripont and Maskin (1995), and von Thadden (1995) offer models in which relationships prevent premature liquidation of projects that need a longer gestation period, but which eventually produce higher long-run returns.

Levine (1993) or Thakor (1996).⁵ Recent conceptions echo views put forth much earlier, largely in view of the German experience. Lavington (1921), for example, stressed screening, monitoring, risk management, venture capital activities and economies of scale and scope:

“An organization of this kind, intermediate between the sources of enterprise and the sources of capital, must evidently possess machinery for investigating business ventures, financial strength adequate to sustain the heavy risks to which it is exposed and the reputation and business connexions necessary for the efficient sale of securities to the public. An organization such as the Deutsche Bank possesses these qualities to a high degree...It is easy to see that, with able management and machinery of this kind, the risks of industrial banking are greatly reduced; business ventures in need of capital can be thoroughly investigated and the development of the more pioneering enterprises may be promoted with a reasonable prospect of success.”⁹

In this line of reasoning, universal banks' combination of investment and commercial services promotes long-term relationships with corporate clients and thereby raises efficiency of financial transactions. Efficiency gains hinge not just on the reusability of information but on its quality as well. Thus, close, long-term relationships between banks and industrial firms are seen as central to the banks' acquisition and transfer of useful information--not just financial, but also strategic and entrepreneurial. Moreover, the banks are thought to have gained significant say in the use of funds, and thus the types of investments made by firms. Such involvement and

⁵Tellingly, the latest work by Levine (2000) finds no statistical relationship between the emphasis on banks relative to markets and real economic growth in the 1990s.

⁹ Lavington (1921), p. 210.

oversight is argued to have reduced banks' uncertainty about borrowers, mitigated risks of moral hazard or simple bad judgment, and facilitated long-term lending. The conventional view of the advantages of universal banking hinges on economies of scope that stem in large part from the perceived cradle-to-grave relationships between banks and firms. This view is evident from the earliest commentaries from bankers themselves: Jeidels (1905) argued that it was “in the interest of the security, profitability, and longevity of a credit institution to provide for all of the credit needs of a firm, from its formation to its liquidation.”¹⁰

Formalized relationships between banks and firms—placement of bank representatives on firms' boards—are closely associated with universal banking functions in the literature. Gerschenkron, among others, claimed that “the German banks, and with them the Austrian and Italian banks, established the closest possible relations with industrial enterprises.”¹¹ Gerschenkron echoed Jeidels, saying that “...through development of the institution of the supervisory boards to the position of most powerful organs within corporate organizations, the banks acquired a formidable degree of ascendancy over industrial enterprises, which extended far beyond the sphere of financial control into that of entrepreneurial and managerial decisions.”¹² Thus, bank seats on supervisory boards are traditionally thought to have permitted not just oversight, but also direct control, over firms' operations and decisions. Chandler (1991) notes, “The representatives of the German Grossbanken participated to a greater extent in the top-level decision-making of new industrial companies than did representatives of financial institutions in the United States and Britain.” He goes on to report that “...the banks often had a significant say (particularly in the early years of a company's history) in investment decisions, in

¹⁰ Jeidels (1905), p. 63, author's translation. See also Gerschenkron (1962) and, for a modern restatement, Mayer (1988).

¹¹ Gerschenkron (1962), p. 14. Jeidels (1905), Riesser (1910), Schumpeter (1930), Wallich (1905), Whale (1930), Tilly (1994), Chandler (1990), and most others writing on the subject, also emphasize this point.

¹² Gerschenkron (1962).

the selection of top and even middle managers, in establishing administrative procedures, and in reviewing the internal financial management of the enterprises that they had helped to finance.”

Together, universality and relationship formation is seen as more efficient than arms-length and specialized banking; thereby lowering costs of finance and promoting industrial investment.¹³ Even at the economy-wide level, universal banks are credited with promoting efficient allocation of the economy's investment portfolio, particularly historically, and in comparison with Britain.¹⁴

Banks versus Markets

Some of the existing literature focuses on the difference between banks and stock markets in the allocation of investment capital, rather than the real effects of various types of banking institutions.¹⁵ Though most of the literature offers no comparison of the relative benefits of different types of financial systems, the Greenwood and Smith (1997) model shows that, with sufficient risk aversion on the part of the investing public, equity markets produce stronger growth than do banks. In a series of papers, Boyd and Smith (1994a, 1995, 1996) introduce the changing roles of debt and equity in the development process and show that, though stock markets should develop after a period of intermediary dominance, both debt and equity remain viable and complementary sources of finance. Moreover, Greenwood and Smith (1997) show

¹³ Economies of scope is a modern interpretation of the traditional accounts. Calomiris (1995), for example, advances such an argument and has argued that German companies faced lower costs of issuing new equity compared with their American counterparts. Tilly (1994) produces similar figures for Germany.

¹⁴Tilly (1986) and Kennedy and Britton (1985), for example.

¹⁵ Often, banking structure is conflated both with corporate governance issues and with financial market activity probably because of the perception that universal, relationship-based banks dominate the financial systems in which they operate, and that financial markets dominate in systems in which financial intermediaries are specialized. See Helmut Dietl (1998) and Jonathan Story and Ingo Walter (1997).

theoretically that growth rates obtained in economies with either banks or equity markets exceed those of economies without financial intermediaries.

Another line of research suggests that there are tradeoffs between banks and financial markets in the revelation and transmission of information necessary for making optimal real decisions; the desirability of one system over another depends on the context. Allen (1992) reasons that, because markets aggregate information from a wide range of disparate sources, but banks depend primarily on their own assessments, markets dominate banks when technologies are new, complex, or rapidly evolving. Banks prevail when technologies are clearly understandable and optimal investment decisions are easy to make. Also, as Thakor (1996) argues, bank-dominated systems exacerbate effort-aversion and overinvestment, while market-based systems lead to excessive reliance on borrower reputation as well as greater asset-substitution moral hazard.¹⁶ Furthermore, the analyses of von Thadden (1990) and Dewatripont and Maskin (1990) suggest that banks tend to prolong low-quality projects for too long, while markets often liquidate good projects prematurely. All of these problems can lead to sub-optimal investment decisions and lower real economic growth.

Changing Perspectives on Financial System Design

The existing literature combines a number of different approaches to the issue of financial system design. Many older studies, as exemplified by Gerschenkron's work, treat universal banks as a second-best substitute for missing markets. Recent research on modern institutions, on the other hand, conceives of the debate as a battle of competing systems arrayed on an even playing field. The results to follow indicate that several countries maintained at least

¹⁶ Thakor bases his argument on the predictions of Rajan (1992), Wilson (1994), and Diamond (1991).

partially specialized, arms-length systems even in the absence of prohibitions on universal or relationship banking: British commercial banks, for example, have always been permitted to engage in universal and relationship banking, but have apparently mostly refrained. Until very recently, the ‘battle of the systems’ literature has represented universal, relationship banking as a superior solution to asymmetric information problems. German banks are thought not only to have engaged in all of the activities seen as central to the promotion of economic growth, but to have executed these functions more effectively and efficiently than the British banks. In echoing the common perception that the British banks and securities markets heavily favored short-term and gilt-edged instruments, Kennedy (1987) attributes the lack of long-term lending and venture capital to the ‘informational weaknesses’ of the British system. Much of what is seen as the decline of the British economy has been blamed on the failure of financial institutions. British industry is thought to have been constrained by a lack of capital; the banks, it is argued, held back necessary finance to industry. Many have chastised the British banks for avoiding engagement with domestic industry and leaving firms to find finance from other sources. The banks’ involvement in foreign and imperial ventures is claimed to have drained away funds from domestic industry; firms’ resultant recourse to securities markets is argued to have advanced investors’ short-term profit motives at the expense of long-term growth.¹⁷ Kennedy concludes that “What was unique in Britain was not the existence of imperfect sharing of risk and control among those with a stake in corporate ventures but rather the unusually slow development of recognition of the extent of the problem and of effective means to rectify it.”¹⁸

¹⁷ For a review of the literature on British banking and industrial development, see Michael Collins (1991, 1998). Also see Forrest Capie and Collins (1992). For a critical appraisal of the British banking system, see George Edwards (1987).

¹⁸ Kennedy (1987), p. 127.

In other words, this strand of the literature interprets the British and American resistance to universality as, respectively, entrepreneurial and regulatory failure. The ‘substitute for markets’ literature would see this persistence of specialization as a sign and natural upshot of the continued availability of the preferred market institutions. This divergence in perspectives is worth keeping in mind in analyzing differences among financial systems as well as the factors that produce these divergent designs.

PLAN OF THE BOOK

The book is divided into two principal sections. The first set of chapters takes on the task of identifying and analyzing the form of different financial systems and their relationship to corporate governance. The second set evaluates broader patterns in the causes and consequences of financial system design. A natural starting point of this study is an in-depth study of several illustrative cases: Germany, Italy, Japan, the US, and the UK. The first two countries developed classic universal-relationship systems as described in the historical literature, and yet a closer look reveals quite a bit of variance with the standard views. Particularly in the case of Germany, many central features of the universal banking system developed late or not at all in the industrialization period. The Italian system appears more similar to the traditional conception on the surface. And yet the consequences of the system appear quite mild and even neutral in both cases—at both firm and aggregate levels. Japan, because of its more dramatic cultural and technological differences with continental Europe, provides a richer view of universal-relationship systems and the paths systems take over time.

While many have investigated the impact of financial development on economic growth, a smaller literature has begun to inquire into the underlying causes of financial system structure and growth. Older theories dictated that banks had to develop faster, and needed to provide more services, in countries that were undergoing rapid industrialization during the end of the nineteenth century. The most and least developed economies of the time, respectively, did not need or could not support such large-scale, industrial banks. Newer work has brought political and legal factors to the fore: hypothesizing specific relationships between banking structure and state centralization and between financial development and legal tradition. The second part of the book therefore turns to broad patterns in financial system development and economic growth.

Chapter 6 begins the section by laying out a framework for distinguishing among financial system types and then by classifying a set of countries by those categories. Such a sorting exercise generalizes the more fine-grained portraits of the five country cases and indicates that few banking systems fit the extreme paradigms of universal-relationship or specialized-arms length banking; the vast majority fall somewhere in between. In addition, though connections do emerge among design of banking institutions, engagement in formal relationships, and prevalence of stock markets, there are few hard and fast rules. In general, empirically, institutions and systems are very difficult to categorize crisply. The long-term view of financial system evolution adds further complications and demonstrates, using the five country cases, how institutions changed over time. In the end, however, the chapter points out that, despite several cases of temporary upheaval and recent widespread movement toward conglomeration in banking, financial system structure has remained remarkably stable over the long run.

The second stage of the analysis, in Chapter 7, uses this categorization scheme in order to identify the political and economic characteristics that unify countries under a given financial paradigm. This exercise reveals a number of consistent patterns. For example, economic factors in the late nineteenth century provide relatively strong explanatory power for financial system development, market orientation, and banking structure at the eve of World War I and in the present day. Banking specialization and market orientation appear strongly associated with legal tradition, though it seems more likely that the three characteristics are jointly determined or that the legal system variable simply proxies for a close or historical tie to the exporter of many political-economic institutions, England. Finally, political structure relates significantly to market orientation but not to banking system design or legal tradition.

The penultimate chapter, Chapter 8, takes up the question of consequences: does financial system structure (or legal tradition) matter for aggregate real development? While it is clear that financial systems could vary in their real effects, it is not yet clear what kind of system offers the greatest net benefit to the real economy—either historically or at present. Perhaps tellingly, the latest work by Levine (2000) finds no statistical relationship between the emphasis on banks relative to markets and real economic growth in the 1990s. The analysis in Chapter 8 therefore offers a much longer-term view than the extant literature—stretching back to the origins of modern growth in the mid-nineteenth century. Such an extended period of time allows a much more robust analysis of potential effects of institutions. The results demonstrate that, while certain systems have prevailed for even extended periods of time, no one system dominates over the past 150 or more years.

The findings in the book lead to three sets of conclusions. First, modern financial systems are rooted in the past and are highly path-dependent: many financial systems—

particularly those in highly-developed, western economies—took shape in the pre-World War I period. Therefore, to understand the current structure of financial institutions, we must take stock of the political and economic forces at play in both the near and distant past: that is, the 1850s as well as the 1950s. Second, many influences converge to mold financial institutions over time. Political and regulatory intervention, though influential on system design, is idiosyncratic to specific countries. Thus, though social and political contexts play important roles in shaping institutions, it is difficult to pinpoint reliable relationships among economic, political, legal, and financial variables. Third, and finally, the economic effects of institutional design may be important within certain contexts, but over the very long run, the existence of some form of well-functioning financial system is more important for real, aggregate outcomes than is the specifics of how those systems are organized.

Chapter 9: Conclusions

This book has brought together a wide array of evidence—from the level of individual firms to the broadest possible international comparison—to offer a new synthesis of financial system design and industrial development. What causes financial systems to develop as they do, and how does the pattern of financial development influence real economic outcomes? Both parts of the book shed new light on these questions.

By taking a close look at the emergence of corporate finance systems in five economies, the first set of chapters provides new insights into the details of financial systems. Each of the countries examined in these chapters began the process of large-scale industrialization at some point in the nineteenth century—early on in the case of the UK, mid-century for Germany and the US, and toward the end for Italy and Japan. The micro-economic view that predominates in these four chapters permits a fine-grained portrait of the range of political, economic, legal, and even cultural factors that have played into these five financial systems.

By the end of the nineteenth century, all of these countries created complex financial systems, with differentiated institutions serving the needs of most anyone in need of financial intermediation: from savings banks and credit cooperatives to commercial banks and trust companies; from merchant and investment banks to universal banks to investment banking arms of commercial banks; and from specialized commodity markets to national and international

financial markets.¹ The design of these systems varied across the five countries, but all gathered resources from investors, grew rapidly, and mobilized enormous amounts of capital toward productive ends.

Despite their considerable differences in culture, society, legal systems, and political processes, all five countries created mostly well-functioning systems for corporate finance by the late nineteenth century. Mostly in the 1850s to 1870s, these countries (and many others not studied here) formalized, standardized, and liberalized incorporation and liability systems. Within a decade or two thereafter, businesses and entrepreneurs in all five countries turned to corporations in order to grow and diversify, financing an unprecedented scale of operations. The acceleration of incorporation in most places toward the last years of the nineteenth century and into the twentieth, spurred rapid advancement in the corporate financial sector and of the securities markets.

For businesses in this period, banks often served as one of the most important sources of outside capital, whether for short-term trade credit or longer-term investment finance. Thus, industrial development usually went hand in hand with the growth of commercial banking. As these five economies evolved and industrialized, the organization of the banking industries, and of the banks themselves, changed in step.² The largest banks grew larger, and densely-networked, nationwide banks almost always emerged. Only in the United States, did regulatory restrictions prevent this natural progression, and even there, a few banking giants appeared.

The five countries did create disparate types of commercial banks, in some cases becoming true universal banks, in other cases not. In at least two cases, the distinction is hard to see: Japanese commercial banks are usually considered universal at this time, but they

¹ See Chapter 2.

² See Chapter 3.

underwrote very little equity. The US banks, at least some of them, remained specialized on the surface but participated actively in industrial securities (particularly equity) through affiliates or other indirect means. The British banks used the most deposit funding by far out of these five countries, but deposit usage does not otherwise vary at all by the universality of banking services. Indeed, in the other four countries, deposits began as a minor part of banks' funding sources in the mid-nineteenth century; but by World War I (and even more thereafter), deposits took on the leading role. All five countries, it was World War I that brought the most marked increase in the deposit business.

For all the variation in these banking systems, bank behavior was more similar than different, particularly among the European and Japanese banks. The limits on branching clearly influenced the financial structure of American banks, mostly because of the greater idiosyncratic risks they faced. The banks in these countries also profited at similar rates, despite all their differences. Profitability (ROA) declined almost monotonically over the late nineteenth and early twentieth centuries, falling from the two to three percent range in the 1880s and early 1890s to around one percent or below in the early 1920s. Most notably, bank profitability did not differ systematically with banking system type.

If commercial banks differed in their financial structure and scope of activities, they varied even more in their responses to changing needs in industrial finance and their engagement in corporate governance. The new system of corporate firms that emerged over the last half of the nineteenth century began to loosen the ties between families and the firms they started. Where management of company business grew more distinct from the ultimate ownership of the revenue streams created by the company, an increasing need for new modes of corporate governance emerged. The increasing use of securities exchanges to trade the claims of

corporations often meant the increased dispersion of ownership among these firms; the process created a new need for oversight mechanisms to protect the interests of shareholders, particularly those with small stakes and limited voting power. Each of the countries studied here developed its own version of corporate governance, and banks played different roles in each.³ Direct stakeholding in non-financial firms over extended periods seemingly arose in the US, but mainly through private investment banks or sometimes commercial banks' securities affiliates. The largest Italian universal bank took some equity stakes, but the German and Japanese universal banks did far less of it. In other words, 'relationship banking' in this era did not typically involve direct ownership relationships. Moreover, the little extant evidence on proxy voting suggests that the German banks held an unusual, if not unique position in their apparently avid use of proxy votes stemming from the deposit of customers' shares.

Relationship via interlocking directorates did become widespread in some countries, but only quite late in the industrialization process, as corporate boards became increasingly formalized and prevalent. Bankers appeared on boards in Germany, Italy, and the United States, but often via multiple supervisory board mandates, not only by the positioning of bank directors in company supervisory boards. In Japan and the United Kingdom, by contrast, bankers took board positions only occasionally. Overall, it proves difficult to divide the five countries into only two categories of corporate governance practices, particularly not ones that coincide with banking types.

Given the variety of corporate governance practices, it comes as no surprise that no significant or definitive role for formal bank relationships appears in the countries examined

³ See Chapter 4.

here.⁴ Even where banks played the greatest role in formal governance, they exerted little measurable influence on the behavior and performance of industrial firms. In both cases, important links appear among stock markets, ownership dispersion, and bank relationships—connections that suggest fundamental revisions to common views of bank relationships and their role in the promotion of industrial development. In all of these cases, capital market finance played a significant, even critical, role in financing corporate firms in the later stages of industrialization. In the European and Japanese cases, bank finance entered to a lesser extent than did internal sources. In the United States, by contrast, debt played a relatively large role. The difference may have stemmed from the extreme level of concentration in the US investment banking industry—the apparent domination of one individual over access to equity capital—and possible from inefficient and poorly integrated capital markets

Overall, then, the comparison of these five banking systems dramatizes the wide variety in systems that arose in countries that were, in economic terms, more similar to one another than they were to many other, far less developed economies of the time. Developing their own approaches to the problem of capital mobilization, they created banking institutions that on the surface looked different from each other but that performed in broad terms very similarly. The American experience—particularly in contrast to the German and British ones—surely suggests that the factors that shape corporate finance and governance systems are myriad and complex; making it difficult to boil the longer history down to a very tidy story about a small number of types or categories of financial systems.

The second part of the book moves the analysis to the macroeconomic level, looking for general patterns of finance and development over the past 150 years. The first of these chapters,

⁴ See Chapter 5.

Chapter 6, examines the design and development of national financial systems. The analysis underscores the difficulty in identifying particular countries with specific, overarching categories of financial system: most systems mixed various characteristics, fitting poorly into narrow categories. Many economies undergoing industrialization in the mid to late 19th century supported a small number of large-scale universal banks but simultaneously maintained many more specialized banks. Nationwide branching appeared in virtually all countries outside of the United States between the 1890s and World War I. Relationship banking was more common in universal systems but the two institutional features also existed separately from each other. In addition, there has been no link between branching and the design of financial institutions.

The distant history of banking systems reveals that the relationship between universal banking and limited securities markets, to the extent that it exists, is a post World War II phenomenon. Most industrialized economies maintained significant securities markets in the pre-war era, and some of the most important markets of the time were embedded in at least partially universal systems. While banking structure exhibits path dependency, or path reversion, over the past 100 to 150 years, financial conglomerates have emerged in most industrialized countries. As the 21st century progresses, formerly specialized systems are becoming more universal, while traditional universal banks are less truly universal.

This observation brings us to the next problem: examining what sorts of institutional factors—economic, political, and legal—determine, or at least influence, what type of financial systems emerge. The next chapter turns to the question of identifying the factors that led some countries to take on certain sets of institutions while others turned to a different type of system. The analysis uncovers several patterns in the development of financial systems and helps to disentangle the various forces involved. Economic factors have the greatest, most consistent,

power in predicting the type of banking system that subsequently developed among the pre-World War I industrial nations; it also factors into the strength of financial system development. In particular, moderately industrialized countries of the time depended more on financial institutions to mobilize capital than did the most and least advanced economies. Whether these tests address the so-called Gerschenkron hypothesis is open to debate, but the results do seem supportive of his general ideas. At the same time, however, the ‘economic-backwardness’ line of reasoning cannot explain the emergence of very broad and active securities markets in Germany and the US in the last quarter of the nineteenth century and the start of the twentieth.

Quantifiable political factors, such as government centralization, provide very little power in explaining banking system design, but do strongly relate to market orientation. The results suggest that political factors vary a great deal and do not consistently impede or encourage financial development. In other words, political forces appeared inconsistently and had no traceable, uniform relationship to the overall political system in place in the nineteenth century. Legal traditions, in contrast, correlate highly with both market orientation and banking institution design (but not with government centralization). It seems very likely, however, that the legal system variable may coincidentally proxy for the true source of influence on the financial system—whether adoption from colonizing powers, adaptation from neighbors or trading partners, or innate cultural and social beliefs. Economic, political, and legal factors most likely work together, and some combination of the rather distinct theories is required to explain the shape of financial systems at their origins and their development over the past century and a half. Undoubtedly, as the case study chapters very clearly illustrate, idiosyncratic factors—particular regulations, specific events, mixes of natural resources and human capital, perhaps even national culture—also matter for explaining the emergence and persistence of systematic

characteristics.

These findings lead next to the question of consequences: whether differences in financial system design impact real economic growth. The short answer, in Chapter 8, seems to be ‘no.’ Neither various attributes of financial systems—bank-based versus market-based, branching versus unit, universal versus specialized—nor legal traditions in themselves can explain the different experiences across countries over the last 100 years or more. In fact, although the set of industrialized (and industrializing) countries at the end of the 19th century exhibited a diversity of overall financial system types, rates of financial development, and legal orientation, for most of the 20th century, long run growth rates turn out to be remarkably similar. This conclusion runs counter to received wisdom about the history of financial and economic development and to debates over the advantages and disadvantages of various types of systems. The findings here also indicate that past economic development plays some role in financial growth. The wealthier among these pre-World War I industrial nations tended to deepen their financial base more than the less well off. In other words, financial and real development went hand in hand in that period of rapid industrial growth. The results thereby bolsters the idea of a feedback mechanism by which financial and real growth spur each other on.

If none of these legal or financial system design theories can explain why some countries grew faster than others, what is the reason for different growth outcomes? The important factor may lay in the fact of having a financial system that is strong and legally protected, regardless of the form of that system. One central conclusion to draw from this study, therefore, is that the development of a financial system must surely be important for economic growth, but the type of financial system that develops is far less so.

These results highlight the two themes discussed in the introduction: the weight of history

in determining the growth and design of financial institutions and markets and the importance of idiosyncratic forces that change institutions over time. Whether we can pin down and classify systematic influences, history clearly matters for financial system structure and economic growth.