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The History of Corporate Ownership and Control in Germany

Caroline Fohlin

4.1 Introduction

Since World War II, a general conception about German corporate governance has gradually emerged. This consensus view, founded largely on scant and unrepresentative evidence, contains a number of exaggerated claims about the German system of corporate ownership and control. The scholarly literature is replete with historical and theoretical arguments about the role—either beneficial or detrimental, but almost always significant—of Germany's system of close relationships among firms and similarly close relationships between firms and universal banks.¹ The common view holds that large and powerful universal banks dominate the financial landscape today as they have in the past. Early on, economic historians posited the universal bank as the central player in the industrialization of Germany, arguing that, from the mid-nineteenth century up to the start of World War I, these institutions mobilized and then efficiently utilized prodigious amounts of financial capital. In this traditional view the lynch-

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1. See the reviews in Calomiris (1995) and Fohlin (1999c). Wellhöner's (1989) detailed work on a few large companies turns up a wealth of evidence against the idea of bank domination during the pre-WWI period.

pin of the German universal banking system was direct bank involvement in the ownership and control of nonfinancial corporations. In the finance literature, such bank involvement in equity ownership and corporate governance has come to be known as relationship banking.

Despite the general enthusiasm—both popular and academic—for the German style of finance, and for relationship banking specifically, a smaller strand of the finance literature has always recognized potential hindrances inherent in that system. Even at the height of industrialization, critics lamented the excessive power of the largest banks and the national emphasis on heavy industry. Recent corporate finance literature on Germany, particularly since the postreunification downturn, has almost completely turned to exploring the problems of the German financial system: the failures of the universal banks and the underdevelopment of the securities markets. In the "law and finance" literature over the past several years, the questions have moved toward broader issues of governance: the concentration of ownership and control, the role of families in building up corporate dynasties or pyramids, the densely networked cross-ownership among firms, and the general lack of market mechanisms to efficiently distribute corporate control. In the 1990s, rather than viewing the relationship-oriented system as advantageous, many critics started to blame these institutional structures for the disappointing performance of the German economy.

This paper ties together these historical and contemporary concerns, examining both the overall evolution of ownership structures and the development of relationship banking practices within that framework. The paper also seeks to explain the patterns of involvement that emerge by looking to economic, political, legal, and even social factors. It aims to offer some balance between the two extreme views of German corporate governance and concludes that the German corporate economy has performed well. To be sure, Germany's corporate organizations differ in noteworthy ways from those of other countries, and these areas of divergence may have had an impact on firms or industries in specific instances. But the peculiarities of the German system have neither dramatically helped nor significantly hindered the corporate economy over the very long run.

4.2 Long-Run Patterns of Corporate Ownership and Control

4.2.1 General Patterns of Ownership: Families, Groups, and Pyramids

An ideal analysis would include the precise ownership patterns of German corporations dating back to the early industrialization period, but firm-level equity ownership data are virtually nonexistent for the pre– World War II era. As German share companies issued mainly bearer shares and considered the identity of shareholders to be private informa-

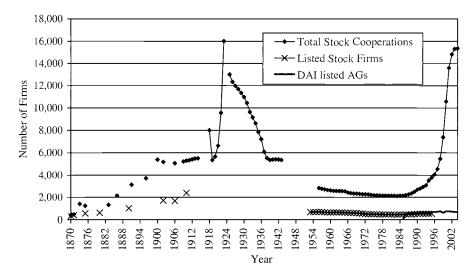


Fig. 4.1 Listed firms versus total stock corporations, 1870–2004

Sources: Deutsche Bundesbank (1976 and various years); Deutsche Börse (1992); Statistisches Bundesamt (1989–95); DAI Factbook (various issues). Data for earliest years come from multiple sources, described in text.

tion, it is not possible to determine the ownership structure of firms, much less to categorize the full population of firms by owner type or by levels of ownership dispersion.² Indeed, it is difficult even to provide comprehensive examples of individual firms' ownership structures—other than some famously family-dominated firms, such as Krupp.

The material that does exist suggests the existence of two principal lines in the evolution of corporate ownership and control. First, there is the emergence and expansion of the limited-liability share company (*Aktiengesellschaft* or AG) form with its accompanying managerial control (see figure 4.1 and table 4.1). Second, there is the increasing cooperation and integration between and among firms that led to cross-shareholding, communities of interest, corporate groups, and eventually pyramids (an ownership structure that can allow a firm to exert control over far more equity stakes than it directly owns). Patterns of the first type naturally facilitated trends of the second type.

Incorporation and the creation of the limited-liability company (GmbH) comprised the primary means of separating ownership from control. Not surprisingly, big enterprises took to the AG form of organization more quickly than average. Private, unincorporated enterprises fell to

^{2.} For certain firms, it may be possible to use protocols from shareholder meetings to measure the dispersion of voting rights and the extent of proxy voting, and some efforts on that front are underway. Voting rights, however, may bear a highly variable relationship to ownership rights.

••	Number	Share capital	Officially listed
Year	of AGs	(millions of marks)	in Berlin
1800 ^a	4	387,000 Taler	
1830/35 ^b	25		21
1850			63
1870°	200		325
1873/75	1,040		554
1880			612
1886/87 ^d	2,143	4,876	
1890/91°	3,124	5,771	1,005
1896 ^f	3,712	6,846	
1900 ^g	5,400		
1902 ^h	5,186	11,968	
1906 ⁱ	5,060	13,848	1,113
1907 ^j	5,157		
1908	5,194		
1909 ^k	5,222	14,723	
1910 ¹	5,295		2,400
1911	5,340		
1912	5,421		
1913 ^m	5,486	17,357	
1914	5,505		

 Table 4.1
 Number and share capital of joint-stock firms (AGs) and listings in Berlin, 1800–1914

^aPrussia only. Hans-Ulrich Wehler (1987, p. 103).

^b1835: Manfred Pohl (1982, p. 171). Listed in Berlin, 1830 and 1850: Brockhage (1910, p. 170).

^eNumber of AGs: 1870 is an approximation for all AGs before 1870 in Prussia only, and 1873 is an approximate figure excluding non-Prussian issues before 1870. Both figures are from Horn (1979, p. 136). Officially listed in Berlin: 1870, 1875, 1880, and 1890 from Ernst Loeb (1896, p. 246–47; he estimates 395 listed in 1871). Loeb's figures are cited in Richard Tilly (1995).

^dNumber and share capital from Rainer Gömmel (1992, p. 152).

^eNumber and share capital for 1891 from Deutsche Bundesbank (1976, p. 294).

^fBeckerath (1956, vol. 1, p. 153).

^gGebhard (1928, p. 103). Loeb (1902, p. 2) estimates 5,500 AGs in the same year.

^hDeutsche Bundesbank (1976, p. 294).

¹Number and share capital calculated from *Statistisches Jahrbuch fuer das Deutsche Reich*, 29 (1908, p. 328). Calculating from *Handbuch der Deutschen Aktiengesellschaften* (1907) yields an estimated number of AGs of 5,352. Berlin listings are estimated based on data from *Handbuch der deutschen Aktiengesellschaften* (1905–1906).

^jNumber of AGs for 1907–14 calculated from Statistisches Jahrbuch (1908–15).

^kShare capital from Beckerath (1956, vol. 1, p. 153). Deutsche Bundesbank (1976, p. 294) estimates total share capital at 14,737 marks.

¹Number of Berlin-listed firms from Stillich (1909), as cited in Tilly (1995).

^mTotal share capital from Deutsche Bundesbank (1976, p. 294).

minor importance compared to the largest firms well before the end of the nineteenth century. By 1887, four out of five of the largest companies were organized as AGs.³ According to Pross (1965, p. 75), power struggles between capital lenders and capital administrators arose early on. The authority to dispose of management was in the hands of majority stockholders, their representatives, and managers further up the hierarchy. The record, such as it is, suggests that manager-controlled enterprises comprised a minority of firms throughout the nineteenth century. Thus, majority stockholders and their representatives retained primary control, and managers held the status of leading employees with important but limited authority. In this early phase of the history of German corporations, the generation of owners who had founded, enlarged, and made competitive the enterprises of the heavy industrialization period still held ultimate sway. The captains of industry of this era—the likes of Krupp, Thyssen, Stinnes, Wolff, Stumm, Klöckner, Siemens, and Bosch-possessed both the necessary equity and the personal authority to maintain solid control of their concerns. Professional managers outside the circle of major shareholders also arose, and a few of them clearly belonged among the economic elite. These employee managers, such as Emil Rathenau at AEG, Georg von Siemens, Emil Kirdorf at Gelsenkirchen, and others, wielded formidable influence despite their limited personal stock ownership.

The growing use of the corporate form, and the use of managers to run operations, led in turn to the second main phenomenon in the history of German corporate governance: cooperation and concentration among firms. The first buds of cooperation between enterprises emerged via the formation of trade and production cartels and the creation of concerns (Pohl and Treue 1978, p. 7). The process of concern building started quite late in the century: in 1887, fewer than 20 of the largest 100 industrial enterprises took on the form of a concern (Siegrist 1980, p. 86). Most cartels appeared in the economically prosperous years between 1888 and 1891, and the institution rose to great economic importance in the period between 1895 and 1900. Before 1865 there existed just four cartels, and a decade later that number was still only eight. By 1885, however, there were 90 cartels, and that number was more than doubled, at 210, in 1890. By 1905, a total of 366 industrial cartels had formed (Sombart 1954, p. 316).

Early Twentieth Century

After the turn of the century, the dual trends in ownership dispersion and interfirm cooperation continued with new vigor. Before World War I, the total number of AGs grew, while the share of AGs among the biggest German enterprises remained stable. In 1902, there were well over 5,000 AGs, with a total nominal capital of twelve billion marks. Those numbers

^{3.} See Siegrist (1980), p. 88 and Wehler (1987), p. 627.

grew almost continuously in the prewar years (figure 4.2). In 1907, as in 1887, 80 percent of the biggest companies were organized as AGs (Henning 1992, p. 210). In 1907, the majority of enterprises remained entrepreneurial enterprises in the sense that small groups of owners, mostly families, owned the majority of the equity and controlled strategic decisions. Even if managers had begun to take over the more routine work of daily business, in Ziegler's (2000) view, the dynastic character of the economic elite was still "quite pronounced." Almost all industrial "big linkers"—more than fourteen mandates in supervisory boards of corporations—still held the role of owner-entrepreneurs with no manager and typically representing an industrial dynasty of sorts.

Still, the managerial enterprise, with widely dispersed ownership and salaried managers, had clearly gained importance and continued to do so in the prewar years (Siegrist 1980, p. 88). The trends toward concentration, cooperation, and increased size continued unabated, and the large AGs grew more and more dominant. In 1904, less than 1 percent of AGs held nearly a quarter of the corporate capital stock. Fewer than 10 percent (400 of 4,740) owned nearly two-thirds of the capital (Pross 1965).

As active as the concentration process was in the early twentieth century, World War I gave new impetus to these trends. Government incentives and intervention spurred the further creation and maintenance of cartels, with particular emphasis on vertical connections among suppliers and produc-

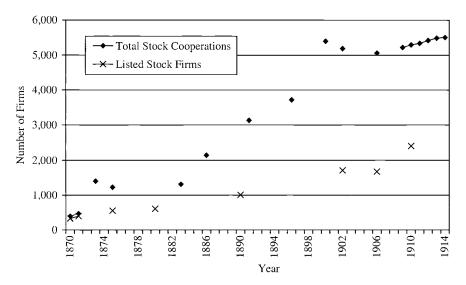


Fig. 4.2 Listed firms versus total stock corporations, 1870–1914

Sources: Deutsche Bundesbank (1976 and various years); Deutsche Börse Annual Report (1992); Statistisches Bundesamt (1989–95); DAI Factbook, May 2003. Data for earliest years come from multiple sources, described in text.

ers (Pohl and Treue 1978, p. 20). Meanwhile, smaller and smaller companies embraced the growing tendency toward incorporation. By 1919, just 6 percent of all German AGs (326 of 5,710) exceeded five million marks of share capital.

The Weimar Republic

After World War I, centrally managed concerns increased in importance and expanded their linkages via interfirm agreements. The tendency toward both concentration and oligarchy increased. During the inflation years between 1919 and 1923, AGs formed at breakneck speed: more than 16,000 AGs appeared by 1923, more than three times the number in existence in 1919. In 1925, over thirteen thousand AGs were registered with a total nominal capital of 19.1 billion marks. Nevertheless, many small family enterprises remained in the market, and small, unincorporated firms still accounted for 90 percent of all enterprises in 1925 (Gömmel 1992, p. 35). To some, managerial capitalism took over in this period, when large concerns often dominated both the markets and the cartels with rationally organized leadership structures, multiplant enterprises, coordinated management teams, and ambitious sales strategies (James 1986, p. 166). While managers clearly emerged as a major force, the underlying ownership structures remain somewhat mysterious. It is assumed, although it probably cannot be proven with the data that exist, that the big enterprises generally came more and more under the control of a small oligarchy of major stockholders and managers (Pross 1965, p. 76). Both types of control that maintained by majority stockholders and that turned over to managers-could be found within the leading enterprises. While managercontrolled concerns likely remained a minority among the big enterprises, they emerged as a growing and important minority (Ziegler 2000, p. 42). Although the data are truly too sparse for certainty, Ziegler hypothesizes that the share of family dynasties in the German economic elite fell markedly in the early 1920s and was replaced by "new" families from the bourgeoisie (p. 42).

Patterns of corporate structure and control also varied with industry sector and business size. In the financial sector AGs clearly dominated, with ninety-three banking and insurance companies holding at least ten million marks of nominal capital each. The mining and steel industry had seventytwo AGs of this magnitude, and the electrical and machine industry together had fifty-five. Thirty AGs in transport and eighteen in the chemical industry held over ten million marks of nominal capital. Another seventy large-scale AGs were dispersed among different branches of industry. In some branches, many smaller firms incorporated and remained moderate in size. A large proportion of all AGs operated in the food and luxury food industry (in 1919 there were 905), but only seven of these firms held over ten million marks of share capital at that time.

In heavy industry as well as the chemical industry the trend toward horizontal integration quickened after World War I. Thyssen, Rheinische Stahlwerke, GHH, Krupp, and Hoesch, for example, represent the vanguard of the trend. In 1925, IG Farbenindustrie AG brought together major chemical firms to create the largest German enterprise in terms of stock capital. Of the 12,392 AGs existing in 1926 with a total nominal capital of 20.4 billion marks, nearly two thousand (1,967 AGs, with a total nominal capital of 13.3 billion marks) maintained membership in a concern. In other words, the stock capital bound up in concerns constituted 65 percent of the total at that time. That figure rose to 69 percent the next year and to almost three-quarters by 1930 (Laux 1998, p. 129). Overall, concentrated companies held 85 percent of the total nominal capital of all German AGs. It is claimed that by 1927 virtually all of the 100 largest industrial enterprises had become concerns-many in the form of holding companies (Siegrist 1980, p. 86). Independent, unlinked AGs had become the exception, while the concern had emerged as the norm (Pross 1965, p. 50).

Perhaps as a natural by-product of these changes in industrial organization, managerial enterprises became prevalent in the mining, iron, and metal industries and in the chemical industry. Managers dominated in the biggest industrial enterprises regardless of sector. Of the ten largest industrial enterprises with a nominal capital greater than 100 million marks— Deutsche Erdöl, Harpener, Vereinigte Stahlwerke, Mannesmann, Krupp, Siemens, AEG, I.G. Farben, Burbach, and Wintershall—only Krupp and Siemens remained entrepreneurial enterprises. The rest were already managerial enterprises (Siegrist 1980, p. 88).

During the 1930s, implementation of managerial capitalism continued. More and more, the leaders of enterprises were managers without a dynastical background, and the founders or controlling shareholders retreated into the oversight role of supervisory board membership (Ziegler 2000, p. 46). Meanwhile, capital became increasingly concentrated and the absolute number of AGs fell. In 1930 there were 10,970 AGs with a total nominal capital of 24.2 billion RM, and in 1932 there were 9,634 AGs with a total nominal capital of 22.3 billion RM. Fewer than 2 percent of these AGs held well over half of the total nominal capital.

The Nazi Regime

The Nazi regime reinforced power relationships within concerns. Nazis encouraged and assisted gentile founder families in retaining control over their firms (Joly 1998, p. 111). In 1932, on the eve of the Nazis' ascent to power, the number of stock corporations stood at 9,634 (see figure 4.1). With the government incentives instituted under the new regime, many AGs went private and their numbers quickly dropped to pre-WWI levels (about 5,500 in 1938) and dwindled slightly after that. By 1943, 5,359 stock corporations remained. For this period, data on ownership and control are

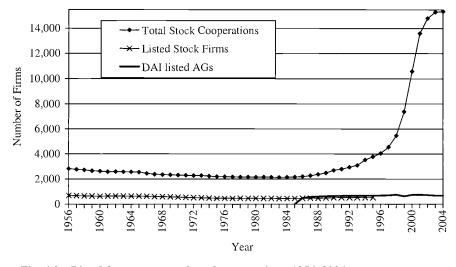


Fig. 4.3 Listed firms versus total stock corporations, 1956–2004 *Sources:* Deutsche Bundesbank (1976 and various years); Deutsche Börse Annual Report (1992); Statistisches Bundesamt (1989–95); DAI Factbook, May 2003 and June 2004.

still sorely lacking, and nothing very precise can be said as of yet.⁴ One thing is clear: the Nazi regime brought great turmoil to the German corporate landscape and permanently altered the patterns of corporate ownership and governance. While they promoted private ownership, the Nazis simultaneously pushed centralization of control in crucial industries. As it was in so many other ways, the Nazi period was an exception to German economic, political, and legal traditions, and one that would have continued ramifications for decades to follow.

The Postwar Years (1945–2004)

After the war, the AG regained favor among large firms. In 1957, 87 of the 100 biggest companies in terms of business volume were AGs. Another nine took on the GmbH form, and the remaining four remained in other forms (Pross 1965, p. 52). More broadly, however, the effects of the war on incorporation persisted. Whereas in 1943 there were still more than 5,000 stock corporations, the number fell nearly 50 percent to 2,627 by 1960—approximately the level of the late 1880s.⁵ Moreover, despite the rapid growth of the German economy, the number of stock corporations continued to fall until 1983. The decreasing importance of this company form can also be seen in the falling number of stock market listings over the same period (figure 4.3).

^{4.} Research efforts with new archival materials are underway and seem promising.

^{5.} See the Deutsches Aktien-Institut (DAI) Factbook.

Data on share ownership in the direct aftermath of World War II are scarce for West Germany, and the published figures from the Deutsches Aktieninstitut go back only to 1960. Still, some broad patterns emerge. Private households exited the stock markets: The percentage of households investing in the stock markets steadily declined. In 1950, over 46 percent of all households held shares, but the number declined steadily until quite recently. By 2000, just over 8 percent of the total German population held shares. With the mini-boom of 2001, the number had increased to 15 percent of all German households—a level still low compared to the more than a quarter of the U.S. population that held stocks. Strikingly, the proportion of shareholdings of private households declined by the same proportions: in 1950, private households held nearly half (48.6 percent) of all shares, but by 1996, the number dropped to only 17 percent. Similarly, the state decreased its holdings of corporate equity from 12 percent in 1960 to 3.9 percent in 1992.

As families and government decreased equity participation over the period, nonfinancial firms became the dominant shareholders in Germany. The proportion of shares held by nonfinancial firms increased from 18 percent in 1950 to more than 41 percent in 1996. At the same time, financial firms and foreigners, who held a total of 17 percent of shares in 1960, held a combined share of 37.1 percent in 1992 (table 4.2).

Similar trends also emerge for unified Germany in the 1990s. Notably, however, share ownership by nonfinancial firms dropped to 30 percent by 1998. Simultaneously, insurers and foreign shareholders increased their shareholdings, along with a new group of institutions, investment funds. Clearly, the importance of financial services firms versus all other types of shareholders has grown. While in 1990 banks, insurers, and investment funds held a combined share of 24.43 percent of all outstanding shares in Germany, by 1998 that group's share stood at 37 percent—an increase of more than 50 percent. A closer look, however, reveals that the direct influence of the financial services sector over the largest companies does not take the form of majority stakes.

Equity ownership in the 100 largest corporations in Germany has been remarkably stable and remarkably concentrated in the 1990s. Out of the 100 companies with the highest value added, slightly more than half are owned by one large shareholder. Another 16 to 21 percent of the sample has moderately concentrated ownership: that is, there is no majority owner, but less than half of the shares are dispersed. Less than one-third of the firms have widely dispersed ownership (table 4.3).⁶ In all but four of the fifty-four firms with concentrated ownership, the majority stakeholders were foreign investors, public entities, or a private individual, a family, or an endowment.

^{6.} See Brickwell (2001), p. 52, table 3.8.

	West Germany, 1960–92							
Year	Banks	Insurers	Nonfinancial companies	Private households	Public	Foreign		
960	8.0	3.4	40.7	30.3	12.0	5.6		
1965	7.5	3.7	39.3	30.6	10.0	8.9		
1970	9.1	4.2	37.4	31.3	9.5	8.5		
1975	9.7	4.2	42.1	25.1	8.9	9.9		
1980	11.7	4.8	42.8	21.2	8.5	11.1		
1985	11.0	5.8	38.8	22.5	7.5	14.4		
1990	14.1	7.8	39.0	19.9	4.4	14.8		
1992	14.9	9.0	41.4	17.6	3.9	13.2		

Table 4.2	Share ownership in Germany,	1960-98 (%)
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	Banks	Investment funds	Insurers	Nonfinancial companies	Private (including organizations)	Public	Foreign
1990	10.29	4.33	9.81	41.68	17.23	3.71	12.95
1991	10.27	4.84	10.32	41.36	16.65	3.67	12.89
1992	10.23	5.42	10.41	42.90	15.99	3.66	11.40
1993	9.78	7.27	12.22	38.72	16.66	3.17	12.18
1994	9.40	7.57	11.82	40.87	15.76	3.53	11.04
1995	10.12	7.45	10.93	41.46	15.35	4.39	10.30
1996	11.05	8.96	10.79	37.54	16.00	3.75	11.91
1997	10.93	11.28	14.50	30.46	16.61	2.86	13.35
1998	10.32	12.94	13.74	30.50	14.96	1.91	15.64

Source: Adapted from Ernst (2001, p. 18, table 2) and Ernst (2001, p. 19, table 3), citing Deutsches Aktieninstitut (1996, S. FB_08.1-2f), Deutsche Bundesbank (1976), and for 1990–98 (unified Germany) Deutsche Bundesbank (1999, S. 105).

This picture depends to some extent on the population of firms being examined, but the high concentration of ownership extends across a broad size range of companies. Between 1993 and 1997, the largest share block for large manufacturing firms averaged 81 percent. Even in the case of the listed AGs, the biggest shareholder held a 53 percent stake on average (Köke 2001, pp. 284–85). In stark contrast to the largest 100 firms, over 60 percent of manufacturing firms had another nonfinancial enterprise as their largest shareholder (Köke, p. 285). However, Köke still argues that cross-ownership is not widespread in the German manufacturing sector and seems to be of minor relevance in Germany (p. 285).

The continuous downward trend in the AG population is consistent with a fundamental economic force: the continued concentration of industrial power. The simultaneous divestment by households and increased investment by firms indicates that companies used stock markets to accumulate shares in other corporations in order to establish capital

Majority owner	1988	1990	1992	1994	1996	1998
Other top-100 company	1	2	0	0	1	0
Foreign investors	16	17	16	18	14	17
Public	13	8	11	13	13	13
Single investors, families,						
endowments	21	23	19	17	19	18
Other	3	4	5	5	5	9
Companies with majority						
ownership	54	54	51	53	52	57
More than 50% dispersed						
ownership	28	30	29	29	27	22
No majority	18	16	20	18	21	21
Companies without						
majority owner	46	46	49	47	48	43

 Table 4.3
 Ownership structure for the 100 largest German companies, 1988–98

Source: Adapted from Brickwell (2001, p. 52, table 3.8).

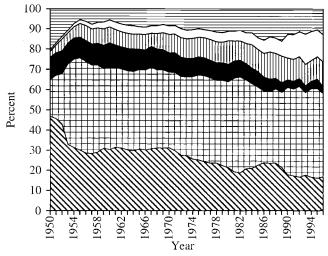
linkages.⁷ This tendency then led to delistings and illiquid capital markets as companies held on to sizable equity stakes in order to establish longterm relationships. Attempts at revitalizing the stock markets in Germany began to some extent in the 1980s and seemed to have some success by the 1990s. But the bursting of the new economy bubble within a decade effectively reversed the positive trend, and the future prospects as of 2005 remain uncertain.

Clearly, the deconcentration efforts of the allies in the early aftermath of World War II—in terms both of equity ownership and of industrial organization—failed generally over the long run. The capital stock concentration of the AGs was higher than it had been before WWII, though other organizational forms, especially personal enterprises, retained their importance and position in the postwar economy. In 1950, the average AG was bigger (average nominal capital in 1925 was 1.5 million RM; in 1957 it was 10.3 million RM) and employed more people (1925: 307, 1950: 790) than in former times, but the share of AGs of all German companies stayed almost the same. For every thousand companies in 1950, just one took the AG form. In the same year, over 90 percent of all companies—including unincorporated firms—were owned by one or only a few owners (Pross 1965, p. 53).⁸

The ongoing concentration process in post–World War II Germany emerged most prominently among the large, listed AGs. Among these firms, concentration increased from the 1960s to the 1980s, and family domination simultaneously declined (Iber 1985). Despite their loosening

^{7.} See also Iber (1985) and monthly reports by the Bundesbank over the period.

^{8.} Unfortunately, Pross does not give exact numbers.



□ Households □ Enterprises ■ Government □ Banks □ Insurance □ Rest of the World

Fig. 4.4 Ownership of German corporate equity

of ties, families and individuals remained important shareholders. Between 1963 and 1983, the percentage as measured by number and nominal capital of corporations with majority shareholders increased at both the 50 percent and 75 percent thresholds. This concentration process slowed somewhat toward the end of the period and appears to have begun to move in the opposite direction at the end of the twentieth century.

Still, ownership remains relatively concentrated in Germany, and families take prominent roles, particularly for nonfinancial firms, unlisted companies, and smaller firms generally.⁹ Nonfinancial firms also take a primary role as block holders, and one can see a shift in the importance from families as dominant shareholders to enterprises and banks starting by the '60s and '70s (figure 4.4). There is also strong evidence that controlling owners tend to be solitary.¹⁰

A look at today's firms shows the persistence of family ownership in Germany and the impact it has had on accumulated wealth. Seventeen of the twenty-one biggest German private fortunes (more than three billion DM in the 1990s) derive from family-founded enterprises (Joly 1998, p. 29).¹¹ Of the 274,139 enterprises with more than two million DM business volume

^{9.} See Faccio and Lang (2002) for comparisons across countries and Klein and Blondel (2002) for in-depth evidence on Germany in particular (with comparisons to a parallel French study).

^{10.} See Faccio and Lang (2002) or Becht and Boehmer (2003).

^{11.} Joly unfortunately does not indicate whether these fortunes derive from family enterprise foundations of the pre- or post-WWII period.

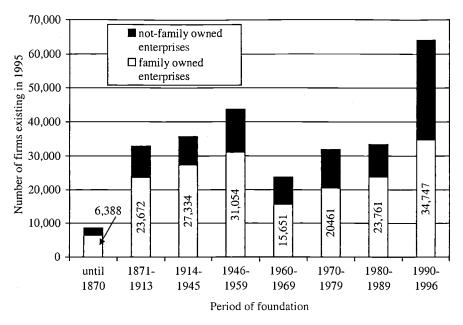


Fig. 4.5 Family and nonfamily firms by period of foundation *Source:* Klein (2000).

in 1995, 3.1 percent were founded before 1870, and 12 percent between 1871 and 1913.¹² In the first group, 74.5 percent are still family enterprises, and in the second group, 72.1 percent are family owned. Thus, among pre-WWI survivors, family ownership is key. Families did lose some importance in corporate ownership after the Second World War, but they remain a significant force. Despite the decline in ownership by households generally, families or individuals are often dominant shareholders. That is, families are central to the ownership of many firms, but equity ownership is unusual among the population at large.

A large number of German corporations consistently have average ownership blocks well in excess of 50 percent, even in corporations listed on the stock exchange. Blocks tend to be higher in smaller and unlisted firms. But even in large and listed companies, large shareholdings are a common feature (see figure 4.5).¹³ These stakes are probably held for control purposes, as stakes are clustered around important control thresholds of 25, 50, and 75 percent (Becht and Boehmer 2003). Because of the right to veto certain

^{12.} It is assumed that during this period, apart from cooperatives (*Genossenschaften*), nearly all enterprises were founded as (potential) family enterprises. Evidence comes from the many personal enterprises cited in Klein (2000), p. 33.

^{13.} See the evidence in Becht and Boehmer (2003), Faccio and Lang (2002), Iber (1985), Klein and Blondel (2002), Köke (2001, 2003), and Lehmann and Weigand (2000).

decisions, the 25 percent (blocking minority) and 75 percent thresholds are crucial. In more than 80 percent of sampled companies, at least one shareholder held a blocking minority in the years examined. Concentration also increased during that period—all the more striking given the sampling of large, listed firms, where one would expect greater ownership dispersion (Iber 1985).

The estimates of the prevalence of pyramids vary across studies: Köke (2002) finds that about half of the firms in his sample are controlled through pyramids, while, for example, Gorton and Schmid (2000) find much smaller numbers. Faccio and Lang (2002) also find that financial firms use pyramids to exert control much more often than did private households. These studies cover varying time periods and samples, making it difficult to draw conclusions about the trends in the use of pyramids in German corporate governance. It does appear, however, that the use of pyramids has been far more common and extensive in the last few decades of the twentieth century than it was before.

Overall, the patterns of corporate ownership suggest that, while ownership dispersion progressed as expected up to the Nazi era, the tendencies appeared to reverse from there up to the 1980s. Still, the most recent figures suggest a possible return to a pattern of gradual diffusion of ownership. Thus, it may turn out that future economists will look back at the midtwentieth century as an aberration, rather than as a permanent trend away from the previous situation.

4.2.2 The Role of Banks in Corporate Ownership

It is difficult to talk about corporate ownership in Germany without dealing with the issue of control rights. Due to the phenomenon of proxy voting, the ability of those with ownership rights to cede their control rights to others, equity ownership is often separated from direct control; likewise, many institutions that exercise control over nonfinancial firms have no ownership rights over the resulting revenue streams. Owners of German corporations very often turn over control rights to financial institutions in the form of proxy voting rights. Such proxy control over voting rights grants banks direct participation in the selection of firm supervisory board members and therefore indirect control over the choice of top management. Banks may actively pursue close and long-term relationships with their client firms through direct connections with existing firm managers and supervisory board members. They forge these formal links with nonfinancial firms by gaining representation on firm supervisory boards (*Aufsichtsräte*) as well as through interlocking directorates more generally.

Historical Debates over the Role of Banks

Jeidels (1905) claims that "the power of the Great Banks is exercised via the legal institution of the supervisory board, rather than through direct influence of financial strength" (p. 145, my translation).¹⁴ Gerschenkron (1962) echoes 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."¹⁵

According to these standard accounts, bank seats on supervisory boards permit not just oversight, but also direct control over firms' strategic decisions. Such involvement arguably reduces uncertainty about borrowers, mitigates risks of moral hazard or simple bad judgment, and facilitates long-term lending through rolled-over current account credits.¹⁶ From this perspective, formal relationships also make bankers willing to help firms solve idiosyncratic difficulties and ride out general downturns. Feldenkirchen (1991, p. 127) gives the example of Hoerder Bergwerks-und Hüttenverein, which, due to what Feldenkirchen argues was an exclusive relationship with the Schaaffhausen'schen Bankverein (and the private banker Deichmann & Co.), received crucial restructuring and survived a brush with bankruptcy. There are as well negative interpretations of bank control, in which the universal banks are seen to have exploited their positions of power to manipulate industrial firms to the banks' advantage.¹⁷ At the same time, however, researchers have uncovered convincing firm-level evidence against the bank-power hypothesis for the prewar period.¹⁸

Evidence on Bank Ownership before World War I

While there is no definitive, general evidence on ownership structure for the pre–World War I period, ownership of nonfinancial firms by universal banks can be examined. A prevalent notion in the literature on German corporate finance is that universal banks hold significant equity stakes in

14. The Great Banks were the nine largest of the universal banks: Bank für Handel und Industrie, Berliner Handelsgesellschaft, Commerz- und Discontobank, Deutsche Bank, Discontogesellschaft, Dresdner Bank, Mitteldeutsche Creditbank, Nationalbank für Deutschland, and A. Schaaffhausen'scheur Bankverein.

16. See Lavington (1921), Schumpeter (1930), Gerschenkron (1962, 1968), Kennedy (1987), and, in the modern context, Mayer (1988). On current account lending, see the discussion in Pollard and Ziegler (1992), p. 21.

17. Hilferding (1910), a known socialist critic, energetically promoted such an idea. See also Tilly (1994), p. 4, citing also Cameron (1961), Levy-Leboyer (1964), Tilly (1966), März (1968), Kocka (1978), and Pohl (1982). See also Feldenkirchen (1979) and Kunze (1926).

18. See Wellhöner (1989), pp. 83–87, who, for example, shows that the bank representatives on Phoenix's board, yielding to pressure from other firms in the Steelworks Association, acted as a lever for Phoenix competitors with the powerful industrialist Thyssen in the lead. Wessel (1990) and Wengenroth (1992) also support the idea that bank power was waning (at least in the steel industry) and that large firms were mostly independent of the universal banks, well before 1900.

^{15.} Wallich (1905), Riesser (1910), Schumpeter (1930), Whale (1930), Chandler (1990), Tilly (1994), Calomiris (1995), and most others writing on the subject also emphasize this point.

firms and use these positions to exert influence over the firms' decisions. This idea has persisted for at least a century, probably from the second half of the nineteenth century. The long-term holding of equities—indeed, any-thing held at the closing of a fiscal year—will appear in the balance sheets of banks. The size and variety of such holdings offer one way to assess their importance relative to the other activities of the banks and to the economy as a whole.

Although reporting laws were weak and vague in the pre–World War I era, banks did book their securities holdings if they existed. Naturally, there are reporting problems, and, according to such contemporaries as the banker Jacob Riesser, banks did undervalue their securities in their financial statements. Underreporting is most severe for industrial securities, since the banks feared that investors would view large holdings of non-financial shares as a signal of poor bank performance. Riesser (1911) explains that

excessive holdings of securities will be interpreted to mean either that the times have not been propitious for the issue business of the bank, or that it maintains excessive speculative engagements, or that it is involved to an excessive extent in speculative transactions on its own account . . . or, finally, that it has been unable to find sufficiently profitable employment for its funds. It is for these reasons that a large proportion of the writing off done by the banks occurs under the head of securities account. (pp. 402-403)

Thus, bank-held equity stakes are probably undervalued relative to other financial assets in their balance sheets, and the extent of the misreporting is uncertain. The very fact that banks attempted to downplay their stock holdings, along with Riesser's contention that investors frowned upon significant stake holding, suggests that the banks did not pursue equity holdings as part of an active policy of direct control of nonfinancial enterprises. At least from the 1880s until World War I, banks seem to have avoided holding large proportions of nongovernment securities over the long term.

Corporate securities make up a small proportion of universal bank assets. For the great banks, the holdings varied between 7 and 8 percent of assets but did trend upward toward the end of the period.¹⁹ For the whole period, the nongovernment equity holdings of the great banks never exceeded 11 percent (see figure 4.6). The denominators of these series are computed in real terms, since securities tended to be posted at book values. Loans and cash assets turn over frequently within any year and therefore

^{19.} Banks often held significant amounts of government securities as reserves. Because these assets are unrelated to industrial finance, it is important to compare securities net of government issues. Data sources aggregate government and nongovernment securities until 1912, so the figures for the years before that are estimated. See Fohlin (2006) for details and additional results.

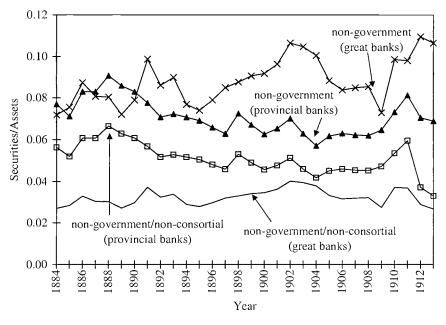


Fig. 4.6 Securities as a share of real total bank assets, 1884–1913 *Source:* Fohlin (2006).

increase or decrease in nominal value along with the general price level. Thus, as other assets inflate (deflate), the apparent proportion of securities to total assets would decline (increase). The low levels of equity holdings are surprising, especially considering the average contribution of the securities business to the overall revenues of the universal banks.

Because these figures aggregate all nongovernment securities holdings, they include many stakes that the banks did not intentionally take as part of their investment strategy. In fact, a significant portion of the total investments by universal banks arose out of their involvement in underwriting consortia (or syndicates). Therefore, some shares remained on the banks' books only because the banks did not place the shares or due to the fact that the underwriting process crossed into the next business year (see figures 4.7 and 4.8). The subset of nongovernment securities *not* held as a result of underwriting syndicates thus gives an approximation of the proportion of assets that universal banks may have held as nongovernment securities, had the universal banks been organized more like specialized commercial banks.²⁰

^{20.} Nonsyndicate securities were estimated using a method similar to that described for nongovernment securities. See Fohlin (2005) for further details.

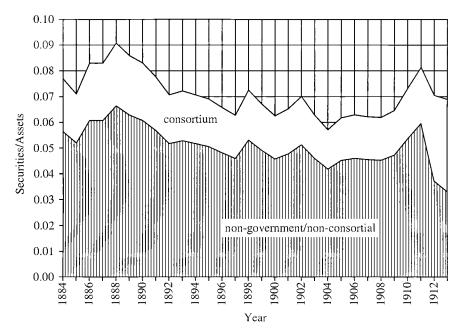


Fig. 4.7 Securities as a share of real total bank assets, provincial banks, 1884–1913 Source: Fohlin (2006).

Consortium-related holdings by the great banks increased steadily throughout the boom in joint-stock founding of the late 1890s and reached a prewar peak in the years just after the stock market crisis of 1900–1901.²¹ Decline continued as the market improved, and holdings increased slightly after the 1907 stock market crisis. In 1909, syndicate securities holdings reached their lowest point in the twenty-five years of available data.²² Smaller banks and provincial banks held even fewer total equity stakes than their Berlin-based counterparts throughout the period, and the provincial banks steadily lowered those holdings, relative to their other assets, from the early 1890s until sometime around 1905. Relative to other assets, the provincial banks also held far smaller proportions of syndicate

21. The rapid increase in joint-stock share capital following 1901 stemmed from an increase in the average nominal share capital of firms, while the upward trend of the 1890s related primarily to a rising number of companies.

22. In the run-up to World War I, universal banks markedly increased their holdings of syndicate securities. After the onset of the war, the great banks' syndicate holdings declined dramatically as a share of bank assets—from 8 percent in 1914 to 3 percent in 1919. Perhaps contrary to intuition, the decline is not primarily accounted for by crowding out by government securities. Government securities holdings did increase in the early years of the war, but all securities holdings declined steadily after the war.

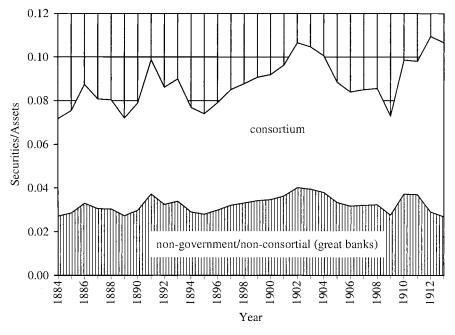


Fig. 4.8 Securities as a share of real total bank assets, great banks, 1884–1913 *Source:* Fohlin (2006).

securities than did the great banks. Only in the couple of years before World War I did the smaller banks substantially raise their syndicate holdings, though it is impossible to say from aggregate data whether the increase stemmed from greater participation in underwriting or simply less success in placing underwritten securities. Much of the difference likely stems from the proximity of the largest universal banks to the major securities markets (particularly Berlin) and the relatively stronger involvement of the great banks in large, more diffusely held firms. The fact that syndicate holdings crowded out other types of equity holdings suggests that the corporate relationships of the great banks via equity stakes were often nonexclusive. By definition, the consortium holdings represented participation within a larger group of banks. So, while the great banks likely engaged in long-term relationships with many of the firms whose shares they helped issue through syndicate participations, those relationships were clearly multilateral.

The data so far also do not reveal anything about the magnitude or duration of individual relationships, since aggregate figures provide no clue to the identity of the firms, the value of shares, or the length of their inclusion in a bank portfolio. To gain this sort of insight, we would need to look at the portfolios of individual banks, and those data are sparse and incomplete. When we patch together the available data on two of the largest Berlin banks, interesting patterns emerge. Between 1852 and 1900, Discontogesellschaft (DG) reported total equity holdings of between zero and 35 percent of assets. While the bank's holdings fluctuated markedly throughout the last half of the nineteenth century, the proportion of securities followed a generally downward trend toward the end of the period. From its founding in 1852 through 1855, DG held no securities among its assets. Thereafter, the bank acquired substantial interest in securities, but a quantitative breakdown of securities 1856 to 1865 indicates that two mining companies accounted for the major share of DG's industrial holdings. Shares in the two firms, Heinrichshütte and Bleialf, amounted to around 11 percent of assets for most of the period in which the bank held the shares.

Däbritz (1931) provides an account of the bank's involvement with these firms and indicates that such direct participation arose out of the bank's abortive plan to convert the firms into joint-stock companies. In one case, the bank bought an iron mining company in 1857 and invested heavily in the expansion of production capacity, but the firm immediately faced rapidly falling iron prices and profits. During the several years of low returns the bank's shareholders constantly criticized management for the misstep (Däbritz, p. 105). The other two firms presented similar problems for DG, and the bank was forced to hold their shares until they could extricate themselves in the more favorable market of the late 1860s and early 1870s. Other than these three companies, the bank's holdings of industry stocks amounted to between zero and 3 percent of its assets for the years in which disaggregated data are available (1852–65). Thus, it can hardly be argued that even the early activities of the great banks involved extensive, direct involvement in industrial companies.

Although the disaggregated data for DG run out before the second wave of the German industrialization hit its peak, the story can be picked up in the 1880s using evidence from another of the great banks. Darmstädter Bank (BHI) published unusually detailed accounts of its securities holdings, and *Saling's* reproduced the information in its series on Berlin-listed companies.²³ It is clear from the available data that holdings of industrial shares amounted to less than 1 percent of BHI's assets for most of the 1880s and '90s and that, even at its peak, the ratio of industrial shares to assets only reached 1.3 percent, in 1882. Including railway and real estate shares, the total of nonbank equity shares probably reached only 4 percent

^{23.} Unfortunately, *Saling's* only began publishing in 1876, and the volumes before 1882 are scarce. Also unfortunate for this analysis, they stopped publishing details of securities holdings in 1899.

of assets. When bank shares are included, the total rises to no more than 6.5 percent. It should be underscored that the earlier numbers are estimated based on the ratio of industrial shares to total securities for the period in which both types of data are reported (1896 and 1897). The proportion of assets held in industrial, railway, or bank shares for those years peaked at 3.7 percent. Thus, only if BHI held a significantly greater part of its securities in the form of bank shares in the 1880s than in the 1890s (unlikely, given that the concentration of banking accelerated in the 1890s) would 6.5 percent be an underestimate. These data provide further support for the notion that the great banks invested a relatively small portion of their portfolios in the equity of industrial firms.

Bank Stake Holding in the Postwar Era

Given the often heated discussion about bank power and influence in Germany, the available evidence on banks' equity stakes is surprising: along with the state, financial enterprises hold the fewest large shareblocks in manufacturing firms.²⁴ Franks and Mayer (2001) report similar results for a sample of 171 large industrial companies in 1990—neither banks nor insurance companies held a stake of 50 percent or more in any of these companies. Moreover, only in 5.8 percent of all cases did a bank hold a stake that was both larger than 25 percent and at the same time the largest stake in the respective companies. For insurance companies, this figure drops to 1.8 percent, compared with 20.5 percent for family groups and 27.5 percent for domestic (German) companies.²⁵

According to Brickwell (2001), in the 1980s and '90s, banks and insurance companies only owned stakes larger than 5 percent in those companies from the "Top 100" that did not have a majority stakeholder. There were forty-three companies that fell into this category in 1998 (table 4.3), and banks and insurance companies held stakes in twenty-eight of those (65 percent). In 1980, banks and insurance companies held stakes in 23 of the 100 major companies. This figure rose to 35 in 1996, before falling back to 25 in 2000. Nearly 90 percent of those investments in equity stakes are made for the long run, with one-third being older than twenty years. Finally, approximately 85 percent of all investments in the "Top 100" are stakes between 5 and 25 percent, and holdings larger than 25 percent have been scaled back since the mid-1980s (table 4.4). In 1990, the thirty main banking institutions—the ten largest private banks, the public banks, and credit cooperatives—held a total of 202 direct stakes (172 firms) and 276 indirect stakes (236 firms) among all capital companies (AG and GmbH

24. Data are from Köke (2001). See Adams (1994, 1999), Baums and Fraune (1995), and Kaserer and Wenger (1998) on the power of banks.

25. Yet Santucci (2002, p. 513) asserts: "In sum, due to their unique position as equity holders, banks and financial institutions are in a position to substantially control German companies."

	GmbH	Nonlisted AG	Listed AG	Weighted average ^a
1 Dispersed shares (%)	14.75	19.21	37.70	20.65
2 Individuals (%)	2.83	11.78	10.60	6.39
3 Nonfinancial firms (%)	67.92	58.81	41.18	60.25
4 State (%)	2.80	1.59	0.83	2.13
5 Financial enterprises (%)	0.18	0.42	3.81	0.98
6 Foreigners (%)	11.53	8.19	5.88	9.61
Total	100.00	100.00	100.00	100.00
No. of observations ^b	3,357	1,197	1,207	5,788

Table 4.4	Shareholder structure by type and legal form: Largest share block (%)
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Source: Köke (2001, p. 276 table).

Notes: Type refers to the largest shareholder that is classified as having voting power using the Cubbin and Leech index. All firms with no large shareholder (just dispersed shares) or those having no large shareholder with voting power using the Cubbin and Leech index are classified as dispersed.

^aIncluding KGaA.

^bThe KGaA is not reported here as a separate category because the number of observations is only 27.

form; Haas 1994, pp. 32–33). Averaged over the thirty banks, this sum amounts to fewer than sixteen stakes (fourteen firms) per bank. Moreover, the affected firms represent a small portion of the overall population of firms, since there were 2,682 AGs and 433,731 GmbHs in Germany at the time (Haas, p. 38).²⁶ From this study, one can also see that banks have held a handful of majority stakes, but only in smaller companies: 21.1 percent of all stakes of these thirty banks were larger than 50 percent, while nearly 13 percent were higher than 75 percent, but the target companies were not the large, listed share corporations (Haas, pp. 32–33).

The current level of bank shareholdings in nonfinancial firms remains comparatively low. In 2002, the German government abolished capital gains taxes in a widely publicized effort to encourage banks to divest themselves of equity stakes. Given the lack of major holdings, it should come as no surprise that banks have not sold large amounts of shares. More broadly, the trend toward disentangling the dense business webs in Germany began before the tax changes took effect. Wójcik (2001), for example, finds that ownership became more dispersed between 1997 and 2001. At the same time, firms started to dissolve cross-holdings, and financial institutions reduced their block holdings. The decline of bank involvement appears particularly pronounced compared to that of individuals and families as well as nonfinancial corporations (Wójcik, p. 15).²⁷

26. The affected firms represent 3.62 percent of all AGs and KGaAs and 0.06 percent of all GmbHs. Since there are other banks not considered in the sample, the total proportion of companies with bank-held stakes is likely somewhat higher.

27. See also Beyer (2002), who finds similar patterns.

A look at the latest annual reports of the leading German banks confirms this general notion: even though all banks have myriad stakes in other, often unrelated companies, these are rarely significant, and overall the participation makes up much less than 5 percent of respective assets. In 1998, the ratios of stakes (market value) to total assets were 4.20 percent for Dresdner Bank, 3.92 percent for Deutsche Bank, 2.65 percent for Hypo-Vereinsbank, and 0.49 percent for Commerzbank (Brickwell 2001, table 3.9).²⁸ The figures on equity shareholding for the last few decades mirror those of the largest banks a century ago. Taken together, the empirical evidence seriously undermines the claim that big finance currently runs Germany's economy via its equity stakes. Contrary to commonly held beliefs, and excepting an active presence in a few firms, banks tend not to hold dominant stakes. Thus, the domination of corporate ownership by banks is just as much a myth for present-day Germany as it was for the industrialization period.²⁹

4.2.3 Patterns of Corporate Control

The available evidence on corporate ownership suggests that bank stakes in German firms are generally small and have been significant only during unusual episodes. The scant evidence available for the pre–World War I period indicates that firms did not own large stakes in other firms, but such stakes are quite common in recent experience. With or without ownership stakes, banks and firms may still wield substantial control over corporations, either through proxy voting of shares or through seats on supervisory boards (*Aufsichtrat*).

Interlocking Directorates

Evidence on Interlocking Directorates before World War I. As with the idea of bank equity stakes, the practice of interlocking directorates—the placement of individuals on multiple boards of directors—has always played a prominent role in the historical accounts of the German industrialization. The institution arose to a substantial extent in the last quarter of the nineteenth century. Before mid-century, when few share companies existed, there were too few firms with formal boards of directors to permit substantial interlocking. As restrictions on chartering stock companies relaxed around 1870, however, and after the 1884 promulgation of regulations requiring stock companies to form supervisory boards, the

^{28.} These are the four leading banks in Germany.

^{29.} There is some evidence, however, that banks largely control themselves through crossshareholdings and have thus effectively managed to shield themselves from outside influences. See Brickwell (2001), pp. 60–65 and Adams (1994), p. 151. See also Boehmer (2000), p. 117 for a critical view on the role of banks in corporate takeovers; Jenkinson and Ljungqvist (2001), pp. 430–31, for a more favorable view of banks aiding nonfinancial firms in equity stakebuilding; and Köke (2002) for related arguments and a more extensive discussion of block trading in Germany.

foundation was set for formalized relations among firms and between banks and firms.

Using data on share companies listed on the Berlin stock exchange, Fohlin (1999b) shows that German corporate governance forms changed considerably during the German industrialization period—particularly during the last twenty years of the nineteenth century. The data demonstrate marked growth in the formalized interaction between banks and industrial firms between 1882 and 1898, indicating that interlocking directorates grew along with industrial enterprises and became widespread among Berlin-listed companies only during the last stages of industrialization. These interactions involved many third-party relationships, in which one individual sat on the supervisory board of both a bank and a firm. The placement of bank directors on industrial firm supervisory boards was considerably less common and likely did not grow substantially over the period.

The historical evidence shows that some of the apparent relationships between banks and firms may have been merely coincidental, suggesting the importance of interlocking directorates between and among nonfinancial firms. Indeed, over half of joint-stock firms in existence in 1904 had at least one board member (either supervisory or executive) in common with a Berlin-listed nonfinancial firm.³⁰ Nearly 22 percent of these firm-linked companies had no board interlocks, either direct or indirect, with a bank, and one-third had no banker sitting on their supervisory boards. Of those with bankers on their boards, almost half had only a private banker—not one of the joint-stock universal banks. In other words, the practice of interlocking directorates extended well beyond the placement of bank directors on company supervisory boards. Many firms intertwined their governance structures with one another, making the involvement of the universal banks just one part of an overall system of shared corporate governance.

Table 4.5 gives a breakdown of the various types of board relationships in a group of nonfinancial share companies from 1895 to 1912, the subset of the industrialization period in which formal banking relationships were most widespread. Even in this later part of industrialization, only twothirds of the sampled firms fall into the attached category, combining all types of bank relationships.³¹ Closer to half of the firms had a bank director sitting on their supervisory boards, and 40 percent of these positions

^{30.} See Fohlin (1997). The firms were randomly sampled from all joint-stock firms in existence in 1904, and their supervisory board members were compared with a list of all board members of all Berlin-listed corporations (*Adressbuch der Direktoren und Aufsichtsratmitglieder*).

^{31.} The three main types are bank director on firm supervisory board, firm director on bank supervisory board, and concurrent membership of one person in both a bank and firm supervisory board. Occasionally, we see a fourth type, in which one individual sits concurrently in the directorates of a bank and a firm.

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Variable	Definition	Number	Mean (%)				
ATT	Any type of attachment	3,347	67.07				
V2AR	Bank director sits on firm supervisory board	2,684	52.56				
GBV2AR	Great bank director sits on firm supervisory board	612	11.98				
ARAR	Joint member of bank and firm supervisory boards	2,268	44.41				
ARARonly	Joint supervisory board member; no V2AR	584	11.40				
AR2V	Firm director sits on a bank supervisory board	265	5.19				
V2V	Firm director is also bank director	107	2.10				

Table 4.5Interlocking directorates by type, 1895–1912

Source: Fohlin (2005).

Note: There are 5,107 observations (firm-years).

	Chair		Vice-chair		Chair or vice-chair		Bank chair or vice-chair (% of firms
	Frequency	Percent	Frequency	Percent	Frequency	Percent	with V2AR)
No bank	5,050	86.31	5,258	89.86	4,582	78.31	
Private bank	253	4.32	178	3.04	410	7.01	36.5
Provincial bank	414	7.08	264	4.51	603	10.31	48.3
Great bank Provincial and	48	0.82	54	0.92	100	1.71	25.9
great bank	86	1.47	97	1.66	156	2.67	49.6
Total	5,851	100	5,851	100	5,851	100	

Table 4.6 Firms with bank directors as supervisory board chair or vice-chair

Source: Fohlin (2005).

(19 percent of the sample overall) were held solely by private bankers. A similar number of firms had provincial bank directors, and no other bankers, on their supervisory boards. Only 12 percent of joint-stock firms received representation from a great bank—one of the top nine banks—and that number is even smaller among the top four banks, the so-called D-banks: Deutsche, Dresdner, Darmstädter, and Disconto. In his 1911 treatise on the German universal banks, Jacob Riesser gave a list of all joint-stock companies with great bank directors on their boards. That list contained 171 industrial firms (that is, not counting railroads and commerce), which would have amounted to less than 5 percent of all joint stock firms in the relevant sectors.

The numbers decline further when considering bank control of the leading positions in nonfinancial firm supervisory boards. The chair (*Vorsitzender*) and vice-chair (*stellvertretender Vorsitzender*) of the supervisory board typically maintained the most control over the policy agenda of a firm. Thus, a banker in such a post might have wielded more power than he could as an ordinary member. Table 4.6 tabulates the frequency of such positions

in the current sample and indicates that less than 22 percent of firms had a bank director as chair or vice-chair of their supervisory boards. That figure drops to less than 14 percent of firms when considering only chairmanships. In other words, in fewer than half of the cases in which a banker sat on a firm supervisory board was the banker in one of the top two posts. The provincial banks naturally held the most chair- or vice-chairmanships (10 percent of the sample), but the private bankers were close behind (7 percent of the sample). The great banks held relatively few chair or vice-chair positions, amounting to less than 5 percent of the full sample and less than 2.5 percent when considering only chairmanships. Compared to the smaller banks, the great banks were also less likely to hold the top positions among the firms on whose boards they sat: 26 percent of board seats for the great banks, compared with 48 and 37 percent of board seats for provincial and private bankers, respectively. In the cases of dual provincial and great bank directors, the figures fall in line with the provincial banks (50 percent of such board members were chairs or vice-chairs). Extrapolating to the full population of German industrial firms, these figures indicate that directors of the nine great banks chaired the supervisory boards of fewer than 100 German nonfinancial firms in the last two decades before World War I.

Although historians and contemporaries clearly underscore the pervasiveness of bank-firm relationships through interlocking directorates, the older literature does not explicitly reveal how or why these relationships emerged. Still, several hypotheses can and have been used to explain the development of formalized banking relationships and how these links may have benefited the German economy during the later stages of industrialization. Most of these hypotheses emphasize the amelioration of information problems for banks by screening firms before providing finance (ex ante monitoring), keeping watch over the firm's activities and results (interim and ex post monitoring), or affixing a seal of approval to signal investment-worthiness. Positions on firm supervisory boards are thought to have allowed banks access to and influence over strategic planning and investment decision making, thus facilitating the transfer of entrepreneurial expertise to firms. Theoretically, then, the intervention of bankers leads to better decisions by firms and outside investors, less incentive for credit rationing, and larger potential markets for new securities, especially equity, issues.32

The evidence on bank board seats clearly shows that firm characteristics

32. See Aoki (1988) on various types of monitoring and Diamond (1984) for a theoretical model of delegated monitoring. On credit rationing, see Stiglitz and Weiss (1981). In the framework of asymmetric information theory, all bank relationships are essentially the same; there is no a priori reason to assume that smaller, provincial universal banks resolve information problems better or worse than their Berlin counterparts. But since the data allow differentiation among the types of banks represented on firm boards, Fohlin (2006) uses a categorical variable to investigate possible systematic differences among private bank, provincial bank, great bank, and joint provincial and great bank attachments.

vary markedly depending on the type of bank considered.³³ This finding, in itself, indicates a lack of generality of the hypotheses laid out. Differences in bank size and location help determine relationships with industrial firms. Even within specific bank categories, the results demonstrate little support for the traditional hypotheses: investment, profits, and income growth should all positively predict bank board memberships, but in fact they do not. Among listed firms, dividend-adjusted stock returns are also statistically insignificant.³⁴ The insignificance of investment and income growth casts doubt on all three hypotheses, while the results for profitability undermine the consultancy hypotheses most specifically. At least, it is safe to conclude that, if universal banks were providing advising, their impact in the areas one would consider most important (such as profits) was small. Certain other variables are significant in some cases but not others. For example, financial asset level (normalized by total assets) negatively predicts board participation by private banks and provincial banks as anticipated but provides no statistical power for great bank or combined attachment. Age, also expected to relate negatively to attachment, is only significant and negative for provincial banks.

Debt-equity ratios are more difficult to forecast due to conflicting implications of the hypotheses. Curiously, high levels of debt finance positively predict supervisory board membership by a provincial bank or a great bank, but not for private banks alone. The coefficient of debt-equity ratio is positive for combined bank affiliation, and the level of significance only falls slightly short of 10 percent. Thus, while it is not a strong predictor of combined attachment, debt finance is clearly at least a weak factor. Size is included as a control variable, and it strongly predicts board membership by all but the provincial banks. Even for provincial bank affiliation, size obtains a positive coefficient—but it is statistically weak. It is not surprising that the largest banks should attract the largest customers, so one would expect that among attached firms, the largest ones would affiliate with the great banks and the smaller ones with the provincial banks. It is less clear, however, that size should be closely tied to attachment in general or attachment to the private banks (in most cases much smaller than their jointstock counterparts) in particular.

This finding does point up the connection between many of the private bankers appearing on corporate boards and the great banks. As the forerunners and often founders of the universal banks, an important subset of private banks was intimately tied to various joint-stock universal banks. Some clearly maintained those links, often sitting on incorporated bank supervisory boards for many years. The most powerful of the private

^{33.} Fohlin (2006) reports multinomial logit coefficient estimates, where the dependent variable is V2AR—the direct measure of bank attachment.

^{34.} The inclusion of stock returns obviously limits the sample to listed firms and therefore reduces the number of observations by about two-thirds to three-quarters.

bankers were likely those associated with the largest banks, primarily the Berlin-centered great banks. Such an explanation for the connection between size and private bank board memberships therefore hints at the importance of location and prestige, in addition to bank size, in determining board memberships. So, for example, though private banks on their own were too small to fully underwrite securities issues for the largest firms, they participated in underwriting syndicates with other banks and gained access to corporate boards in this manner. The findings on size therefore lead naturally to the question of stock market listings and the role of universal banks in the securities markets.

Stock market listing is the only variable that provides consistent and significant prediction of board membership for all types of bank affiliations, though the magnitude of the effect varies depending on the type of bank involved. The probability of the various sorts of bank board membership differs markedly depending on whether or not a firm is listed on a stock exchange, even controlling for all the other factors that relate to bank relationships. For example, unattached firms comprise nearly half (48 percent) of the overall sample of firms, but among unlisted firms that share is 61 percent. After controlling for the other relevant factors, however, the adjusted probability of being independent given that the firm is unlisted is 53 percent. In contrast, listed firms have a 30 percent adjusted probability of being unattached, compared to a 26 percent unadjusted probability. These figures mean that, even when controlling for other firm characteristics, the chance of being unattached is 23 percentage points lower assuming a stock market listing than not (about a 75 percent reduction in the likelihood of independent status). In contrast, the probability of attachment rises between 3 and 9 percentage points, depending on bank type, when a hypothetical firm changes from unlisted to listed. Given the relatively low likelihood of having a great bank on an unlisted firm's board (about 9 percent, controlling for other factors and including those with combined attachment), the increase due to stock market listing represents a doubling of the probability. In comparison, the adjusted probabilities of private bank or provincial bank board membership rise less with listing status, but still increase by over one-third (17 to 25 percent for private bank attachment and 20 to 27 percent for provincial bank attachment).

The strong significance of listing suggests that bank board memberships were at least partly related to securities issues and trading. Such an explanation is very plausible for a number of reasons. By the end of the nine-teenth century, companies wishing to gain admission to a German stock market were subject to several preliminary requirements, not least of which was the stipulation that the firm's share capital be fully paid up.³⁵ This reg-

^{35.} See chapter 8 in Fohlin (2006) on the stock markets and their place in the overall corporate financial system in Germany.

ulation alone likely necessitated the engagement of a universal bank, and, having underwritten the new securities, that bank would have acquired some portion of the issued shares, and sometimes more than the bank could place with investors. Banks often joined forces to underwrite large issues, and larger firms naturally would have required a greater number of banks in order to keep each individual stake constant. Under such circumstances, the firms with the highest share capitals would be the most likely to end up with supervisory board representation from multiple banks.

In addition to their underwriting and placement activities, universal banks were actively engaged in the brokerage business. The extensive trading of securities through the banking system likely provided further opportunities for banks to hold firm shares. Furthermore, since the universal banks maintained extensive networks of commercial clients, retaining a universal bank may have allowed firms to reap the benefits of network externalities. Bankers not only created their own secondary markets in listed shares, but they also became fully ensconced in the governing bodies of the stock exchanges. As the gatekeepers of the German capital market, therefore, the universal banks gained easy access to a broad range of securities—particularly those that were listed.

Finally, it is also possible that firms made their way into bank networks because they were already listed or about to become so. Since the Reichsbank accepted as collateral only securities listed at a German bourse, such issues may have been in turn more likely to be accepted as collateral by universal banks.³⁶ A bank may have then exercised influence in the choice of supervisory board members of the firms whose shares the bank held as collateral, particularly when shares were owned by small, outside stakeholders.

Modern Patterns of Interlocking Directorates. In the past few decades, debates have continued over the placement of bank employees in the supervisory boards of nonfinancial firms. Some argue that bank employees were considered able monitors and that it was merely coincidental that bank employees were appointed to supervisory boards; others claim that banks sent employees to supervisory boards in order to better monitor their credit engagements and to position themselves to sell additional financial services and perhaps to influence corporate policy in favor of other companies in which the bank held a stake.³⁷ Contradicting the more activist theories of board membership, Hopt (1996a) argues that banks already had any necessary access to customer financial information by virtue of disclosure requirements stemming from the credit relationship itself, as well as from participation in the firms. A similar perspective sees these personal linkages as

36. See Engberg (1981).

37. See Böhm (1992), p. 186.

ways to build cooperation among firms in order to minimize risk and uncertainty (Schreyögg and Papenheim-Tockhorn 1995, p. 205).³⁸

Twenty years ago, the view predominated that banks actively pursued board seats in an effort to exert control over corporations in which they were interested. One study, covering the 1960s and '70s, found that the banks held seats (mandates) in all branches of industry and had gradually shifted focus to mandates in larger corporations by 1978 (Albach and Kless 1982, p. 977). This move arguably demonstrated a new strategy of quality over quantity: gaining power in the most important firms rather than via a large number of mandates with smaller industry players (Albach and Kless, p. 977).

More generally, board members usually hold only one mandate at a time, at least among the relatively large German firms. In a 1989 sample of 492 such companies, having a total of 7,778 members in their management (2,061) and supervisory (5,717) boards, the vast majority of representatives (86 percent) had only one mandate.³⁹ Still, there was a substantial share of representatives who did hold multiple seats and therefore created interlocking directorates. Indeed, in this particular sample, 14 percent of the people holding seats in these firms accounted for one-third of all mandates in the companies, and a small handful held upward of ten to twelve seats apiece (Pfannschmidt 1995).

It also appears that bank relationships last, or they did at least in the 1970s and '80s. Banks at that time seem to have maintained purposeful and stable linkages with firms. For example, out of a sample of 56 of the largest 500 *Kapitalgesellschaften* in 1987, almost all of the bank board positions between 1969 and 1988 exceeded personal ties held by one individual bank employee and appeared to represent intentional moves to build lasting relationships (Schreyögg and Papenheim-Tockhorn 1995, p. 223).⁴⁰ Once again, though, the big-three banks were the main participants in these partnerships, holding forty-nine out of sixty-six stable linkages maintained by the top fifteen banks (Schreyögg and Papenheim-Tockhorn, p. 223).

Even among the largest 100 firms, the proportion of mandates held by bankers has fallen gradually since the late seventies—from 8.6 percent in 1978 to 6.4 percent in 1996 (Bokelmann 2000). Still, even among these large companies, the banks held relatively few board seats—never more than 15 percent of any board (Böhm 1992, pp. 194–95).⁴¹ And most banks do not engage actively in these relationships. Half of the bank-held posi-

38. Tradition might also explain the reappointment of the same bank to a vacated seat.

40. Intent is evidenced by the new appointment of individuals from a given bank when a previous representative from that bank left a firm's supervisory board.

41. Size is measured by revenue as of 1986. Half of the mandates are elected by labor, which automatically halves the number of seats available to bankers. At the same time, this powersharing arrangement may lessen the banks' influence via the supervisory board seats.

^{39.} Pfannschmidt (1995), whose sample includes 492 big German companies as of December 31, 1989 (consisting of the FAZ-list of the hundred biggest companies and companies out of the Bonner Stichprobe database).

tions traced back to just two banks—Deutsche and Dresdner—with Deutsche holding twice as many as Dresdner.

Banks have also decreased the number of firms on whose supervisory boards they sit. In 1986, over two-thirds of the top 100 firms, and 43 of the top 50, had bankers on their boards. The Deutsche Bank alone sent representatives to 40 of the top 100 (in 1980). By 1990, that figure was down to 35 firms, while in 1998, it had dropped to 17 of the top 100 firms. Deutsche Bank and Allianz, two of the primary participants in board representation, have enacted clear plans to dissolve their formerly strong and thick ties with German companies—Deutsche, in particular, announced in March 2001 that members of the bank would no longer take up supervisory board chairmanships (*Aufsichtsratsvorsitze;* Beyer 2002).

If we constrain the pre–World War I sample to the largest firms—taking the top 10 percent by total assets, for example—the results are quite similar to those for the 1990s: approximately one-third to one-half of these large and mostly listed firms had one or more of the great banks represented on their supervisory boards, depending on the year in question. Thus, it is clear that banks, most noticeably the largest ones, have always taken an active interest in corporate control, especially of the largest firms. The latest swing away from board representation can also be placed in this much longer perspective and thereby be seen as a historical low point.

Proxy Voting

Direct ownership of shares accounts for only part of the networking between universal banks and industrial firms. As the first part of this chapter indicates, universal banks owned significant stakes in relatively few firms—quite clearly a smaller set of firms than those on whose supervisory boards they held seats. Bankers must have entered boards by other means, and one important avenue for such bank access is proxy votes—votes entrusted to the bank by the actual owner of the share.

Proxy Voting before WWI. Given their involvement with the placement of new issues, their provision of safe deposit services, and their lending secured by stocks, the universal banks would have been the logical parties to take an investor's proxy votes. Indeed, many investors would have seen proxy voting by banks as a valuable service. Having acquired voting power in the general assembly (*Generalversammlung*), the bank could directly influence the selection of supervisory board members and thereby indirectly influence firm management and strategy.

Unfortunately, it is difficult to test this hypothesis. As with direct ownership data, hardly any data exist on proxy voting in Germany before 1913, though qualitative evidence and descriptive accounts suggest that it was common.⁴² It may be possible to provide additional insight into the matter

^{42.} Some new efforts are underway and could clarify some of these issues.

with the current data, but several assumptions must be made. For example, if small stakeholders felt less compelled to vote their own shares than did those with large stakes, then small shareholders would have been more likely to deposit their shares and turn over their voting rights to a universal bank. According to this reasoning, closely held firms—firms whose capital was held by a small number of large shareholders—would experience less proxy voting than would widely held firms. As a result, the dispersion of capital ownership would increase the likelihood of accumulation of board seats by universal bankers.⁴³ The same customers who facilitated securities issues by a firm, therefore, may have been the main suppliers of proxy votes to universal banks.

Based on this reasoning and on data availability, figures on the number of shares issued substitute for dispersion of ownership. While it is hardly a perfect measure of dispersion, the number of shares outstanding does offer valuable information. For a given share, as the number of shares declines, the value of each share relative to total capital increases. If shares are indivisible, the number of shares outstanding represents the maximum number of shareholders in a firm.⁴⁴ Clearly, it is possible that firms with large numbers of shares were closely held, yet firms with relatively few shares outstanding are more likely to have been closely held. In the sample assembled by Fohlin (2006), share prices fall in a narrow range, regardless of attachment status, and therefore the number of shares issued is highly correlated with total assets, share capital, and net worth (96 to 98 percent). The stock of fixed assets is slightly less highly correlated with the number of shares (90 percent), making it the best available control for firm size.

The number of shares outstanding is the only variable that strongly predicts broadly defined bank affiliations of all types.⁴⁵ Several other variables (size, stock market listing, debt-equity ratio, age, and financial assets) also help explain multiple broad attachments. Beyond the industry sector, however, only number of shares helps predict broad attachment with a single category of bank (either a provincial or a great bank). The strong, positive relationship between the number of shares in circulation and broadly defined bank affiliation suggests that ownership dispersion is positively associated with at least loose involvement in a joint-stock bank network. Given the limitations on the data, this is the most compelling evidence available that proxy voting was an important factor in the involvement of firms in interlocking directorates with banks.

In contrast, the number of shares outstanding provides no strong pre-

^{43.} See Chirinko and Elston (1998), in which the authors show that bank-influenced firms tend to have a more dispersed ownership structure than independent firms.

^{44.} It may have been possible for several people to own a single share, but I have no evidence for or against such a practice.

^{45.} The models repeat the multinomial logit model of narrow attachment (Fohlin 2005). Private bankers are considered unattached, since private banks do not generally have supervisory boards whose members can concurrently sit on firms' supervisory boards.

dictive power of narrowly defined bank attachment.⁴⁶ To the extent that the number of shares captures the dispersion of capital ownership, the change in the coefficients from those in the models using the broad definition of attachment suggests that proxy voting was relatively unimportant for the direct involvement of bank directors in supervisory boards. A hypothesis that can explain why the number of firm shares is a strong, positive indicator of broadly defined affiliation but is of no predictive value for narrowly defined attachment runs as follows. Bankers would have sought the closest oversight of firms in which the bank invested directly. Membership by bank directors on firm supervisory boards therefore may have stemmed from bank holding of a firm's securities or debt. Given the physical limits on a bank director's ability to monitor them, firms in which a bank held proxy votes but minimal securities or debt may have reasonably fallen to a lower priority for bank oversight. Proxy votes, therefore, may have simply represented a means by which banks could vote into office bank-friendly supervisory board members-in particular, individuals who already sat on their own supervisory boards or whom they might know from other business dealings. Clearly, these arguments about proxy voting and ownership structure are largely hypothetical. All that can be said from the analysis is that the importance of proxy voting cannot be rejected on the basis of the currently available data. It is unlikely that we will definitively resolve the uncertainty about the historical importance of proxy voting.47

Modern Patterns of Proxy Voting. The representation of banks on supervisory boards relates closely to the voting of ownership shares in these firms. Available figures on the voters present at annual shareholder meetings suggest that shareholders do not exercise the right to vote their shares. The attendance of small shareholders is extremely low, and rates decreased, at least at the largest German firms, from the mid-1970s to the early 1990s.⁴⁸ As they were in the pre–World War I era, these small share owners are still often represented via proxy votes turned over to institutions, largely banks. Data on proxy voting by banks continue to elude researchers, since there is no central database about general annual meetings. The list of participants (*Teilnehmerverzeichnisse*) is required to be recorded only in the commercial

46. Number of shares is significant in the narrow attachment logit model only when sector controls are excluded, clustering is not assumed, and normal (as opposed to robust) standard errors are used. Number of shares is also positive and significant in a panel probit model comparing all attached firms to independents, but the estimation technique appears to be rather unstable. In particular, different assumptions on the model provide significantly different results. Thus, the coefficients of such a model should be viewed with caution.

47. Despite some new efforts to gather proxy voting data, I remain pessimistic about the possibility of finding *sufficient* data to statistically test the proxy voting hypothesis in any direct or conclusive manner for the prewar period.

48. Adams (1994, p. 156) reports data for five of the largest German companies for 1975 and 1992, while Brickwell (2001, p. 62) provides an overview of turnout at the general meeting of shareholders of four financial services companies in 1998 and 1999.

registers of the city where the company has its seat. Moreover, banks may remain silent on whether or not they cast instructed proxy votes. These data limitations hamper the investigation of proxy voting, and past studies have often exacerbated the interpretation problems by constraining their samples to firms with dispersed ownership, in which proxy voting by banks is particularly important.

In one such study, for 1986, financial institutions, particularly the bigthree universal banks, proxy votes played a decisive role in the representation of shares at annual general meetings of shareholders. In the thirty-two largest corporate firms with dispersed ownership, on average, 64.5 percent of shares received representation at the annual general meeting of shareholders.⁴⁹ While it was very rare that one bank alone dominated the general annual meeting, taken together, the big-three banks often held a majority of votes cast (45 percent share on average), and, with the notable exception of the meetings held by Volkswagen, banks as a group always held a majority of represented votes (83 percent share on average; Gottschalk 1988).⁵⁰ The big-three banks also held one-third to one-half of the votes present at their own general annual meeting (Deutsche Bank: 47.17 percent, Dresdner Bank: 47.08 percent, Commerzbank: 34.58 percent). Although it is unwise to infer any kind of trend, the data for 1990 show a slight reduction (to 72 percent) in the average share of votes held by the banks in the top 100 firms (Baums and Fraune 1995).⁵¹ The big-three banks continued to hold substantial voting percentages at their own meetings.

A finer breakdown indicates that only ten of these firms had truly highly dispersed share ownership (less than 25 percent of shares held in blocks), whereas seventeen had some bank-held stake and thirteen had significant (nonbank) block holders (Böhm 1992).⁵² Proxy voting by banks was greatest among the first group, giving the big-three banks 44 percent of votes cast at the annual meeting (versus 25 percent of all possible votes). Interestingly, when banks owned their own stakes in firms, they also held proxy votes, but they averaged lower total vote percentages (for the big-three alone, 25 percent of the total or 33 percent of votes present at the meeting)

49. See Gottschalk (1988). He started with the 100 biggest companies (as measured by value added in 1984) and selected those firms whose shares were more than half controlled by dispersed owners or by banks. He based his calculations on the index of participants (*Teilnehmerverzeichnisse*) of the general annual meetings of these companies in 1986 (1987 for some companies).

50. The big-three banks are Deutsche, Dresdner, and Commerzbank; he also included the Bayrische Vereinsbank, Bayrische Hypo, the state banks (*Landesbanken*) and savings banks (*Sparkassen*), the credit cooperatives (*Genossenschaftsbanken*), and other financial institutions.

51. Their sample contains only twenty-four companies, so it's possible that fewer firms had dispersed ownership, though data availability could also explain part of the difference in sample sizes.

52. Only thirty-two of forty attendance lists for annual meetings (*Hauptversammlung-spräsenzlisten*) were available.

compared to widely held firms. Not surprisingly, the banks held the fewest proxy votes in firms with dominating block holders: the big three held only 6 percent of votes (7 percent present at the annual meeting), and all banks together held 13 percent (15 percent of those cast at the meeting).

Broadening the sample to include smaller firms, those with more concentrated share ownership, and unlisted companies, the findings show significantly less bank control, especially when instructed proxy votes are excluded.⁵³ For the Edwards and Nibler (2000) sample from 1992, proxy votes accounted for a greater share of total bank votes than did actual equity ownership, and the figures are far lower than for the more restricted samples used in other studies: banks as a group averaged an 8.5 percent share of firm voting rights in the form of proxy votes, compared to 6.7 percent from equity ownership.⁵⁴ The banks rarely held any proxy votes in unlisted firms but held at least some in the majority of the listed firms. As with previous studies, the big-three banks played the dominant role in proxy voting.⁵⁵

Given the paucity of proxy voting data before the 1980s, it is difficult to compare these more recent patterns with those of previous periods. It is safe to say, however, that proxy voting by banks, especially by the largest banks, has been a key feature of the connection of banks to corporate ownership in Germany since the industrialization period. Moreover, that link has apparently always been the tightest among large firms with stock market listings and dispersed ownership structures.

4.3 The Underlying Political and Legal Factors

4.3.1 Roots in the Industrialization Period, 1870–1913

Incorporating Firms and Issuing Equity Shares

The majority of German corporations are organized as *Aktiengesell-schaften* (AG), literally "share companies."⁵⁶ Share companies are required

53. While customers turning over voting rights are explicitly offered the chance to instruct banks on their voting, only about 2–3 percent of them take this opportunity (Baums 1996).

56. See Whale (1930), pp. 331–33, for a discussion of different company forms in Germany up to that point (which remain essentially unchanged). But regulations and de facto rights of shareholders in AGs are very similar to those of the other major type of corporation, the *Kommanditgesellschaften (auf Aktien)*.

^{54.} Their sample is based on 156 of the 200 largest nonfinancial firms as measured by in terms of turnover as of 1992.

^{55.} See also Perlitz and Seger (1994), whose sample consists of 110 (large, listed) industrial companies of which only 57 could be evaluated for proxy voting and only for 1990. They found total proxy voting by banks of less than 10 percent in over one-third of the firms, but also found 30 percent of firms (17/57) had at least a majority of represented votes held in proxy by banks. Also, 83 percent of the 110 firms had at least one banker on its supervisory board. Böhm (1992) has similar findings. See also the earlier study by Cable (1985) on bank involvement through proxy voting in the 1970s.

to have a general meeting of shareholders (*Generalversammlung*) and a supervisory board (*Aufsichtsrat*) to represent shareholders.⁵⁷ The supervisory board of an AG selects the executive board, a group composed of high-level firm managers.

Although the AG form predates the industrialization period, it took hold only after the liberalization of incorporation laws around 1870. These legal changes coincided with a rapid development of large-scale industry. Certain types of industries—particularly the railroads in the late 1830s and 1840s and then the banks in the late 1840s and 1850s—did avail themselves of the AG form. But the numbers remained low until 1870, when amendments to the 1861 company code (*Handelsgestzbuch*) replaced state concessions with objective criteria.

In the early years, the importance of the AG grew slowly in comparison with the personal enterprise. Very few AGs appeared before 1850: estimates put the numbers at only 16 in Prussia between 1800 and 1825, and 112 between 1825 and 1850. In the Bavarian Kingdom, just 6 existed between 1838 and 1848, and 44 more came in the following decade. The ranks of AGs expanded faster after 1850, with 336 AGs founded in Prussia up to 1870 and 57 in Saxony, where just 10 existed in the year 1850.⁵⁸ The real boom in formation came between 1870 and 1873, with the liberalization of company laws and the establishment of the German Empire: 928 new AGs were founded, with a total nominal capital of 2.81 billion marks (Henning 1992, p. 210). Yet, even by 1882, private firms still accounted for nearly 95 percent of all enterprises in Germany (table 4.1; Gömmel 1992, p. 35). The numbers exceeded 3,000 by 1890 and stayed well over 5,000 from the late 1890s until at least World War I.

The boom of the early 1870s ended in a prolonged crisis from 1873 to 1879, the effects of which prompted immediate political pressure for restructuring the economy and particularly for addressing the state of shareholder laws. The ensuing ups and downs in the markets and the broader economy spurred periodic revisions to the law, most of which had relatively minor impact in an era of overall prosperity and, given the context, liberal political thinking.⁵⁹

The first of these efforts resulted in the company law of 1884—a revision to the unified national regulation of share companies of 1870. The new law added two important provisions: first, it required new corporations to create a prospectus, specifying a time period within which the subscriptions would take place, and, second, it stipulated that the opening general meet-

^{57.} Most other types of companies, and particularly small ones, are not required to have a supervisory board.

^{58.} Laux (1998) mentions 454 AGs for Prussia up to 1870. See Pross (1965).

^{59.} See Fohlin (2002b, 2006) for a review of the pre-WWI laws and regulations concerning the stock exchanges and corporations as well as the imposition of taxes on exchange listing and transactions starting in 1882.

ing of shareholders must attract a minimum percentage attendance.⁶⁰ Underwriting issues on the basis of subscriptions could cause long delays and put new issues at risk for failure to meet regulations and deadlines. To insure success, companies therefore turned to informed intermediaries—the universal banks—who would purchase the new capital and subsequently sell individual equity shares to the public.

A second round of political and legal debates followed the financial crisis of the early 1890s (Wiener 1905; Buss 1913; Meier 1993; Schulz 1994). The resulting stock exchange law in 1896 contained a number of provisions regarding the issuing and listing of securities, and the revised company law of 1897 added further stipulations.⁶¹ The new regulations—mostly making it more difficult to issue and list stock shares—added to the difficulties in attracting outside investors for firms and, it is commonly believed, created a need for greater bank credit, while pushing more securities trading from the exchanges to the banks. The new law may well have solidified simultaneous founding, and the central position of the universal banks, for stock issuance. Indeed, Robert Liefmann (1921, p. 476) attributed the form of the German universal banks partly to the regulations imposed on company promotions (cited in Whale 1930, p. 40).

The Supervisory Board and Corporate Control

In the first half of the nineteenth century, while the government still maintained tight control over incorporation, it imposed little regulation on corporate governance. The voting rights of shareholders and their representation by supervisory boards evolved over time. In the 1840s and '50s, scholars wrote on the distribution of voting rights according to share ownership.⁶² Many were concerned about the ability of the smallest shareholders to be heard and the potential for excessive control by a small number of large shareholders. As the regulatory stance on incorporation liberalized, and as vast numbers of firms began to take advantage of limited liability, the clear need arose for legal guidelines for corporate control. Of particular concern were the smallest shareholders, who were often disenfranchised and also unable to access information about the firms in which they invested. Thus, in promulgating the 1870 company law, the government demanded, in return for free incorporation, greater uniformity and consistency in corporate accounting, reporting, and governance (Hopt 1998). In

^{60.} Text of share company law of 1884 (*Gesetz, betreffend die Kommanditgesellschaft auf Aktien und die Aktiengesellschaften*), articles 209e and 210. The 1870 company code had already required the full amount of an issue to be subscribed and at least 25 percent to be paid up before a new joint-stock company could be founded; for shares issued at higher than nominal value, 50 percent payment was required.

^{61.} See Nussbaum (1910).

^{62.} See Dunlavy (1998).

particular, the law stipulated the creation of the dual board structure, in part as a means of protecting shareholder and public interest, independent of the management of the company.

The 1884 law added new regulations on corporate governance; among other stipulations, it prohibited simultaneous positions on the supervisory and executive boards of any one firm. Former company directors could, and often did, take seats on the supervisory board, as long as they had been officially discharged from the executive board (*Handelsgesetzbuch* art. 225a). The 1884 law also explicitly raised the level of responsibility inherent in supervisory board positions. Whereas the 1870 law granted supervisory board members the right to obtain information about the company, the 1884 law made such oversight a duty. At the same time, though the 1870 law stipulated that supervisory board members must own shares of the firm on whose board they sat, the 1884 law made such equity stakes optional.

Shareholder representation also grew more democratic as the nineteenth century wore on. The use of proxy voting may have partially alleviated the disenfranchisement problem, since small shareholders—or large ones—could deposit their shares with a bank and protect their stakes both literally and figuratively. That is, they found safe storage of easily lost or stolen bearer shares along with representation of their votes in the general meetings of shareholders. Bankers could hypothetically build up significant stakes from many disparate small shareholders and thereby attain far greater standing at the general meeting than could any one small stakeholder could. As long as the banker could be trusted to vote in the interest of the small shareholders, the system improved their position. This point leads naturally to questions of corporate control: Who really controlled or controls German corporations—the owners or their proxy holders?

4.3.2 Postindustrialization Developments

The early post–World War I period brought a wave of company foundations, and the hyperinflation of the early 1920s brought an even larger swelling of the corporate ranks. Financial crisis in 1931 and the ensuing depression of that decade reversed the trend. The Great Depression of the 1930s hit German corporations hard and sent large numbers of them into insolvency. The wave of corporate failures prompted new calls for reform to the corporation laws (*Handelsgesetzbuch* or HGB) as well as the desire to create a code (*Aktiengesetz*) specifically addressing shareholding and attendant rights and restrictions. Ultimately, the debates led to an "emergency order" (*Notverordnung* or NotVO) on stock companies. The act, set into force by the Nazi regime, without parliamentary action, included a tax credit, stronger regulation of banks, stronger disclosure rules, and several other stipulations. The legal changes, and their underlying political motivations, played a major role in the patterns of corporate control that evolved over the rest of the twentieth century.⁶³

The Relationship Between Share Ownership and Voting Rights

Democratic intuition, liberal traditions, and today's market-orientation trends suggest that one share should be associated with one vote. Deviations from a one-share-one-vote system, the most important of which appeared in the interwar years, greatly affected patterns of ownership and control in Germany. Because the disassociation of ownership and control allowed founders to control their firms longer than they would have otherwise, these legal changes altered the fates of families and their firms.

Multiple-Vote Shares (Mehrstimmrechtsaktien). Mehrstimmrechtsaktien are quite literally shares that are associated with multiple votes. This means that a few shares and little capital investment can lead to a lot of voting power. In the interwar years, this instrument was used extensively and was usually justified as means of fighting dilution of family control. Multiple voting rights helped solve the need for capital after WWI, while allowing founding families to keep their grip on their firms (Pross 1965, p. 84). Based on a large sample of AGs studied by the national statistics office (Statistisches Reichsamt), 842 out of 1,595 AGs in 1925, and close to 40 percent out of 913 in 1934, used shares with multiple voting rights. The votes per share ranged between 20 and 250 times higher than the normal voting right. These shares, usually associated with just a small fraction of the overall capital, were loaded with as many votes as necessary for the domination of the general meeting of shareholders. Usually, these privileged shares were given to members of the Aufsichtsrat or to banks that committed themselves to vote according to the controlling group. The remaining shareholders and any future shareholders effectively lost all power. According to the Statistisches Reichsamt study, ownership of 10 percent of the shares was sufficient to control more than 40 percent of the votes in 388 companies in 1925. Due to the generally poor attendance at the general meetings of shareholders, 40 percent of the available votes usually meant the majority of the votes present (Pross 1965, p. 86).

Multiple-vote shares were prohibited by the reform in 1937; however, the Nazis apparently made exceptions favoring family enterprises—a topic that appears again in the next section. The new AktG of 1965 allows *Mehrfachstimmrechte*, but only after a special concession to be issued by a

^{63.} The discussion here sticks to the primary focus of political and legal influences on corporate governance institutions. That approach is not intended to minimize the human tragedy of the Nazi regime.

federal minister (AktG para. 12).⁶⁴ Today they are of little importance, and, in fact, the new law on control and transparency in the business sphere (KonTraG 1998) explicitly prohibits the issuing of *Mehrstimmrechtsaktien*.

Vorratsaktien and Vorzugsaktien. Vorratsaktien ("depot shares") were another instrument heavily used in the time of the Weimar Republic. According to Menke (1988), these shares were issued without granting stockholders a right to buy them. Officially, they were created to help the company react quickly when needed for mergers or acquisitions, and, pending their use, were not eligible for trade. Their actual purpose was different, though: Menke argues that the shares were loaded with multiple voting rights in order to keep the control over the company in the hands of the controlling group or an associated shareholder without having to invest huge amounts of capital.⁶⁵ This misuse led to legal changes in 1937, and they vanished thereafter.

Vorzugsaktien ("preferential shares") were created for the purpose of financing corporations in trouble. These shares granted holders preferential rights to dividend payments. This right was offered as an additional incentive for investors to buy into a poorly performing company. The shares came without voting rights, so as to raise substantial infusions of capital without diluting control of the firm. The 1937 reform of the AktG strengthened the right of holders of *Vorzugsaktien:* not more than 50 percent of the capital could be issued in these preferred shares, they had to have all other rights associated with shares except for voting, and they regained their voting right if the corporation was one year late with the payment of the preferential dividend.

Höchststimmrechte and Other Restrictions. Höchststimmrechte (maximumvoting rights) were rules that prescribed a limit to the number of votes a shareholder might hold. This could be achieved either directly by allowing fewer votes than the number of shares of an important shareholder or indirectly by prohibiting the purchase of more than a certain fraction of the shares.⁶⁶ While voting limitations have a long tradition in Germany many of the corporations of the early nineteenth century had them—the rules proved generally ineffective, since it was not difficult for a determined investor to have someone else own the stocks and for that investor to still control their votes. This instrument could be used to limit the power of ma-

^{64.} It would also be interesting to examine the cases in which *Mehrstimmrechtsaktien* were used after the war: with the influx of "oil dollars" from Near Eastern countries in the 1970s, these shares may have been used to prevent control losses to governmental investors from Near Eastern countries.

^{65.} See Menke (1988), p. 98.

^{66.} This section is based on Emmerich (2000) and Fey (2000).

jority shareholders, but it also worked as an effective threat against hostile takeovers. Heavy criticism of this restriction of the market for corporate control led to legal changes, and in the 1998 reforms *Höchststimmrechte* were phased out. The capital market actually rewarded this change: the prices for stocks from companies with *Höchsstimmrechts* clauses jumped when the legal changes were announced. The AktG 1965 had still allowed them, and even today corporations whose shares are not traded at stock exchanges are not subject to the prohibition of *Höchststimmrechten*. The rationale is to preserve control of founders—in many cases families—who are still involved, albeit with reduced ownership stakes, in smaller AGs. Of course, there are other related restrictions on voting shares, such as minimum stake requirements, and even on attending the general meeting of shareholders.⁶⁷

Codetermination. The idea that the management of a stock corporation should be responsible not only to the shareholders but also to other stakeholders can also be seen in the codetermination laws. Employees send representatives to the supervisory boards in stock corporations. By giving employees voice without actual ownership, these rules cause a major deviation from the one-share-one-vote rule. Of course, codetermination was introduced in order to represent employee interests in the supervisory boards, regardless of the implications for shareholder rights. Codetermination may have limited ownership dispersion, because shareholders attempt to counterbalance the power of the employees and prevent the damages that could occur if management and employees collude.⁶⁸ Roe argues that, due to codetermination, managers and large block holders circumvented the supervisory board by making decisions outside the boardroom—largely obviating the supervisory board as a governance device. In addition, he argues that codetermination and block holding are complementary. That is, dispersed ownership fits poorly with codetermination, because it prevents block holders from selling their blocks to the public and also scares off potential minority investors. Codetermination evolved over two postwar regulatory episodes in 1951 and 1952 and then in 1972 and 1976. While theoretically appealing, studies that examine the effect on the shareholders of employees in the supervisory board find little or no effect of codetermination.69

Block Holding and Other Forms of Monitoring. Given this background, shareholders are left with only one possibility to effectively control management: block holding as a monitoring device. Dispersed ownership cre-

^{67.} See Emmerich (2000) and Pross (1965).

^{68.} See Roe (2003).

^{69.} See Becht, Bolton, and Roëll (2003) for a review, including Svejnar (1981, 1982), Benelli, Loderer, and Lys (1987), and Baums and Frick (1999).

ates managerial agency problems, such as conflicts of interest between investors and managers.⁷⁰ There are several mechanisms that can mitigate these costs. Roe (1999) argues that there are four main monitoring mechanisms: market competition, takeovers, good boards of directors, and block holding. In his view, Germany has few takeovers, is weak at competition, and does not have strong boards. Hence, he argues, large block holders are the only control device for monitoring managers. If there is diffusion of ownership, no internal or external control device for the management will exist. When taken into account with the agency costs in corporate governance, the different mechanisms of monitoring are plausible. As effective as block holding may be, it is far from clear that it remains the only way of monitoring in Germany. Based on his empirical study, for example, Köke (2002, p. 128) argues that lenders use financial pressure to exert influence on management decisions and thereby positively impact productivity growth.

Legal Influences on Bank Control

The Shareholder Law of 1937. Legitimized by an overriding principle of acting for the good of the whole (known as the *Führerprinzip*), the 1937 shareholder law weakened the position of the shareholders—in particular, the general assembly—in favor of the management board (Vorstand). The management was no longer responsible specifically for shareholder interests but for all groups having a stake-figuratively-in the company, including the Reich (AktG para. 70I, p. 37).71 The new laws eased the process of transforming stock corporations into partnerships (Umwandlungsgesetz), while a higher minimum share capital of 500,000 RM impeded the founding of new stock corporations. While the law did tend to undermine the use of the AG form, it also simultaneously provided for greater disclosure of information to the public.⁷²

Although both the HGB and the AktG saw registered shares (Namensaktien) as the norm, in practice the market was dominated by bearer shares, because they allowed shareholders to stay anonymous.⁷³ Under the shareholder law of 1937, votes could not be cast by mail, making it even more likely that shareholders, especially small stakeholders, would be unable or unwilling to exercise their ownership rights directly. As an accommodation, the law provided two ways for shareholders to cast their votes by proxy. First, a shareholder could give his bank a Stimmrechtsvollmacht, al-

70. Again, see Becht, Bolton, and Roëll (2003) for a more thorough review.

71. It is easy to assume that the law represented standard Nazi thinking, given the date of its promulgation. Yet the president of the commission for preparing the new Aktiengesetz in 1965, Wilhelmini (1965, p. 153), argued that the 1937 law was not a piece of Nazi work. It seems that the main components of the law were actually articulated under the previous administration, the Weimar Republic.

73. See von Falkenhausen (1967), p. 69.

^{72.} See Kübler (1994), p. 12.

lowing the bank to cast the votes in the shareholder's name but also forcing shareholders to reveal their identity. Second, and more important in practice, the *Stimmrechtsermächtigung* ceded the shareholder's voting rights to the bank.⁷⁴ A *Stimmrechtsermächtigung* had to be given in written form and, while valid for up to fifteen months, could be revoked at any time. This form of proxy voting was later called *Bankenstimmrecht* or *Depotstimmrecht*, due to the heavy use of banks as the proxy holder.⁷⁵ Interestingly, this new regulation actually weakened the banks' position, since some banks had required customers to turn over *Stimmrechtsermächtigungen* automatically upon opening securities accounts. Even with the new regulations, banks could still do more or less whatever they wished with the voting rights that continued to be ceded to them.⁷⁶

Reforms of 1965. After World War II, American overseers, wanting to introduce shareholder democracy and to limit excessive concentration of power, began to initiate reforms in the German corporate sector.⁷⁷ These reforms, directed largely at the mining industry, included returning to registered shares, restricting proxy voting by banks to *Stimmrechtsvoll-machten* (the weaker form) for every individual general assembly of shareholders, and outlawing all anonymous voting. The law enacted specifically for the privatization of Volkswagen in 1960 (*Gesetz zur Privatisierung des Volkswagenwerkes vom* 22.7.1960) contained similar provisions, and the Schuman plan likewise imposed restrictions on proxy voting by banks involved with mining firms. Along the way, smaller reforms, called "*kleine Aktienrechtsreform*," tightened accounting standards and rules for building reserves.

The *Aktiengesetz* of 1937 was not seen as a major problem by many politicians in Germany after World War II, and even modern scholars suggest that arguments for reform stemmed from a desire to improve the lot of small shareholders and to promote a society based on democracy and capitalism, rather than to somehow right a wrong that was imposed under the Nazi regime.⁷⁸ The general atmosphere of reform that emerged during the reconstruction period favored a number of alterations to the status quo. Significantly, the 1965 reform bill abolished the *Führerprinzip* and, while retaining important powers for the management board, imposed a norm of majority rule for that body. Other elements of this new law included attempts to eliminate the practice of "silent reserves" that allowed corpora-

^{74.} See Hüffer (2002), p. 694. Though similar, the *Stimmrechtsermächtigung* gave banks much more power. See also von Falkenhausen (1967), p. 69.

^{75.} Hopt (1996a) calls the *Depotstimmrecht* a misnomer for that reason. The correct word is *Vollmachtsstimmrecht*, but at the moment these words are used synonymously.

^{76.} See von Falkenhausen (1966), p. 71.

^{77.} See von Falkenhausen (1966), p. 70.

^{78.} See Kübler (1994), p. 13 and Gessler (1965), p. 344.

tions to hide their true returns, strengthen the general assembly of shareholders vis-à-vis the management board—especially its director. The law also mandated greater oversight and control of management by the supervisory board, greater dispersion of share ownership, improved access to company information for small shareholders, and even regulation of industrial groups (Konzern).⁷⁹

One of the major changes of the 1965 law (AktG 65) concerned the process of proxy voting via banks. Under the new law, banks were allowed to cast votes as a proxy only when they received a written authorization (*schriftliche Vollmacht*) (§ 135 I AktG 65). Valid for up to fifteen months, the authorization could be given for all or only part of a customer's portfolio and could be revoked anytime (§ 135 II AktG 65). The shareholder could now stay anonymous, and banks offering to perform proxy voting had to offer customers the opportunity to provide specific instructions on how to vote (§ 128 II AktG). Likewise, the banks also had to inform their customers how the bank intended to vote. In the absence of customer instructions, the bank could vote according to its own plan (§ 135 V AktG, § 128 II AktG).

Recent Reforms. As important as the 1965 reform was, it left the banks with widespread and easy access to corporate control rights. Pressure for reform began to build anew as Germany's postwar economic miracle waned. By the 1990s, not long after reunification with the East, Germany slid into recession, and political debates focused once again on the power of banks in Germany's corporations. As a result, the government enacted three new laws to modify the existing shareholder law (AktG): specifically, the 1998 law on control and transparency in corporations (KonTraG 98), the law on registered shares and facilitation of voting rights (NaStraG 01), and the law on transparency and publicity (TransPubG 02). Political and public debates continue over further legislative changes in these areas.

The new laws stipulated some important alterations of corporate ownership and control, especially regarding the use of registered shares and the exercising of proxy voting rights. In the latter case, current law allows banks to take proxy voting authorization for an unlimited time but requires the proxy holder to inform shareholders yearly both of their option to revoke the authorization and of the opportunity for alternative representation. In an effort to avoid conflicts of interests, banks now also must create an organizational division of managers who prepare voting plans separate from other divisions of the bank—in particular, lending divisions. As further safeguards against conflicts of interest, banks must also inform their customers about personal linkages, such as bank employee membership on supervisory boards or major equity holdings in pertinent companies.

79. See Hopt (1996b), p. 210.

Furthermore, banks must also inform shareholders if the bank is a member of a consortium that prepared an initial public offering (IPO) or any issue of shares for a company in question. Notably, banks are not obliged to provide these services at all—but if they offer to cast votes in general, they are now required to offer the services to all customers (*Kontrahierungszwang*). This last provision aims to prevent banks from avoiding instructed votes in favor of only unrestricted voting rights.

The most recent regulations to be set in place (TransPubG 02) require corporations to declare whether they comply with the so-called "Corporate Governance Codex." They strengthen the supervisory board by increasing the information provision to that body; strengthen the general assembly of shareholders, among other things, by granting greater control over the distribution of profits; and specifically identify new ways for companies to communicate with shareholders and the market, for example, by broadcasting major meetings on television or via the internet. The underlying intent of this law was to bring the German corporate system into line with international standards and thereby increase the attractiveness of German firms in world markets. As further recommendations of the commission on corporate governance (chaired by T. Baums) remain under discussion, the situation bears continued monitoring.⁸⁰ Whether Germany will retain a relationship-oriented system of corporate ownership and governance remains to be seen. Whether such a system is desirable, or has in fact been widespread in Germany, is another question.

4.4 Consequences of German Patterns of Corporate Ownership and Control

Many have argued that poor legal protection of minority stockholders has led to the concentrated ownership found in Germany. Such concentration can affect firms in a variety of ways, though the theoretical issues are less than clear-cut. One possible benefit from concentrated ownership is better monitoring of management and improved performance. But ownership concentration could also permit block holders to reap private benefits at the costs of minority shareholders. Private benefits of control, as noted by Leuz, Nanda, and Wyoscki (2003), range from perquisite consumption to the transfer of firm assets to other firms owned by insiders or their families. Block holders seek to protect their private benefits, benefits that appear to be enjoyed only by insiders.

The available empirical evidence casts some doubt on these interpreta-

^{80.} Proposals include measures to increase supervisory and management board liability and more generally to strengthen disclosure rules and informational rights of shareholders. Other possible adjustments include restricting supervisory board members to a maximum of five supervisory board positions and establishing a central database of information on all corporations (see Bundesregierung 2001).

tions. Dyck and Zingales (2002) find a relatively small private benefit in Germany as compared to other countries. And, while there does seem to have been an ongoing concentration process from the end of World War II until the 1980s, but for the codetermination laws, there was no weakening in minority shareholder protection. Thus, the German pattern is not explained well by changes in shareholder protection. The civil law tradition also provides a weak explanation at best because the German legal tradition remains fundamentally one of civil law throughout. History suggests a wide range of political movements that seem to go much farther in explaining the German case.

Despite the obvious pattern of ownership concentration in Germany, it is difficult to conclude much about the effects of this structure on corporate performance. Köke (2002) finds that ownership concentration in combination with fierce product market competition increases productivity growth. Other authors, including Cable (1985), find a clear relationship between ownership concentration and corporate performance. Lehmann and Weigand (2000) argue that the relationship depends on the type of owner. Gorton and Schmid (2000) also find a clear relationship. Edwards and Nibler (2000) argue that minority shareholders gain benefits from an increase in ownership concentration, though this, however, does not hold for nonbank firms and public-sector bodies. They also find that the presence of second and third large shareholders is generally beneficial, except, again, for nonbank firms. This could point to a conflict of interests that Iber (1985) also describes.

Another question is of a more dynamic nature: Audretsch and Elston (1997) pose the question as to whether the German system is capable of financing new and innovative firms. The question remains—is there truly a negative impact on the firm or economy level, even though the stock markets have clearly lost considerable ground since the interwar years? Franks and Mayer hold that while patterns of ownership do differ markedly between German companies on the one hand and U.K. and U.S. firms on the other, corporate control is similar. They also find little relation between concentration of ownership and the disciplining of management in poorly performing firms, and between the type of concentrated owner and board turnover (Franks and Mayer 2001, p. 974).

These findings for the recent period echo the historical findings for Germany overall: in the two decades before World War I, when the German economy combined large-scale, universal banking with active markets, managerial turnover was highly sensitive to the performance of firms.⁸¹

^{81.} See Fohlin (2006). These findings stem from the regression of managerial board turnover on various indicators of firm performance (return on assets [ROA], dividends, and dividend-adjusted stock returns) plus a series of control variables and indicator variables for various subpopulations, such as firms with and without stock market listings and firms with and without bank directors on their boards.

Moreover, firms with listings on the Berlin stock exchange—that is, those that were most likely to be owned by external shareholders rather than founding families or other block holders—changed management even more in response to poor performance. In general, listed firms performed better, earning higher ROA and paying far higher dividends.

4.5 Concluding Remarks

This paper patches together the sometimes-spotty evidence on the structure of corporate ownership and control in Germany since the beginning of free incorporation (1870) and demonstrates several ups and downs that correspond largely to manifold political, legal, and economic events and crises. The discussion raises several particularly important points, summarized here.

4.5.1 Historical Patterns

- Corporate governance institutions—executive and supervisory boards—remained quite underdeveloped in Germany until the last quarter of the nineteenth century. Boards were generally small and grew little over the pre–World War I period.
- Universal banks had significant but not overwhelming presence in the governance of German corporations during this period of rapid heavy industrialization and economic expansion (roughly 1895–1912). Similarly, industrial firms played only a small role in the ownership and governance of other nonfinancial firms. Notably, financial firms, especially the large banks, did own shares in other banks and subsidiaries and did sit on the boards of those banks.
- Bank involvement in corporate ownership appears to have arisen largely out of active bank involvement with securities issues, particularly of listed firms. Substantial holdings were rare, though earlier universal banks (e.g., Discontogesellschaft in the 1850s) did sometimes unwillingly hold large stakes that could not be sold off for a period of time.
- Bank involvement in corporate control through interlocking directorates is closely related to firm size, sector, securities issue, and stock market listing. Control rights appear to have been granted largely via proxy voting for customers who deposited bearer shares with the bank.
- The combination of commercial, investment, and brokerage services within individual banking institutions may have facilitated the networking of bank and firm supervisory boards.
- Traditional explanations of German bank-firm relationships that focus on bank intervention in investment decisions and direct monitoring of debt contracts find little support in the available empirical analysis.

4.5.2 Comparisons with Modern Germany

- German corporate ownership continues to be often very concentrated, but nonfinancial firms appear to be more heavily involved in ownership of other nonfinancial firms than they were before WWI.
- Modern patterns of bank involvement in corporate ownership and control are remarkably similar to those of the late industrialization period. The war period, roughly 1915–1945, was probably an aberration from long-run patterns. Contrary to popular myth, banks do not—and never did—control most of the corporate economy. But they do participate actively—as they always have—in the ownership and control of a notable minority of corporations. Bank involvement continues to relate significantly to dispersion of corporate ownership, firm size, securities issue, and stock market listing—all pointing at proxy voting for customers depositing shares with the bank.

In light of these patterns, I argue that political, social, and economic factors constitute the proximate causes of change. Moreover, combining recent evidence offered in the corporate control literature with my own study of an extensive range of German corporations from the pre-WWI period, I argue that German ownership structures have not, in times of stability, produced the negative consequences predicted in much of the "law and finance" literature.⁸² Indeed, the long-run perspective on Germany—particularly the wide swings in corporate and industrial concentration, along with positive findings on corporate performance in the pre-WWI and post-WWII erascasts doubt on the notion that civil law traditions per se consistently undermine market functioning. In the German case, the string of disastrous political institutions and movements in the aftermath of World War I, culminating in the Nazi regime, dismantled the rich, highly functioning, hybrid financial system of the Second Empire. The postwar political and legal climate, one that continues to suppress the liberal tradition of the pre-World War I era, seemingly prevents the old dual system from reemerging.

References

Adams, Michael. 1994. Die Usurpation von Aktionärsbefugnissen mittels Ringverflechtung in der "Deutschland AG." *Die Aktiengesellschaft* 39 (4): 148– 58.

. 1999. Cross holdings in Germany. *Journal of Institutional and Theoretical Economics* 155:80–109.

82. Evidence on the period between 1918 and 1970 or so is sorely lacking, though new efforts are underway to fill this major gap.

- Albach, Horst, and Heinz-Peter Kless. 1982. Personelle Verflechtungen bei deutschen Industrieaktiengesellschaften. Zeitschrift f
 ür Betriebswirtschaft 52 (10): 959–77.
- Aoki, Masahiko. 1988. Information, incentives, and bargaining in the Japanese economy. New York: Cambridge University Press.
- Audretsch, David, and Julie Ann Elston. 1997. Financing the German Mittelstand. Small Business Economics 9:97–110.
- Baums, Theodor. 1996. Vollmachtstimmrecht der Banken Ja oder Nein? Die Aktiengesellschaft 41 (1): 11–26.
- Baums, Theodor, and Christian Fraune. 1995. Institutionelle Anleger und Publikumsgesellschaft: Eine empirische Untersuchung. *Die Aktiengesellschaft* 40 (3): 97–112.
- Baums, Theodor, and B. Frick. 1999. The market value of the codetermined firm. In *Employees and corporate governance*, ed. M. M. Balir and M. J. Roe, 206–35. Washington, DC: Brookings Institution Press.
- Becht, Marco, and Ekkehard Boehmer. 2003. Voting control in German corporations. International Review of Law and Economics 23:1–29.
- Becht, Marco, Patrick Bolton, and Ailsa Röell. 2002. Corporate governance and control. In *Handbook of the economics of finance*, Volume 1A, *Corporate finance*, ed. G. M. Constantinides, M. Harris, and R. M. Stulz, 1–109. Amsterdam: North-Holland.
- Beckerath, Erwin von, ed. 1956. *Handwörterbuch der Sozialwissenschaften*. Stuttgart: Gustav Fisher Verlag.
- Benelli, Guiseppe, Claudio Loderer, and Thomas Lys. 1987. Labor participation in corporate policy making decisions: West Germany's experience with codetermination. *Journal of Business* 60:553–75.
- Beyer, Jürgen. 2002. Deutschland AG a.D.: Deutsche Bank, Allianz und das Verflechtungszentrum großer deutscher Unternehmen. MPIfG Working Paper no. 02/4. Cologne, Germany: Max Planck Institute für Gesellschaftsforschung, March.
- Boehmer, Ekkehart. 2000. Business groups, bank control, and large shareholders: An analysis of German takeovers. *Journal of Financial Intermediation* 9:117–48.
- Böhm, Jürgen. 1992. Der Einfluß der Banken auf Großunternehmen. Hamburg: Steuern und Wirtschaftsverlag.
- Bokelmann, Bettina. 2000. Personelle Verflechtungen über Aufsichtsräte: Aufsichtsratsmitglieder mit hauptberuflicher Vorstandsfunktion. Frankfurt: Lang.
- Brickwell, Daniel M. 2001. Zu den Einflusspotenzialen der Großbanken. PhD diss., Freie Universität Berlin.
- Brockhage, B. 1910. Zur Entwicklung des Preuss-Deutschen Kapitalexports. Schmollers Jahrbuch, Heft 148.
- Bundesregierung. 2001. Kurzfassung des Berichts der Regierungskommission "Corporate governance." http://www.bundesregierung.de
- Buss, Georg. 1913. *Die Berliner Börse von 1685–1913*. Berlin: Gedenktage der ersten Versammlung im neuen Hause.
- Cable, John. 1985. Capital market information and industrial performance: The role of West German banks. *Economic Journal* 95:118–32.
- Calomiris, Charles. 1995. The costs of rejecting universal banking: American finance in the German mirror, 1870–1914. In *Coordination and information*, ed. N. Lamoreaux and D. Raff, 257–315. Chicago: University of Chicago Press.
- Cameron, Rondo E. 1961. France and the economic development of Europe. Princeton: Princeton University Press.
- Chandler, Alfred D. 1990. *Scale and scope: The dynamics of industrial capitalism.* Cambridge, MA: The Belknap Press of Harvard University Press.

- Chirinko, Robert, and Julie Ann Elston. 1998. Finance, control, and profitability: An evaluation of German bank influence. Economics working paper no. 28. Washington, DC: American Institute for Contemporary German Studies.
- Däbritz, Walther. 1931. *Gründung und Anfänge der Disconto-Gesellschaft Berlin.* Leipzig: Duncker und Humblot.
- Deutsche Börse. 1992. Annual report. Deutsche Börse AG.
- Deutsche Bundesbank. Various years. Capital market statistics (statistical supplement to monthly report 2). Frankfurt: Knapp.
- Deutsche Bundesbank. 1976. Deutsches Geld- und Bankwesen in Zahlen, 1876– 1975. Frankfurt: Knapp.
- Deutsches Aktien-Institut (DAI). Various years. *Factbook*. Frankfort on the Main: DAI.
- Diamond, Douglas. 1984. Financial intermediation and delegated monitoring. *Review of Economic Studies* 51:393–414.
- Dunlavy, Colleen. 1998. Corporate governance in late 19th-century Europe and the U.S.: The case of shareholder voting rights. In *Comparative corporate governance: The state of the art and emerging research*, ed. Klaus J. Hopt, Hideki Kanda, Mark J. Roe, Eddy Wymeersch, and Stefan Prigge. Oxford: Clarendon Press.
- Dyck, Alexander, and Luigi Zingales. 2002. Private benefits of control: An international comparison. Center for Economic Policy Research Discussion Paper no. 3177, Center for Research in Securities Prices Working Paper no. 535, and Harvard Program on Negotiation Working Paper.
- Edwards, Jeremy, and Nibler, Marcus. 2000. Corporate governance in Germany: The role of banks and ownership concentration. *Economic Policy* 32:239–68.
- Emmerich, Markus. 2000. Die historische Entwicklung von Beschlussverfahren und Beschlusskontrolle im Gesellschaftsrecht der Neuzeit unter besonderer Berücksichtigung des Aktienrechts. Berlin: Duncker and Humblot.
- Engberg, Holger L. 1981. Mixed banking and economic growth in Germany, 1850– 1931. New York: Arno Press.
- Ernst, Christian. 2001. Die Aktionärsstruktur deutscher und amerikanischer Unternehmen. Ein internationaler Vergleich. Ulm: Verlag Ulmer Manuskripte.
- Faccio, Mara, and Larry H. P. Lang. 2002. The ultimate ownership of Western European corporations. *Journal of Financial Economics* 65:365–95.
- Falkenhausen, Bernhard Freiherr von. 1966. Das Bankenstimmrecht im neuen Aktienrecht. *Die Aktiengesellschaft* 11 (3): 69–79.
- ——. 1967. Verfassungsrechtliche Grenzen der Mehrheitsherrschaft nach dem Recht der Kapitalgesellshaften (AG und GmbH). Karlsruhe, Germany: C. F. Müller.
- Feldenkirchen, Wilfred. 1979. Banken und stahlindusrie im Ruhrgebiet: Zur Entwicklun ihrer Beziehungen 1873–1914. In *Bankhistoriches Archiv* 2:27–52.

——. 1991. Banking and economic growth: Banks and industry in the nineteenth century and their changing relationship during industrialization. In *German industry and German industrialisation*, ed. W. R. Lee, 116–47. London: Routledge.

- Fey, Gerrit. 2000. Unternehmenskontrolle und Kapitalmarkt: Die Aktienrechtsreformen von 1965 und 1998 im Vergleich. Stuttgart: Lucius and Lucius.
- Fohlin, Caroline. 1997. Universal banking networks in pre-war Germany: New evidence from company financial data. *Research in Economics* 51:201–25.
 - ——. 1998. Relationship banking, liquidity, and investment in the German industrialization. *Journal of Finance* 53:1737–58.
 - ——. 1999a. Capital mobilization and utilisation in latecomer economies: Germany and Italy compared. *European Review of Economic History* 2:139–74.
 - ——. 1999b. The rise of interlocking directorates in imperial Germany. *Economic History Review* 52 (2): 307–33.

——. 1999c. Universal banking in pre–World War I Germany: Model or myth? *Explorations in Economic History* 36:305–43.

- ———. 2002a. Corporate capital structure and the influence of universal banks in pre–World War I Germany. *Jahrbuch für Wirtschaftsgeschichte* 2:113–34.
- _____. 2002b. Regulation, taxation, and the development of the German universal banking system. *European Review of Economic History* 6:221–54.
- ——. 2006. Financial empire: New perspectives on finance, governance, and performance in the German industrialization. New York: Cambridge University Press, forthcoming.
- Franks, Julian, and Colin Mayer. 2001. Ownership and control of German corporations. *Review of Financial Studies* 14 (4): 943–77.
- Gebhard, H. 1928. Die Berliner Börse von den Anfängen bis zum Jahre 1896. PhD diss., University of Erlangen.
- Gerschenkron, Alexander. 1962. *Economic backwardness in historical perspective*. Cambridge, MA: Harvard University Press. Quoted in Fohlin 2005.
- ——. 1968. Continuity in history and other essays. Cambridge: Belknap Press of Harvard University Press.
- Gessler, Ernst. 1965. Aktiengesetz: Kommentar. Munich: F. Vahlen.
- Gömmel, Rainer. 1992. Entstehung und Entwicklung der Effektenbörse im 19. Jahrhundert bis 1914. In ed. H. Pohl, *Deutsche Börsengeschichte*, 133–207. Frankfurt: Knapp.
- Gorton, Gary, and Frank A. Schmid. 2000. Universal banking and the performance of German firms. *Journal of Financial Economics* 58:29–80.
- Gottschalk, Arno. 1988. Der Stimmrechtseinfluß der Banken in den Aktionärsversammlungen von Großunternehmen. WSI-Mitteilungen 5:294–304.
- Haas, Wolfgang. 1994. Die Auswirkungen des Betriebsübergangs insbesondere bei der Fusion von Kapitalgesellschaften auf Betriebsvereinbarungen. Mainz: Dissertations Druck.
- Handbuch der deutschen Aktiengesellschaften. Various years. Berlin: Verlag für Börsen- und Finanzliteratur.
- Henning, Friedrich-Wilhelm. 1992. Börsenkrisen und Börsengesetzgebung von 1914 bis 1945 in Deutschland. In *Deutsche Börsengeschichte*, ed. H. Pohl, 211–90. Frankfurt: Knapp.
- Hilferding, Rudolph. 1910. *Das Finanzkapital*. Vienna: Wiener Volksbuchhandlung. Translated by T. Bottomore in 1981 as *Finance capital*. Boston: Routledge and Kegan Paul.
- Hopt, Klaus J. 1996a. Corporate governance und deutsche Universalbanken. In *Corporate governance: Optimierung der Unternehmensführung und der Unternehmenskontrolle im deutschen und amerikanischen Aktienrecht*, ed. D. Feddersen. Cologne: Otto Schmidt.
 - . 1996b. Gesellschaftsrecht. 4th ed. Munich: C. H. Beck.

———. 1998. The German two-tier board: Experience, theories, reforms. In *Comparative corporate governance: The state of the art and emerging research*, ed. K. J. Hopt, H. Kanda, M. J. Roe, E. Wymeersch, and S. Prigge, 227–58. Oxford: Clarendon Press.

- Horn, N. 1979. Aktienrechtliche Unternehmensorganisation in der Hochindustrialisierung (1860–1920): Deutschland, England, Frankreich und die USA im Vergleich. In *Recht und Entwicking der Großunternehmen im 19. und frühen 20. Jahrhunder*, ed. N. Horn and J. Kocka. Göttingen: Vandenhoeck und Ruprecht.
- Hüffer, Wilhelm. 2002. Theodizee der Freiheit: Hegels Philosophie des Geschichtlichen Denkens. Hamburg: Felix Meiner.
- Iber, Bernhard. 1985. Zur Entwicklung der Aktionärsstruktur in der Bundesre-

publik Deutschland (1963–1983). Zeitschrift fuer Betriebswirtschaft 55 (11): 1101–19.

- James, Harold. 1986. *The German slump: Politics and economics, 1924–1936.* Oxford: Oxford University Press.
- Jeidels, Otto. 1905. Das Verhältnis der Deutschen Großbanken zur Industrie. Leipzig: Duncker und Humblot.
- Jenkinson, Tim, and Alexander Ljungqvist. 2001. The role of hostile stakes in German corporate governance. *Journal of Corporate Finance* 7:397–446.
- Joly, Hervé. 1998. Großunternehmer in Deutschland: Soziologie einer industriellen Elite 1933–1989. Leipzig: Leipziger Universitätsverlag.
- Kaserer, Christoph, and Ekkehard Wenger. 1997. *The German system of corporate governance: A model which should not be imitated.* Washington, DC: American Institute for Contemporary German Studies.
- Kennedy, William P. 1987. Industrial structure, capital markets and the origins of British economic decline. London: Cambridge University Press.
- Klein, Sabine. 2000. Familienunternehmen: Theoretische und empirische Grundlagen. Wiesbaden: Gabler.
- Klein, Sabine, and Christine Blondel. 2002. Ownership structure of the 250 largest listed companies in Germany. Working Paper. Paris: INSEAD.
- Kocka, Jürgen. 1978. Entrepreneurs and managers in German industrialisation. In *The Cambridge economic history of Europe, the industrial economies: Capital labor and enterprise. Part one: Britain, France, Germany, and Scandinavia*, ed. P. Mathias and M. M. Postan, 492–589. Cambridge, MA: Cambridge University Press.
- Köke, Jens. 2001. New evidence on ownership structures in Germany. *Kredit und Kapital* 2:257–92.

——. 2002. Determinants of acquisition and failure: Evidence from corporate Germany. *Structural Change and Economic Dynamics* 13:457–84.

——. 2003. The market for corporate control in bank-based economy: A governance device. *Journal of Corporate Finance* 10 (1): 53–80.

- Kübler, Friedrich. 1994. *Gesellschaftsrecht*. 4th ed. Heidelberg: C. F. Müller Juristischer Verlag.
- Kunze, W. 1926. Der Aufbau des Phoenix-Konzerns. Frankfurt.
- Laux, Frank. 1998. Die Lehre vom Unternehmen an sich: Walther Rathenau und die aktienrechtliche Diskussion in der Weimarer Republik. Berlin: Duncker und Humblot.
- Lavington, F. E. 1921. The English capital market. London: Methuen.
- Lehmann, Erik, and Jürgen Weigand. 2000. Does the governed corporation perform better? Governance structures and corporate performance in Germany. *European Finance Review* 4:157–95.
- Leuz, Christian, Dhananjay Nanda, and Peter D. Wyoscki. 2003. Earnings management and investor protection: An international comparison. *Journal of Fi*nancial Economics 69:505–27.
- Levy-Leboyer, M. 1964. Les banques europeennes et l'industrialisation internationale dans la premiere moitié du XIX siecle. Paris: Presses Universitaires de France.
- Liefmann, Robert. 1921. Beteiligungs und Finanzierungsgesellschaften. Jena: Gustav Fisher Verlag.
- Loeb, Ernst. 1896. Kursfeststellung und Maklerwesen an der Berliner Effektenbörse. In Jahrbücher für Nationalökonomie und Statistik, vol. 11.
- . 1902. Das Institut des Aufsichtsrat. *Jahrbuch für National-Ökonomie* 2 (23).

- März, E. 1968. Österreichische Industrie und bankpolitik in der Zeit Franz Josephs I. Frankfurt: Europa Verlag.
- Mayer, Colin. 1988. New issues in corporate finance. *European Economic Review* 32:1167–88.
- Meier, Johann Christian. 1993. Die Entstehung des Börsengesetzes vom. 22, Juni 1896. Studien zur Wirtschafts und Sozialgeschichte, Vol. 9. St. Katharinen, Germany: Scripta Mereaturae Verlag.
- Menke, Joachim. 1988. Die Kapitalbasis deutscher Aktiengesellschaften vom Beginn der Reformdiskussion im Jahre 1924 bis zum Erlass des Aktiengesetzes von 1937. PhD diss., University of Kiel, Germany.
- Nussbaum, Arthur. 1910. Kommentar zum Boersengesetz fuer das Deutsche Reich. Munich.
- Perlitz, Manfred, and Frank Seger. 1994. The role of universal banks in German corporate governance. *Business and the Contemporary World* 6 (4): 49–67.
- Pfannschmidt, Arno. 1995. Mehrfachmandate in deutschen Unternehmen. Zeitschrift für Betriebswirtschaft 65 (2): 177–203.
- Pohl, Manfred. 1982. Konzentration in deutschen bankwesen, 1848–1980. Frankfurt: Knapp.
- Pohl, Hans, and Wilhelm Treue, eds. 1978. Die Konzentration in der deutschen Wirtschaft seit dem 19. Jahrhundert. Zeitschrift für Unternehmensgeschichte. Suppl. no. 11.
- Pollard, Sidney, and Dieter Ziegler. 1992. Banking and industrialization: Rondo Cameron twenty years on. In *Finance and financiers in European history*, 1880– 1960, ed. Y. Cassis, 17–38. New York: Cambridge University Press.
- Pross, Helge. 1965. Manager und Aktionäre in Deutschland: Untersuchungen zum Verhältnis von Eigentum und Verfügungsmacht. Frankfurter Beiträge zur Soziologie 15. Frankfurt: Europäische Verlagsanstait.
- Riesser, Jakob. 1911. Die deutschen Groβbanken und ihre Konzentration [The German great banks and their concentration]. Washington, DC: National Monetary Commission. (Orig. pub. 1910)
- Roe, Mark J. 1999. German codetermination and German securities markets. Columbia Journal of European Law 5:199–211.
- 2003. German codetermination and German securities markets. Harvard Law School. Working paper.
- Santucci, Tanja. 2002. Extending fair disclosure to foreign issuers: Corporate governance and finance implications for German companies. *Columbia Business Law Review* 2002:499–539.
- Schreyögg, Georg, and Papenheim-Tockhorn, Heike. 1995. Dient der Aufsichtsrat dem Aufbau zwischenbetrieblicher Kooperationsbeziehungen? Zeitschrift für Betriebswirtschaft 65 (2): 205–30.
- Schulz, W. 1994. Das deutsche Börsengesetz: Die Entstehungsgeschichte und wirtschaftlichen Auswirkungen des Börsengesetzes von 1896. Frankfurt: Peter Lang.
- Schumpeter, Joseph. 1930. *Theory of economic development*. Cambridge: Harvard University Press.
- Siegrist, Hans. 1980. Deutsche Großunternehmen vom späten 19: Jahrhundert bis zur Weimarer Republik. *Geschichte und Gesellschaft* 6:60–102.
- Sombart, Werner. 1954. Die deutsche Volkswirtschaft im neunzehnten Jahrhundert. Berlin: Georg Bondi.
- Statistisches Jahrbuch für das deutsche Reich. 1908–15. Berlin: Statistisches Bundesamt.
- Stiglitz, Joseph E., and A. Weiss. 1981. Credit rationing in markets with imperfect information. American Economic Review 71:393–410.

Stillich, O. 1909. Die Börse und ihre Geschäfte. Berlin.

. 1924. Die Banken, ihre Arten und ihre Beziehung zur Gesellschaft. Berlin.

- Svejnar, Jan. 1981. Relative wage effects of unions, dictatorship and codetermination: Econometric evidence from Germany. *Review of Economics and Statistics* 63:188–97.
- Svejnar, Jan. 1982. Codetermination and productivity: Evidence from the federal republic of Germany. In *Participatory and self-managed firms*, ed. D. Jones, and Jan Svejnar. Lexington, MA: Heath.
- Tilly, Richard. 1966. Financial institutions and industrialization in the Rhineland, 1815–1870. Madison: University of Wisconsin Press.
- ——. 1994. Banks and industry: Lessons from history. University of Münster, Germany. Working Paper.
- Wallich, Paul. 1905. *Die Konzentration im deutschen Bankwesen*. Stuttgart: Union deutsche Verlagsgesellschaft.
- Wehler, Hans Ulrich. 1987. Deutsche Gesellschaftsgeschichte. Munich: C. H. Beck.
- Wellhöner, Volker. 1989. *Großbanken und Großindustrie im Kaiserreich*. Göttingen: Vandenhoek-Ruprecht.
- Wengenroth, Ulrich. 1992. Iron and steel. In *International banking*, 1870–1914, ed.V. I. Bovykin and R. Cameron. New York: Oxford University Press.
- Wessel, Horst A. 1990. Finanzierungsprobleme in der Gründungs und Ausbauphase der Deutsch-Österreichischen Mannesmannröhrenwerke A.G. 1890– 1907. In Zur Geschichte der Unternehmensfinanzierung, ed. D. Petzina, 119–71. Berlin: Schriften des Vereins für Sozialpolitik, Vol. 196.
- Whale, P. Barrett. 1930. Joint-stock banking in Germany. London: MacMillan.
- Wiener, Fritz A. 1905. Die Börse. Berlin: Puttkammer und Mühlbrecht.
- Wilhelmini, Hans. 1965. Das neue Aktiengesetz. Die Aktiengesellschaft 10 (6): 153– 55.
- Wójcik, Dariusz. 2001. Change in the German model of corporate governance: Evidence from block-holdings, 1997–2001. University of Oxford, School of Geography and the Environment. Working paper.
- Ziegler, Dieter. 2000. Die wirtschaftsbürgerliche Elite im 20. Jahrhundert: Eine Bilanz. In Groβbürger und Unternehmer: Die deutsche Wirtschaftselite im 20. Jahrhundert, ed. D. Ziegler, 7–29. Göttingen: Vandenhoeck und Ruprecht.

Comment Alexander Dyck

The German economic system has performed remarkably well since industrialization. Firms and entrepreneurs have benefited from access to deep financial markets. Combining together the private sector's borrowing from banks and the capitalization in equity markets, Rajan and Zingales (1998) estimate that Germany has the second-deepest market for providing external finance to firms among forty-one countries in the world. Apparently, these financial resources have been deployed efficiently. Wurgler (2000) estimates that Germany has the highest efficiency of investment in

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the world (proxied by sensitivity of industry investment to value added). And such efficiency is reflected in high rates of per capita GDP growth and the maintenance of a high level of income per capita since the 1870s (e.g., Maddison 1991).

It is worthwhile repeating these numbers, because if we were told just about the features of the German corporate sector, such outcomes are not what most of us would predict. Here, the traditional characterization goes, is a country dominated by very concentrated ownership structures, with weak protections for investors (one out of six, according to LaPorta et al. 1998), very limited equity markets, an almost complete absence of takeovers, and an overwhelming influence of the banking sector, among both listed and unlisted firms. Is this traditional characterization accurate, and, if so, why didn't this change over time, as it did in countries like the United States and Britain, and how could such corporate structures not lead to significant inefficiency rather than the positive indicators described above?

Caroline Fohlin, in this chapter on the history of corporate ownership and control in Germany, provides some new evidence and a new perspective on some of these questions. Fohlin sidesteps questions of economic performance and links between ownership and performance to focus on the evolution of corporate ownership and the role of relationship banking. She concentrates, in particular, on increasing our understanding of the growth of the corporate sector prior to World War I. And she brings to bear a wealth of data and a determination to rely on data-led conclusions.

The paper's first contribution is to provide some additional information on the origin and evolution of concentrated ownership structures in Germany. Fohlin reports that the entrepreneurs who founded many German corporations in the latter half of the nineteenth century retained significant corporate stakes for themselves and families. The story, interestingly, is then one of gradual dispersion of ownership and professionalization of management. But this dispersion halts rather abruptly at a high level of concentrated ownership in the interwar period. Perhaps more surprising is that in the postwar period, including when the Allies were in control, concentration persists and is stable until the most recent years.

Fohlin provides some evidence as to the driving forces behind these changes, for example, pointing to the emergence and wholesale endorsement of shares with multiple voting rights—whereby more than 50 percent of AGs in 1925 and 40 percent in 1934 had such voting rights—as an ingredient in maintaining concentrated control, as well as political changes in the Nazi era. But, unfortunately, other factors escape examination. Why didn't the founding families sell out? Why didn't those with significant minority stakeholders (like banks) sell out? Was it fear of tax implications of sales, or was it something else? These questions remain for the future.

The real heart of the paper, though, is not about concentrated ownership but about banks. Here Fohlin, step by step, asks the reader to reevaluate the notion that German banks controlled German corporations, through their direct equity stakes, their seats on supervisory boards, or the additional voting power arising from their holding of proxy voting rights for small shareholders. The target in this discussion is clearly a view in some of the literature that suggests overwhelming power of the great banks in corporate decision making.

Fohlin correctly asks us to center our attention on the voting power of banks. This is important, as certain major decisions are put to a vote at the general assembly as well as being the forum to appoint members of the managing board and the supervisory board. On the basis of extensive data collection efforts in the pre–World War I period she concludes that the great banks had 7–11 percent of their assets in the form of corporate equities, with provincial banks having slightly lower levels. And she points to more detailed studies of specific great banks to show that these levels likely are based on more significant stakes in a small number of firms. Fohlin incidentally tells a fascinating story of how in the latter half of the nineteenth century banks acquired equity stakes, almost incidentally, as a result of their investment banking arms and their lending operations. Here underwriting operations led firms to accumulate stakes, and these stakes multiplied in times of crisis when debt was exchanged for equity.

But her analysis does little to convince those without any vested interest in the debate about the power of banks to change their prior estimate that banks play an important role in corporate decision making. Focusing on equity stakes is likely to dramatically understate voting power. The most important reason for this is the traditional story of the free-rider problem faced by small shareholders. They cannot get sufficient reward, given their small stakes, to go through the effort to get informed and vote on corporate decisions, so anyone with a larger stake with a lower cost of getting informed (e.g., banks) is more likely to vote and have more effective voting power than is suggested by their stakes. In addition, in Germany there is the important fact that shareholders held bearer shares and that overtime banks offered services of holding those shares, and when they did so they held the proxy voting rights attached to these shares. This dramatically increased their voting power both in firms where they held equity stakes and in firms where they held no stakes.

The evidence on the composition of supervisory boards, which is where Fohlin directs our attention next, is a well-chosen sample to use to test for the power of banks, for it is a decision where votes will matter, and it is a decision where it is possible with effort to see whether banks get what they want, as measured by the identity of the board members. Again, Fohlin does an impressive job of accumulating and organizing data on board memberships in the pre–World War I period. And again, Fohlin's characterization of the data as revealing the weakness of the banks doesn't fit with my reading of the evidence. To her, it is a reflection of weakness that "only two-thirds of the sampled firms fall into the attached category," meaning that in two-thirds of firms there is a board representative who shares a position on a firm and representation in a bank, that "half of the firms had a bank director sitting on their supervisory boards" and that "less than 22 percent of firms had a bank director as chair or vice chair." I guess my prior is just different from hers, as two-thirds with a connection, half with a direct member, and onefifth with a commanding position suggests that the banks could use their voting power to protect their interests. This is significant bank involvement, and one suspects that if firms were ranked based on economic importance (e.g., just the top 100 companies) these percentages would increase, as the numbers do in the post–World War II period when Fohlin focuses on larger firms.

Also somewhat surprising since the discussion is of bank power is the lack of attention played to banks as providers of external finance to companies, and the relative importance of the vast stable of middle-sized companies, collectively called the *mittelstand*. Of course, through the provision of working capital and longer-term loans, banks have influence over companies. And this is only enhanced by the stable banking relationships where firms often established a near exclusive relationship with a specific bank, often called a *hausbank*. This influence of banks through their provision of external finance will of course be more important for the *mittelstand*, who lack the ability to raise finance through issuing equity, as well as finding it challenging to raise any bond financing.

So, to summarize, Fohlin successfully dislodges an extreme view of a domination of the corporate sector by the great banks, but based on this evidence a careful reader should do little to update prior estimates of the important role played by German banks in corporate life. While clearly not in absolute control, the evidence suggests a significant role indeed.

To finish, it is useful to return once again to the question of performance. While the evidence in this paper enriches our understanding, it also essentially confirms the traditional wisdom of the importance of concentrated ownership and banks in the German corporate sector. We are left with Fohlin's conclusion that "German ownership structures have not, in times of stability, produced the negative consequences predicted in much of the 'law and finance' literature." But we do not know why these structures weren't associated with worse performance. What, if anything, reduced the extent of pyramid structures that we associated with the worst corporate abuses? Did firms avoid the "stupid heir" problem of an incompetent next generation, and how did they do so? Why didn't banks use their dominant position on boards to protect their interests as debt holders or use this position to loot firms? What role has extensive product market competition (and an export orientation) played in limiting the potential extent of private benefits and agency costs for firms? And what role has bank competition played in avoiding the development of bad incentives in firms?

There is clearly room for more research here, to enrich our understanding and to alert us to gaps in our models and in our thinking. And good, careful historical research like this will be an important complement to the cross-sectional evidence that is the focus of much research today.

References

- La Porta, Rafael, Florencio López-de-Silanes, Andrei Shleifer, and Robert Vishny. 1998. Law and finance. *Journal of Political Economy* 106 (6): 1113–55.
- Maddison, Angus. 1991. *Dynamic forces in capitalist development*. New York: Oxford University Press.
- Rajan, Raghuram G., and Luigi Zingales. 1998. Financial dependence and growth. *American Economic Review* 88 (3): 559–86.
- Wurgler, Jeffrey. 2000. Financial markets and the allocation of capital. *Journal of Financial Economics* 58 (1–2): 187–214.