Corporate Finance In International Perspective: Legal And Regulatory Influences on Financial System Development

Stephen D. Prowse
Senior Economist and Policy Advisor
Federal Reserve Bank of Dallas

Much of the discussion on the relative superiority of one system over another ignores the possibility that these systems are the products of particular legal and regulatory environments that may be difficult to create in other countries.

In the postwar period, dramatically different systems of corporate finance and governance have emerged among the major industrialized countries. Even the casual observer notices large differences between the way firms finance and govern themselves in the United States on the one hand, and in Japan and Germany on the other. Why should corporate finance and governance systems differ so dramatically across countries? The difference poses a problem for the theory of corporate finance and governance. Theoretically, there is a single best way to organize and finance firms. Since we should expect finance and governance systems to converge to this optimum, we ought not to find much difference in these mechanisms across countries. The large differences we actually observe thus suggest accidents of history or culture or factors that theory ignores—such as differences in the laws, rules, and regulations that govern the financial systems of industrialized countries.

Recently, much has been written in the scholarly and policy-oriented literature on the relative merits of the different corporate finance systems in the developed countries.[1] There is, however, little focus on the *reasons* we observe such differences despite the problems these differences pose for the theory of corporate finance.[2] Many studies appear implicitly to assume that the outcomes we observe are essentially cultural or historical accidents. And much of the discussion on the relative superiority of one system over another ignores the possibility that these systems are the products of particular legal and regulatory environments that may be difficult to create in other countries.

I argue in this article that there are, in fact, large legal and regulatory differences among the United States, Japan, and Germany that affect the corporate financial systems in place. The differences are essentially of three kinds. First is the severity of the legal and regulatory restraints on large investors' being "active" investors in firms. U.S. laws are in general much more hostile to investors' taking large influential stakes in firms than are the laws of Japan or Germany. Second is the degree to which sources of nonbank finance are actively suppressed. For much of the postwar period, the development of securities markets in Japan and Germany has been impeded by discriminatory taxation, regulatory fiat, and cumbersome mandated issuance procedures. Third is the degree to which corporate securities markets have been "passively" suppressed by the absence of any strong mandated, standardized disclosure requirements by firms wishing to issue securities to outside investors. U.S. disclosure requirements have been much more severe than those in Japan or Germany. These differences may have been important in determining the relative speed of securities markets development if there is a large public good aspect to the production of information by firms seeking external finance that only the imposition of government-backed disclosure requirements can solve.

I argue these legal and regulatory differences are largely responsible for the very different systems of corporate finance and governance in the United States, Japan, and Germany. One natural question is, Which system is superior in terms of providing external finance at the lowest cost? The academic literature on this topic does not yield a clear conclusion as to the more efficient system, or whether any efficiency differences are large enough to be of practical relevance. However, I point out that this literature ignores that changes in technology, the globalization of financial markets, and the changing structure of the firm may have made the Japanese and German systems of finance and governance less attractive systems over time. There is evidence that the U.S. system of finance, for example, is more favorable to the growth of new, high-technology companies than are the German and Japanese systems.

Perhaps in response to the perceived advantages of the U.S. system, the legal and regulatory environments of the German and Japanese systems are changing rapidly, and securities markets are being substantially deregulated in an effort to increase their importance as a source of firm finance. However, it is important to realize that the regulatory environment of the U.S. financial system is changing, too, albeit much more slowly than the German or Japanese system, as financial institutions are being given more latitude to be active investors in firms. Thus, over the long term, the legal and regulatory environments of all three countries appear to be converging, and the focal point of this convergence is not the Japanese/German or U.S. system as it currently stands but an entirely new environment where financial institutions are free to be active investors *and* where corporate securities markets are unhindered by regulatory obstacles.

These issues are fundamental to the theory of the firm, corporate finance, and corporate governance that have engaged academic debate for many years. However, recently they have taken on a policy relevance not experienced before. In the United States, there has been an intense, ongoing debate about the most preferred methods of financing and governing firms.[3] And in the last few years, both Japan and Germany have substantially deregulated their corporate securities markets. In addition, the stark differences between these systems provide alternative paths of development for policymakers in a whole host of countries considering revamping their financial systems. These include developed countries such as France and Italy, as well as the excommunist countries of Central Europe and many of the emerging market countries of Latin America and Asia, which all face decisions about how to craft the outlines of their rapidly developing financial markets. In doing so, they would undoubtedly appreciate an understanding of the factors behind the differences in the major industrialized countries' financial systems and their relative costs and benefits. This article addresses these issues by describing in detail the important characteristics of the corporate financing systems in the United States, Japan, and Germany, examining why such differences exist, and comparing some of their strengths and weaknesses.

In the following section, I describe the corporate finance and governance system in the United States, Japan, and Germany, highlighting the major differences. I then focus on the major legal and regulatory factors I believe are the main determinant of these differences. Finally, I look at why the Japanese/German system and the U.S. system may be converging and explore some implications of this convergence.

Corporate finance and governance across countries

All corporate finance markets must address two generic information problems faced by firms attempting to raise funds from outsiders: sorting problems and incentive problems.

Sorting problems arise in the course of selecting investments: firm owners and managers typically know much more about their business than do outsiders, and it is in their interests to accent the positive while downplaying potential difficulties. Sorting problems and their implications for corporate finance were first analyzed by Leland and Pyle (1977) and Ross (1977), who emphasized that the choice of capital structure was important in minimizing such problems. More generally, potential outside financiers must conduct extensive information gathering and verifying activities in order to minimize such information asymmetries.

Incentive problems arise in the course of the firm's operations. Firm managers have many opportunities to benefit themselves at the expense of outside investors. Jensen and Meckling (1976) were the first to address these issues. They stressed that a combination of methods is usually needed to align the incentives of managers and investors, including the use of an appropriate capital structure, collateral, security covenants, and direct monitoring. Diamond (1991) highlighted the role of reputation in mitigating incentive problems: managers of firms that have a stake in maintaining a good reputation with outside investors have strong incentives not to act opportunistically at the investors' expense.

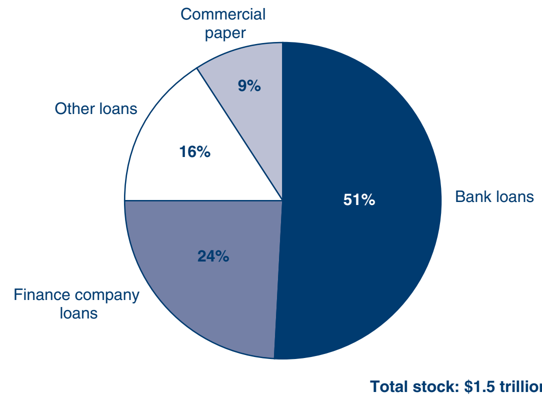
Information problems vary in severity across firms. The firm's age, size, growth rate, and line of business all influence the degree of information problems it poses to outside investors. For example, firms with heavy investments in tangible fixed assets pose less severe information problems to investors because they may be able to offer some of their fixed assets as collateral to potential creditors and because monitoring the sale of fixed assets or their transformation from one use to another is likely to be easier than it is for more liquid assets. Conversely, firms that focus on research and development may have wide scope for discretionary behavior, since the risk implicit in a particular research and development program cannot easily be monitored or controlled by outside investors. Finally, other things being equal, small firms pose greater information problems than large firms. Smaller firms do not produce detailed information about themselves and are often too young to have a credible reputation. Larger, public firms make available detailed information about their activities and have a bigger stake in maintaining a good reputation among potential financiers.

The following section describes the structure of U.S., Japanese and German corporate financial markets and how they address these information problems.

The U.S. system

The U.S. system is developed broadly and deeply enough to allow a large variety of suppliers of finance to compete with one another in a number of different finance markets. These markets differ from one another partly in the degree to which they are designed to mitigate the information problems posed by firms. This differentiation provides a natural selection mechanism as to which firms use which markets. While banks play an important financing role, they are more limited by regulation than in Japan or Germany. Conversely, more liberal regulation of securities markets permits a greater role for securities financing than in Japan or Germany.

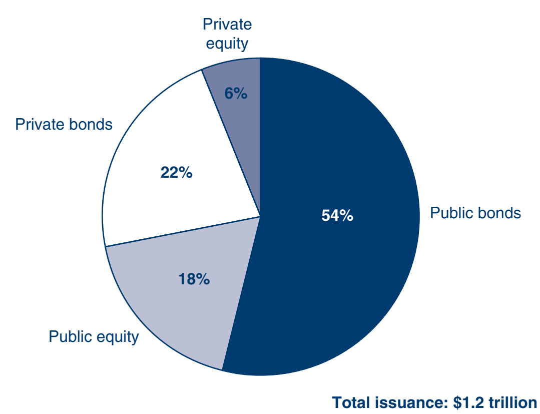
Figure 1
Short-Term Liabilities of Nonfinancial Business, 1994



Although banks dominate U.S. short-term finance markets, they have much competition from finance companies, savings institutions, and the commercial paper market, which is an option for larger, more highly rated firms (*Figure 1*).[4] While banks are still an extremely important source of funds for small firms, over the past fifteen years rapid consolidation of the banking industry has led to a decrease in small business lending. Bank lending to large firms has also shown declines in recent years, possibly owing to increasing competition from other intermediaries and from securities markets.[5]

Securities markets play a more important role in long-term financing than in short-term financing, and they play a more important overall role in corporate financing than in most other countries (*Figure 2*). The public bond market is the largest source of long-term finance because it caters to the biggest firms that have the largest

Figure 2
Issuance of Long-Term Securities, 1990–94



capital needs. The public equity market is also an extremely important source of long-term funds for large firms and small, fast growing firms that make initial public offerings. Two private markets—the private bond and private equity markets—are often the only realistic sources of long-term finance for small and middle market companies. These markets involve the issuance of securities that are exempt from registration with the Securities and Exchange Commission and, thus, free from much of the expense in money and time of the registration process and the continuing reporting and disclosure requirements. The largest of these private markets is the private placement, or private bond, market. It offers long-term debt at fixed interest rates and is a significant source of funds for middle-market firms with annual revenues between $100 million and $500 million that are generally not large enough to issue public bonds.[6] The private equity market consists of equity investments in small and medium-sized firms professionally managed by specialized intermediaries, mostly limited partnerships.[7]

Just as firms vary in the degree to which they suffer from sorting and incentive problems, U.S. corporate finance markets differ in the extent to which they are designed to mitigate these problems. Thus, as shown in Table 1, small firms are forced to raise funds in markets that have developed the greatest safeguards to mitigate information problems, such as the private equity and bank loan market. Medium-sized firms may be able to tap the private bond market, while larger or more promising middle-market firms may be able to issue public equity. Large firms that suffer least from information problems gravitate toward the markets with the fewest such safeguards and where capital is the cheapest, such as the public bond and commercial paper markets.

Two common features in the bank loan, private placement, and private equity markets safeguard against the most severe information problems that occur in smaller firms. First, investors in these markets have the expertise and resources to obtain and analyze information about the firms that solicit them for money, helping to mitigate the sorting problem. Second, investors use various control mechanisms to influence the firm after funds are invested to ensure that it makes proper use of their capital, which helps mitigate the monitoring problem. For example, tight covenants in bank loans and private placements help control risk and constrain opportunistic behavior. Private equity investors use a number of mechanisms to give them influence, including board representation and voting rights. In addition, they will typically control the firm's access to subsequent capital. Fast-growing firms depend crucially on the initial investors to either provide subsequent capital themselves or find other investors to do so. Finally, management is almost always given a significant stock ownership, which more closely aligns management's incentives with those of the private equity investors.

Table 1
Capital Sources for Firms

	Firm size		
	Small	**Medium**	**Large**
Information availability	Low	More	High
Sorting/incentive problems:	High	Less	Low
Capital sources	Angel capital		
	Private equity	Private equity	
	Bank loans	Bank loans	Bank loans
		Private bonds	
		Public equity	Public equity
			Public bonds
			Commercial paper

Large, public firms share some of small firms' information problems, though to a lesser extent. The public bond and equity markets have a number of characteristics that help mitigate these problems. First, there are a host of stock and bond analysts, ratings agencies, and other advisors that analyze the operations and reports of large firms and offer opinions about whether the firm is worthy of new capital. Second, the public equity market is highly liquid, making the threat of a takeover of a firm that is performing poorly a credible one in many cases, helping to discipline management to act in shareholders' interests.

The German/Japanese systems

Although there are some differences, methods of finance and governance in Japan and Germany share a number of important characteristics. In particular, they both look very different from those of the United States.

First, there has been a much less diverse spectrum of finance markets available to firms in Japan or Germany than in the United States. Japanese and German firms, regardless of their size or the severity of their information problems, have traditionally relied more on bank financing than have U.S. firms, while securities markets have been much less important. For example, from 1970 to 1985, intermediated loans (principally from banks) comprised 85 percent

Table 2
Stock Market Capitalization, 1985
(As a Percentage of GNP)

	United States	Japan	Germany
Unadjusted	51	71	29
Adjusted	48	37	14

NOTE: Adjusted figures are corrected for the double-counting of shares associated with intercorporate share holdings.

SOURCES: Borio (1990) and national data.

Table 3
Composition of Companies' Credit Market Debt, 1985
(As a Percentage of Total Credit Market Debt)

	United States	Japan	Germany
Securities	55	9	6
Intermediated debt	45	91	94
of which, from banks	36	NA	88

NOTE: Credit market debt excludes trade debt. Intermediated debt refers to loans from financial intermediaries. Securities includes commercial paper and other short-term bills and long-term bonds.

SOURCES: Borio (1990) and national data.

of the total gross external financing of Japanese nonfinancial firms, with only 15 percent sourced from bond and equity markets.[8] German nonfinancial firms raised 88 percent of their gross external funds from intermediated loans over the same period, with only 12 percent from securities markets.[9]

Another important characteristic of the financial systems of Germany and Japan is the closeness of ties between banks and their corporate borrowers, which are much tighter than the traditional arm's length relationships observed in the United States. One important aspect of these tight relationships is the ownership of equity of nonfinancial firms by banks. Unlike in the United States, banks are the most important large shareholders in firms in both countries. In Japan, they own over 20 percent of the outstanding common stock of nonfinancial firms. In Germany, they own 10 percent, but under current law they have great flexibility to vote according to their own wishes the additional 14 percent of common stock owned by individuals but held by banks in trust for them. In contrast, U.S. banks own negligible amounts of nonfinancial firms' equity.

Banks consequently have a potentially powerful position as active monitors in both Germany and Japan. First, they have typically comprised the lion's share of external finance to firms and may, therefore, exercise influence through their control of the firm's access to external funds. Second, the loans they make are often short-term in nature. In normal times, they would be rolled over on an almost automatic basis, but should questions arise about management strategy or quality, the bank always has the option of not renewing the loan at a fairly frequent interval. Finally, their large shareholder status means that they have both the incentive and ability to directly monitor management through their presence on the board and the votes they can exercise at the shareholders meeting.

Unlike U.S. banks, banks in Germany and Japan have effectively acted as insiders to firms. They have had great access to information about the firm's operations and have had the ability to

Table 4
Summary Statistics of Ownership Concentration of Large Nonfinancial Corporations
(Percentage of Outstanding Shares Owned by the Largest Five Shareholders)

	United States	Japan	Germany
Mean	25.4	33.1	41.5
Median	20.9	29.7	37.0
Standard deviation	16.0	13.8	14.5
Minimum	1.3	10.9	15.0
Maximum	87.1	85.0	89.6
Mean firm size[1] (millions of US$, 1980)	3,505	1,835	3,483
Mean firm size[2] (millions of US$, 1980)	1,287	811	1,497

[1] Measured by total assets.
[2] Measured by market value of equity.

NOTE: The samples were as follows: United States—457 nonfinancial corporations in 1980; Japan—143 mining and manufacturing corporations in 1984; and Germany—41 nonfinancial corporations in 1990.

SOURCES: For the United States and Japan, Prowse (1992); for Germany, Prowse (1993). Size data converted to US$, using 1980 average exchange rates and deflated by U.S. consumer prices.

engage in monitoring and influencing management. Banks' dual role as important lenders and shareholders has given them a primary role in the financing and governing of firms.

U.S. and German/Japanese systems compared

These differences between corporate finance systems show up in a variety of ways. First, the relative importance of corporate securities markets across industrialized countries differs dramatically. Stock market capitalization (as a share of gross domestic product) is much larger in the United States than in Japan and Germany after adjustment for the double-counting associated with intercorporate shareholding (*Table 2*).[10] Corporate bond markets also differ dramatically in size across countries. In Japan and Germany, less than 10 percent of nonfinancial corporations' credit market debt was in the form of securities in 1985, compared with more than 50 percent in the United States (*Table 3*). These differences also show up in the financing patterns of individual large firms in the three countries. For example, in 1994, the two largest firms in Germany, Daimler-Benz and Siemens, had long-term debt securities outstanding accounting for 10 percent and 2 percent, respectively, of their total assets. In Japan, the numbers for Toyota and Nissan were 10 percent and 4 percent, respectively. In contrast, the percentage of total assets financed by long-term bond securities for two of the largest U.S. firms were 30 percent for Ford and 20 percent for GE.

Corporate ownership structures in the Untied States, Japan, and Germany also differ markedly. Ownership concentration is significantly higher in Japan and Germany than in the United States (*Table 4*). The holdings of the largest five shareholders average over 40 percent in Germany, 33 percent in Japan, and only 25 percent in the United States. Many of the large shareholders in Japan and Germany are banks with lending ties to the firm.

Another major difference is the frequency of corporate takeovers. The market for corporate control is much less active in Japan and Germany (*Table 5*). Part of the reason for the much greater merger and acquisition activity in the United States is, of course, the larger number of companies listed on the stock market. However, even after normalizing the dollar value of mergers and acquisitions by stock market capitalization, the U.S. merger market appears fifteen to twenty times more active than those in Japan or Germany.

Hostile takeovers are also very much less frequent in Japan or Germany than in the United States. Table 6 illustrates the paucity of hostile offers (whether ultimately successful or not) in continental Europe compared with those in the United States (no comparable data for Japan are available). The differences across countries in *actual, completed* hostile takeovers are even more striking. Since World War II, for example, there have only been *four* successful hostile takeovers in Germany (see Franks and Mayer 1993). Kester (1991) claims that the use of takeovers in large Japanese firms is very infrequent. Conversely, in the United States, almost 10 percent of the Fortune 500 in 1980 have since been acquired in a transaction that was hostile or that started off as hostile.[11]

Legal and regulatory determinants of corporate financial systems

Much of the scholarly and policy-oriented literature is silent on the reasons for the differences in corporate finance and governance systems across countries. Studies that do focus on differences in the legal and regulatory environment mistakenly focus on only one aspect of it:

Table 5
Average Annual Volume of Completed Domestic Mergers and Corporate Transactions with Disclosed Values, 1985–89

	United States	Japan	Germany
Volume (in billions of US$)	1,070	61.3	4.2
As a percentage of total market capitalization	41.1	3.1	2.3

NOTES: Dollar values calculated at current exchange rates for each of the five years covered. Market capitalization figures are for 1987, converted to dollars at prevailing exchange rate.

SOURCES: For the United States and Germany, Securities Data Corp., Mergers and Corporate Transactions database; for Japan, Yamaichi Securities Corp., as reported in Beiter (1991).

Table 6
Hostile Takeovers and Leveraged Buyouts as a Percentage of All Attempted Transactions, 1985–89

	United States	Rest of Europe
Hostile takeovers	17.8	9.6
Leveraged buyouts	20.0	2.7

NOTES: Hostile offers are defined as those transactions in which the acquiring company proceeds with its offer against the wishes of the target company's management. Data include both completed and withdrawn transactions.

SOURCES: Securities Data Corp.; Mergers and Corporate Transactions database.

Table 7
Legal and Regulatory Constraints on Corporate Control

Institution	United States	Japan	Germany
Banks	Stock ownership prohibited or requires prior approval of Federal Reserve Board and must be "passive." Source: Glass–Steagall and Bank Holding Company Act.	Prior to 1987 banks could hold up to 10 percent of a firm's stock. After 1987 can hold up to 5 percent. Source: Anti-Monopoly Act.	No restrictions, apart from some generous prudential rules.
Life insurance companies	Can hold up to 2 percent of assets in a single company's securities; can hold up to 20 percent of assets in equities. Source: New York insurance law.	Can hold up to 10 percent of a firm's stock. Source: Anti-Monopoly Act.	Can hold up to 20 percent of total assets in equities. Source: Insurance Law.
Other insurers	Control of noninsurance company prohibited. Source: New York insurance law.	Can hold up to 10 percent of a firm's stock. Source: Anti-Monopoly Act.	No restrictions.
Mutual funds	Tax penalties and regulatory restrictions if ownership exceeds 10 percent of a firm's stock. Source: Investment Company Act, Internal Revenue Service.	No restrictions.	No restrictions.
Pension funds	Must diversify. Source: ERISA.	No restrictions.	No restrictions.
General	Securities and Exchange Commission notification required for 5-percent ownership. Antitrust laws prohibit vertical restraints. Insider trading laws discouraging active share holding. Bankruptcy case law makes creditor in control of firm liable to subordination of its loans.	—	Regulatory notification required for 25-percent ownership.

SOURCES: For the United States, Roe (1990); for Japan and Germany, various national sources.

differences in the degree to which banks are allowed to be active investors in firms.[12]

In fact, there are large legal and regulatory differences among the United States, Japan, and Germany that affect the corporate financial systems in place. These differences are of three kinds. First is the aforementioned severity of the restraints on large investors being active investors in firms. Second is the degree to which sources of nonbank finance are actively suppressed. Finally, there are differences regarding disclosure requirements by firms wishing to issue securities. All these differences play a role in determining the different outcomes observed across countries. I consider them in turn.

Restraints on ownership of corporate equity. As Table 7 documents, financial institutions in Japan and Germany are generally given much more latitude to own shares in and exert control over firms than they are in the United States.

In the United States, financial institutions face significant constraints on their ability to take large stock positions in firms and use them for corporate control purposes.[13] Banks are simply prohibited from owning any stock on their own account. Bank holding companies cannot own more than 5 percent of any unaffiliated, nonsubsidiary, nonbank firm without Federal Reserve Board approval, and their holdings must be passive.[14] Bank trust departments are allowed to hold equity for the beneficial owners. However, they cannot invest more than 10 percent of their trust funds in any one firm, and there are often other trustee laws

Table 8
Legal and Regulatory Constraints on Nonfinancial Firms' Access to Nonbank Finance

Instrument	Japan	Germany
Commercial paper	Issuance prohibited until November 1987.	Issuance discouraged until 1992 by issue authorization procedure and securities transfer taxes.
Domestic bonds	Stringent criteria for issuance of straight and convertible bonds until 1987.	Issuance discouraged until 1992 by issue authorization procedure and securities transfer taxes.
Eurobonds	One-year approval period for foreign bond issuance until 1982; restrictions on issuance of Euroyen bonds until 1984; withholding tax on interest income of nonresidents until 1985; Eurobond issuance restrictions eased further in 1992.	Issuance abroad required prior notification of the authorities and was subject to maturity restrictions until 1989; issuance of foreign currency bonds prohibited until 1990.
Equity	Heavy taxes on equity transactions until 1988.	New share issues must be offered to existing shareholders first. One-percent corporation tax on all equity issues until 1992. Secondary trading in equities subject to securities transfer tax until 1992, ranging from 0.1 percent to 0.25 percent. Annual net asset tax of 1 percent on corporate net assets, payable irrespective of net income position.

SOURCES: Döser and Broderson (1990); Takeda and Turner (1992).

that encourage further fragmentation of trust holdings.

Other financial institutions also face strict rules governing their equity investments. New York insurance law, which currently governs almost 60 percent of total life insurance industry assets, places a limit of 20 percent of a life insurer's assets, or one-half of its surplus, that can be invested in equity, and a limit of 2 percent of its assets that can be invested in the equity of any one firm. Other states have similar rules. Property and casualty insurers are prohibited outright from owning a noninsurer. Mutual funds are subject to tax and regulatory penalties if they own more than 10 percent of the stock of any one firm. Pension fund investments are governed by the Employment Retirement Income Securities Act of 1974 (ERISA). ERISA requires all pension funds to be diversified, allowing little room for an influential position in a company.

U.S. securities laws discourage concentrated, active shareholding by investors in general. First, all entities acquiring 5 percent or more of a company must file with the SEC, outlining the group's plans and revealing its ownership and sources of finance. Second, any stockholder who exercises control over a firm may be liable for the acts of the firm. Third, insider trading rules restrict large active shareholders from short-term trading of stock they own. Thus, Bhide (1993) reports that pension fund managers are reluctant to own more than 10 percent of a firm because this would restrict the liquidity of their stake, which by law they have a responsibility to protect. Finally, the legal doctrine of equitable subordination discourages all creditors from taking equity positions in the firm, since their loans are subject to subordination should they exert control.

In Japan, there are far fewer regulations constraining particular financial institutions from holding corporate stock or from using the stock they own for corporate control purposes. The sole restrictions derive from the Anti-Monopoly Act, which until 1987 limited a bank's holdings of a firm's shares to 10 percent (the limit has since been lowered to 5 percent). Insurance companies are similarly restricted to owning at most 10 percent of a firm. Antitrust laws and insider trading legislation on paper look similar to those of the United States. However, there is widespread recognition that they are not enforced by the authorities.

The institutional structure of the German financial system is based on the universal banking principle. Universal banks can hold whatever share of equity they like in any nonfinancial firm, limited only by a number of prudential rules that do not appear to be particularly binding.[15] Antitrust laws have not been used to discourage intercorporate shareholdings as they have in the United States. And for much of the postwar period, there was no explicit legislation against insider trading: Germany has only recently adopted the European Community standards regarding the establishment of minimum levels of shareholder protection.

Suppression of sources of nonbank finance in Japan and Germany. Table 8 documents some of the legal and regulatory restraints on access to external nonbank finance by nonfinancial firms in Japan and Germany in the postwar period. Unlike in the United States, significant obstacles have confronted firms wishing to raise external finance from sources other than banks

Table 9

Selected Results from a Survey of the Implementation of OECD Guidelines on the Disclosure of Information by Multinational Enterprises

(Number of Firms)

Country	Implementation of guidelines on disclosure of operating results[1]			Implementation of guidelines on disclosure of intragroup pricing policies[2]		
	Full	Partial	Not implemented	Full	Partial	Not implemented
United States	34	19	0	29	0	18
Japan	2	21	0	2	0	17
Germany	0	19	0	0	0	15

[1] Includes industrial and financial firms.

[2] Industrial firms only.

SOURCE: OECD, "Disclosure of Information by Multinational Enterprises," *Working Document by the Working Group on Accounting Standards*, no. 6, 1989.

until the mid-1980s in Japan and until very recently in Germany.

Until the early 1980s, Japanese firms had no direct recourse to capital markets for external finance. The domestic bond market was open to only a few government-owned firms or electric utilities. The Bond Issuance Committee set severe eligibility requirements on issuers of corporate bonds through a detailed set of accounting criteria that in 1979 only permitted *two* firms to issue unsecured bonds domestically. These requirements were gradually relaxed in the mid-1980s, so that, by 1989, about 300 firms were eligible to issue unsecured straight bonds.[16] Similar restrictions on access to the Eurobond market were relaxed in stages from 1982. Commercial paper issuance was prohibited by the authorities until 1987. While not directly restricted, equity issuance was discouraged by heavy taxes on transactions in equities until 1988.

Restrictions on nonbank finance in Germany have been significant until even more recently. Issuance of commercial paper and longer term bonds was hampered by requirements under the issue authorization procedure and the securities transfer tax (see Deutsche Bundesbank 1992). The issue authorization requirements included obtaining prior approval by the Federal Ministry of Economics. Such approval was granted if the issuer's credit standing was satisfactory and if a bank supported the application. While this procedure was a formality for large German firms, it added to the effective cost of a bond issue because firms could not generally issue the bonds at a time of their own choosing but were forced to wait for approval from the ministry. The securities transfer tax often imposed a considerable burden on the secondary market for corporate securities, particularly at its short end. Foreign issuance of corporate debt has been subject to similar restrictions. Equity issuance and secondary trading of equities historically have been subject to a variety of taxes that have generally made equity uncompetitive with bank loans as a form of external finance (see Döser and Broderson 1990). Most important, however, has been the legal requirement for employee representation on boards of publicly listed firms, which has discouraged many private firms from going public (see Borio 1990). Overall, these restrictions have made securities issuance "not a viable alternative for most German businesses."[17]

Fostering nonbank finance in the United States through disclosure requirements. Quite apart from the active discrimination against nonintermediated forms of finance, the lax disclosure requirements in Japan and Germany *may* have been an additional (passive) factor in discouraging the development of securities markets.

Firms in the United States wishing to issue securities to the public have been required to disclose much more information than those in Japan and Germany. Results from a recent Organization for Economic Cooperation and Development survey, which rated the degree of information disclosure by firms relative to OECD guidelines, illustrate this pattern.[18] Table 9 illustrates the results for two areas of disclosure—operating results and intragroup pricing policies. Two-thirds of U.S. firms surveyed had fully implemented the OECD disclosure guidelines for operating results; the rest had partially implemented them. In Germany none of the firms surveyed and in Japan less than 10 percent of those surveyed had fully implemented the guidelines. The results for disclosure of intragroup pricing policies (and other areas not reported here) reveal a similar pattern.

There is a fairly intense academic debate as to the effects of mandated corporate disclosure requirements, with no conclusive answer. One hypothesis is that mandated disclosure rules help firms make credible commitments to outside investors to provide honest and timely disclosure and protection from market manipulation or insider trading. In this view, for strategic, competitive reasons firms may not have sufficient incentives voluntarily to provide the financial information outside investors would require to consider extending such finance (for example, they may be afraid that competitors could take advantage of such information). Thus, absent a regulatory requirement for adequate disclosure to outside investors, the development of a liquid market for corporate securities may be effectively impeded. Proponents of such a view include Dye (1990), Dye and Magee (1991), and Demski and Feltham (1994).

The alternative hypothesis is that regulation unduly constrains the choices of firms and investors and prevents efficient contracting. In this view, firms have sufficient incentives to provide the optimal amount of disclosure to obtain external financing and regulations mandating such disclosure are, at best, irrelevant and, at worst, burdensome and costly on both firms and investors. Proponents of this view include Bentson (1973), Leftwich (1980), Watts and Zimmerman (1986), and Phillips and Zecher (1981).

Ultimately, the effect of mandated disclosure requirements is an empirical issue. Unfortunately, only a limited amount of research bears on this topic. Stock price studies of firms before and after the 1933 Securities Act suggest that mandated disclosure regulations impose costs on firms (see Benston 1973 and Chow 1983). On the other hand, Sylla and Smith (1995) explain the differing speeds of development of stock markets in the United States and U.K. since 1800 on differences in mandated disclosure rules. They attribute the faster development of the stock market in the U.K. in the nineteenth and early twentieth centuries to the various companies acts between 1844 and 1900 that required substantial disclosure by firms wishing to issue equity. Disclosure requirements were significantly less onerous in the United States until the 1930s, when the Securities Acts of 1933 and 1934 went beyond even what the British had put in place. Sylla and Smith claim these disclosure rules were responsible for putting the United States ahead of the U.K. in terms of the size and depth of the stock market in the immediate postwar period.

While this debate is far from settled, it is possible that the marked differences in disclosure requirements among countries may, in part, be responsible for the differences in the relative speeds of development of corporate securities markets.

Costs and benefits of different systems of finance and governance

There has been much debate about the efficiency of the different systems of corporate finance and governance we observe in the industrialized countries, with no clear consensus. While the academic and policy-oriented literature often finds *specific* advantages in a particular country's financing and governance systems, it has not found demonstrably cheaper capital for firms or obviously superior mechanisms of corporate control in any one country.

The academic literature to date makes the following points: first, there are some advantages in fostering tight ties between banks and firms. Prowse (1990), Hoshi et al. (1990a), Lichtenberg and Pushner (1993), Cable (1985), and Elston (1993) all provide evidence suggesting that the concentrated holding of debt and equity claims by financial institutions in Germany and Japan mitigates the information problems of external finance and governance to a greater extent than in the United States, where ties between banks and firms are more arm's length.

However, there are also advantages to having large, active corporate securities markets. Porter (1992) and Sahlman (1990) provide evidence that the U.S. system appears better at funding emerging companies and new (often high-technology) business activities than the German or Japanese system. Franks and Mayer (1992) argue that such a comparative advantage is the reason for the predominance of high-technology firms in the fields of oil exploration, biotechnology, pharmaceuticals, and computer software in the United States. Porter also claims that liquid U.S. capital markets are able to reallocate capital from low- to high-growth sectors more efficiently than those of Japan and Germany.

The specific advantages of each system do not appear to translate into overall measurable differences in either the cost of external financing or the effectiveness of the corporate control mechanism. There are legions of cost of capital studies with no clear message as to which system delivers external finance to firms at the lowest cost.[19] And Kaplan (1993a, 1993b) reports that top management turnover exhibits *similar* sensitivities to measures of poor firm performance in the United States, Japan, and Germany. Conversely, both systems clearly have their embarrassing examples of breakdowns in corporate control. The German and Japanese systems appear particularly susceptible to potential problems involving "who monitors the monitor?"[20] The U.S. system appears to have particular weaknesses when, for one reason or another, hostile takeovers pose no credible threat to current management.[21] Overall, it may well be that neither system clearly dominates the other. After all, firms from all three countries have been competing internationally with each other for years, yet no obvious winner has emerged.

Perhaps the most important consideration in evaluating the effectiveness of each system is the system's long-run stability, a factor many studies ignore. It appears that the legal and regulatory environment that sustains the corporate finance system in Japan and Germany is not stable, but is changing rather rapidly. These changes may be a result of a conscious decision by policymakers in these countries to capture some of the aforementioned advantages of the U.S. system in financing emerging high-technology ventures. Or they may have resulted from the fact that legal and regulatory systems have costs, both economic and political, the bulk of which may have little to do with the particular mechanism of corporate finance and governance they support and which have increased in response to changes in the power of vested interests, financial innovations, and other market developments.

Japan is the clearest example of this phenomenon. The regulatory and legal structure of the Japanese financial system has been changing since the 1970s under both domestic and international pressure for reform. One aspect of Japanese deregulation has been the gradual removal of restrictions on nonbank finance. Rosenbluth (1988) argues that the strict regulation of Japanese corporate finance in favor of bank lending until the early 1980s proved unsustainable in the face of growing competition from the Euromarkets and the decline in profitability of domestic bank lending after the removal of interest rate controls.

Ties between banks and large firms in Japan that have easy access to the Euromarkets and the developing domestic bond market are weakening substantially in response to this deregulation, as the financing patterns of many firms are changing (see Hoshi et al. 1993 and Kester 1991). While Japanese nonfinancial firms obtained only 15 percent of their total gross external financing from securities markets between the years 1970 and 1985, from 1986 to 1990 they obtained over 30 percent from bond and equity markets.[22] What these changes mean for the mechanisms of corporate control employed in Japan is not clear. It may mean that takeovers start to become more frequently used to discipline management. However methods of corporate control evolve, and there will likely be significant changes from the previous regime.

The German legal and regulatory environment has also shown recent signs of changing. As part of the attempt to compete with London as a center of finance, many of the restrictions on corporate finance have been relaxed (see Deutsche Bundesbank, March 1992). In addition, other aspects of the German legal and regulatory framework will have to change under planned European Economic Community reforms. As in Japan, this may increase the role of securities markets in the financing of German firms. Again, how methods of corporate control will change is unclear.

The U.S. financial system has also been changing, albeit much more slowly than those in Japan and Germany. Some restrictions, such as the SEC's rules on shareholder activism, have already been loosened and have led to some institutional investors flexing their muscles somewhat. However, the wide variety of different laws that support the U.S. system of corporate control—portfolio regulations on financial institutions, tax laws, antitrust rules, and securities laws—means that any changes are likely to be evolutionary rather than revolutionary.

Implications of changing legal and regulatory environments

This article has shown that differences in the legal and regulatory environment pertaining to corporate ownership by financial institutions and to corporate securities market development have been of great importance in determining differences in the finance and governance systems observed across the industrialized countries. It follows that as these legal and regulatory environments change, so will methods of finance and governance. As noted above, there is clearly some long-term convergence going on in the legal and regulatory environments of the United States, Japan, and Germany, and the focal point of this convergence is not the Japanese/German or U.S. system as it currently exists but an environment in which banks are free to conduct investment and commercial banking activities (including active investments in firms) *and* corporate securities markets are unhindered by regulatory and legal obstacles.

What will be the primary mechanisms of corporate finance and control in such a system? This is a difficult question because we do not have models among the developed industrialized countries we can look at that embody such a legal and regulatory environment. The closest to this model might arguably be the United States in the early twentieth century. In the United States in the 1920s, firms had relatively free access to nonbank finance, securities markets were relatively active, and there were few restrictions on the ability of financial institutions to take equity and debt positions of a size to confer some control.[23] In this system, there might plausibly be some firms that would solve their financing and governance problems better by using intermediated finance from intermediaries that also take active equity positions in the firm, while others might better rely on securities markets for external finance and an active takeover market for corporate control. Just how and why this "mix" occurs is a subject worth further investigation in the form of a more detailed analysis of this period in U.S. financial history.

For the United States, the movement toward a more deregulated environment for financial intermediaries should not necessarily be viewed with trepidation. As pointed out, there are some clear advantages to be gained from letting banks and other financial intermediaries form tighter ties with the firms to which they lend. Perhaps the biggest concern relates to the issue of deposit insurance. Allowing commercial banks to engage in investment banking activities, including the holding of corporate equity, clearly requires a thorough review of the implications for the deposit insurance fund and possible modifications to the U.S. deposit insurance system.

Notes

1 For example, see Jensen (1989), Kester (1991), Bisignano (1990), Porter (1992), Franks and Mayer (1992 and 1990), Bhide (1993), Roe (1993), Edwards and Fischer (1994), and Charkham (1994).

2 An exception is Roe (1993).

3 A recent manifestation of this is the Council on Competitiveness' 1992 report, *Capital Choices: Changing the Way America Invests in Industry*. See Porter (1992).

4 Recent innovations in asset-backed commercial paper programs and other credit-enhancement techniques are, however, allowing smaller, less highly rated firms to access the commercial paper market.

5 See Berger, Kashyap, and Scalise (1995) for evidence on these trends in bank lending.

6 See Carey, Prowse, Rea, and Udell (1993).

7 Large firms will also use the private equity market on occasion. See Fenn, Liang, and Prowse (1995).

8 1985 is chosen as the year for comparison because it reflects the situation in Japan prior to much of the corporate securities market deregulation in the second half of the 1980s.

9 See Prowse (1995).

10 Comparing unadjusted stock market capitalization across countries can be misleading if there is a high degree of intercorporate shareholding in one country because these shares are double-counted.

11 See Morck, Shliefer, and Vishny (1989).

12 Thus, Roe (1993), Allen and Gale (1996), Boot and Thakor (1996), Gorton and Schmidt (1992), and Calomiris (1993) distinguish the U.S. and German financial systems solely on the principle of universal banking, with no acknowledgement of the severe restrictions on corporate securities markets in Germany.

13 For a detailed description of these restrictions, see Roe (1990) and Prowse (1995 and 1990).

14 Bank holding companies are regulated by the Federal Reserve Board under the Bank Holding Company Act of 1956. In addition, they may purchase up to 24.9 percent of a nonbank firm's total capital (including subordinated debt and nonvoting stock); again, the investment must be passive. See Carey et al. (1993).

15 The most onerous appears to be the requirement that total qualifying investments in equity and real estate should not exceed the bank's capital. A qualifying investment is one in which the bank takes a greater than 10-percent share of the enterprise. See Deutsche Bundesbank (1991).

16 See Nomura Securities (1989).

17 See Döser and Brodersen (1990).

18 See OECD (1989).

19 See, for example, Kester and Luehrman (1992).

20 That is, banks in Japan and Germany are the very institutions that are themselves diffusely held by shareholders. Thus, there may be a problem in ensuring that banks in these countries act to maximize value and conduct the monitoring function in an efficient manner in the firms in which they have large stakes.

21 Two examples would be during periods when the financing for takeovers becomes scarce and when, in particular industries such as commercial banking, regulatory constraints effectively preclude hostile takeovers. See Prowse (1995). Regarding the corporate control mechanism in U.S. commercial banks, see Prowse (1994).

22 See Prowse (1995). See also Bank of Japan (1992).

23 See, for example, De Long (1990).

References

Allen, F., and D. Gale (1996), "Universal Banking, Intertemporal Risk Smoothing, and European Financial Integration," in A. Saunders and I. Walter (eds.), *Universal Banking: Financial System Design Reconsidered* (Burr Ridge, Ill.: Irwin).

Bank of Japan (1992), "Analysis of Recent Changes in the Relationship Between Banks and Corporations Based on Financial Data of Corporation," Special Paper, no. 217, July.

Beiter, J. (1991), "The Japanese Market for Corporate Control," Salomon Center Occasional Paper, no. 10.

Benston, G. (1973), "Required Disclosure and the Stock Market: An Evaluation of the Securities Exchange Act of

1934," *American Economic Review* 63 (1): 132–55.

Berger, A. N., A. K. Kashyap, and J. M. Scalise (1995), "The Transformation of the U.S. Banking Industry: What a Long, Strange Trip It's Been," *Brookings Papers on Economic Activity* 2, 55–218.

Bhide, A. (1993), "The Hidden Costs of Stock Market Liquidity," *Journal of Financial Economics* 34 (1): 31–52.

Bisignano J. R. (1990), "Structures of Financial Intermediation, Corporate Finance, and Central Banking" unpublished manuscript.

Board of Governors of the Federal Reserve System (1991), "Flow of Funds Accounts: Financial Assets and Liabilities."

Boot, A., and A. Thakor (1996), "Banking Scope, Financial Innovation, and the Evolution of the Financial System," in A. Saunders and I. Walter (eds.), *Universal Banking: Financial System Design Reconsidered* (Burr Ridge, Ill.: Irwin).

Borio, C. E. V. (1990), "Leverage and Financing of Nonfinancial Companies: An International Perspective," BIS Economic Papers, no. 27.

Cable, J. (1985), "Capital Market Information and Industrial Performance: The Role of West German Banks," *Economic Journal* 95: 118–32.

Calomiris (1993), "Corporate Finance Benefits from Universal Banking: Germany and the United States, 1870–1914," NBER Working Paper, no. 4408.

Carey, M., S. Prowse, J. Rea, and G. F. Udell (1993), "The Economics of the Private Placement Market," Board of Governors of the Federal Reserve System Staff Study, no.166.

Charkham, J. (1994), *Keeping Good Company: A Study of Corporate Governance in Five Countries* (Oxford: Clarendon Press).

Chow, C. (1983), "The Impacts of Accounting Regulation on Bondholder and Shareholder Wealth: The Case of the Securities Acts," *Accounting Review* 58 (4): 485–520.

De Long, B. (1990), "Did J.P. Morgan's Men Add Value?" *NBER Working Paper*, no. 3461.

Demski, J. S., and G. A. Feltham (1994), "Market Response to Financial Reports," *Journal of Accounting and Economics* 17 (1–2): 3–40.

Deutsche Bundesbank (1992), "Financial Center Germany," Deutsche Bundesbank Monthly Report, March.

——— (1991), *Banking Act of the Federal Republic of Germany*, Frankfurt.

Diamond, D. W. (1991), "Monitoring and Reputation: The Choice Between Bank Loans and Directly Placed Debt," *Journal of Political Economy* 99 (4): 689–721.

Döser, W., and Christian Broderson (1990), "A Guide to the Law on Issuing Securities in Germany," International Financial Law Review Special Supplement.

Dye, R. A. (1990), "Mandatory vs. Voluntary Disclosures: The Cases of Financial and Real Externalities," *Accounting Review* 65 (1): 1–24.

———, and R. P. Magee (1991), "Discretion in Reporting Managerial Performance," *Economics Letters* 35 (1): 359–63.

Edwards, J., and K. Fischer (1994), *Banks, Finance, and Investment in Germany* (Cambridge: Cambridge University Press).

Elston, J. A. (1993), "Firm Ownership Structure and Investment: Theory and Evidence from German Panel Data," unpublished manuscript.

Fenn, G., N. Liang, and S. D. Prowse (1995), "The Economics of the Private Equity Market," Federal Reserve Board Staff Study, no. 168.

Franks, J., and C. Mayer (1993), "German Capital Markets, Corporate Control, and the Obstacles to Hostile Takeovers: Lessons from Three Case Studies," unpublished working paper, London Business School.

———, and ——— (1992), "Corporate Control: A Synthesis of the International Evidence," unpublished working paper, London Business School.

———, and ——— (1990), "Capital Markets and Corporate Control: A Study of France, Germany, and the U.K.," *Economic Policy* 11 (1): 191–31.

Gorton, G., and F. Schmidt (1992), "Universal Banking and the Performance of German firms," unpublished manuscript.

Hoshi, T., A. Kashyap, and D. Scharfstein (1993), "The Choice Between Public and Private Debt: An Analysis of Post-Deregulation Corporate Financing in Japan," unpublished manuscript.

———, ———, and ——— (1990), "Bank Monitoring and Investment: Evidence from the Changing Structure of Japanese Corporate Banking Relationships," in R. Glenn Hubbard (ed.), *Asymmetric Information, Corporate*

Finance, and Investment, (Chicago: University of Chicago Press).

Jensen, M. C. (1989), "The Eclipse of the Public Corporation," *Harvard Business Review* September–October, 61–74.

———, and W. H. Meckling (1976), "Theory of the Firm: Managerial Behavior, Agency Costs, and Ownership Structure," *Journal of Financial Economics* 3 (2): 305–60.

Kaplan, S. (1993a), "Top Executive Rewards and Firm Performance: A Comparison of Japan and the U.S.," University of Chicago Working Paper.

——— (1993b), "Top Executives, Management Turnover, and Firm Performance in Germany," University of Chicago Working Paper.

Kester, W. Carl and T. Luerhman (1992), "Cost of Capital Comparisons Across Countries," *Harvard Business Review*.

——— (1991), *Japanese Takeovers: The Global Quest for Corporate Control*, (Boston: Harvard Business School Press).

Leftwich, R. (1980), "Market Failure Fallacies and Accounting Information," *Journal of Accounting and Economics* 2 (3): 193–211.

Leland, H., and D. Pyle (1977), "Informational Asymmetries, Financial Structure, and Financial Intermediation," *Journal of Finance* 32 (2): 371–87.

Lichtenberg, F., and G. Pushner (1992), "Ownership Structure and Corporate Performance in Japan," NBER Working Paper, no. 4092.

Morck, R., A. Shleifer, and R. Vishny (1989), "Alternative Methods for Corporate Control," *American Economic Review* 79 (4): 842–52.

Nomura Securities (1989), *Finance Handbook*, Tokyo.

OECD (1989), *Disclosure of Information by Multinational Enterprises* (Paris: Organization for Economic Cooperation and Development).

Phillips, S., and J. R. Zecher (1981), *The SEC and the Public Interest: An Economic Perspective* (Cambridge, Mass.: MIT Press).

Porter, M. (1992), *Capital Changes: Changing the Ways America Invests in Industry* (Boston: Harvard Business School Press).

Prowse, S. D. (1995), Corporate Governance in an International Perspective: A Survey of Corporate Control Mechanisms Among Large Firms in the United States, United Kingdom, Japan, and Germany *Financial Markets, Institutions, and Instruments* 4 (1).

——— (1994), "Alternative Methods of Corporate Control in Commercial Banks," *Proceedings of a Conference on Bank Structure and Competition: The Declining Role of Banking?* Federal Reserve Bank of Chicago.

——— (1993), "The Structure of Corporate Ownership in Germany," unpublished manuscript.

——— (1992), "The Structure of Corporate Ownership in Japan," *Journal of Finance* 47 (3): 1,121–1,140.

——— (1990), "Institutional Investment Patterns and Corporate Financial Behavior in the United States and Japan," *Journal of Financial Economics* 27 (1): 43–66.

Roe, M. J. (1993), "Some Differences in Corporate Structure in Germany, Japan, and America," *Yale Law Journal* 102 (8): 1927–2003.

——— (1990), "Political and Legal Restraints on Ownership and Control of Public Companies," *Journal of Finance Economics* 2 (1): 7–43.

Rosenbluth, F. (1988), *Financial Politics in Contemporary Japan* (Ithaca: Cornell University Press).

Ross, S. (1977), "The Determination of Financial Structure: The Incentive-Signaling Approach," *Bell Journal of Economics* 8 (1): 23–40.

Sahlman, W., (1990), "The Structure and Governance of Venture Capital Organizations," *Journal of Financial Economics* 27 (1): 473–521.

Sylla, R., and G. D. Smith (1995), "Information and Capital Market Regulation in Anglo-American Finance," in Michael Bordo and Richard Sylla (eds.) *Anglo–American Financial Systems* (Burr Ridge, Ill.: Irwin).

Takeda, M., and P. Turner (1992), "The Liberalization of Japan's Financial Markets: Some Major Themes," *BIS Economic Papers*, no. 34.

Watts, R., and J. Zimmerman (1986), *Positive Accounting Theory* (Englewood Cliffs, N.J.: Prentice Hall).