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CORPORATE GOVERNANCE IN AN INTERNATIONAL PERSPECTIVE:
a survey of corporate control mechanisms among large firms in the United States, the United Kingdom, Japan and Germany

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Introduction[1]

To what extent are firms in different capitalist countries organised and governed in different ways? What are the reasons for the striking differences we see in corporate finance and corporate governance mechanisms across countries? What are the costs and benefits of these different mechanisms of corporate control? Is one system of corporate governance inherently better than any other? If so, why do we not see this system operating in all countries?

These issues are of course fundamental to the theories of the firm, corporate finance and corporate governance that have exercised academics for many years. Recently, however, they have acquired a policy relevance that they have not enjoyed before. In the United States and the United Kingdom there has been a long-standing debate about the preferred methods of corporate control of large non-financial firms.[2] In addition, many industrialised countries, such as Japan and Germany, have recently initiated significant changes in their financial markets. Others, such as France and Italy, are considering vast privatisation efforts and concomitant changes in their financial systems. Finally, the ex-communist countries are putting in place entirely new systems of property rights, business law and financial markets. In deciding on what changes to make and how to design their new financial markets policy-makers must decide which is the optimal way to organise the financing and governance of the large non-financial firms whose success is vital to the economic health of

[1] I would like to thank Joseph Bisignano, Horst Bockelmann, Claudio Borio, Phil Davis, Peter Dittus, Mitsuhiro Fukao, Neale Kennedy and Noriyuki Tomioka for their suggestions, and staff members of the Bundesbank for useful conversations. Any errors are the sole responsibility of the author.

[2] For the United States, the most recent manifestation of this is the Council on Competitiveness' 1992 report, "Capital Choices: Changing the Way America Invests in Industry". In the United Kingdom, it is "The Financial Aspects of Corporate Governance" (The Cadbury Report (1992)).

their country. In doing so, they would clearly benefit from an understanding of the factors behind the differences between the current models of corporate finance and governance operating in the major industrialised countries, and the costs and benefits of each. This paper attempts to shed light on these issues by describing in detail the important characteristics of the corporate control mechanisms in large non-financial firms in the United States, the United Kingdom, Japan and Germany by examining why such differences exist and by comparing some of the strengths and weaknesses of each system.

Even the casual observer notices large differences in the ways in which firms are organised and governed in the major industrialised countries. Firms in the United States and the United Kingdom are widely thought of as relying primarily on the threat of a takeover by outsiders to ensure that managers abide by shareholders' wishes, while German and Japanese firms are thought to be governed by the banks, with which they typically have close ties. One purpose of this paper is to bring together the large amount of data and empirical results from a variety of sources on these issues that illustrate the important differences in methods of corporate control across countries and allow analysis of this conventional wisdom. In doing so, the paper will draw on a large number of sources in the academic literature to make its argument. Quite apart from its newly acquired status as a relevant policy issue, such an inquiry may be valuable at the current moment as a summary of the recent burgeoning of research on these issues in different countries.

One theme of this paper is that the differences observed between countries are not simply accidents of history or culture but a result of striking differences in the firm's legal and regulatory environment which affects the degree to which the concentrated holding of the firm's financial claims (both debt and equity) is achieved. Concentrated holdings are important from a corporate control perspective because they provide investors with both the incentive and the ability to monitor and influence management. In the absence of such concentration, alternative mechanisms of corporate control must be relied upon to ensure management discipline. Regulatory restrictions on investors' (particularly financial institutions') holdings of large debt and equity stakes in individual firms in the Anglo-Saxon countries has led to relatively dispersed holdings of such claims. Conversely, the absence of such restrictions in Japan and particularly Germany has encouraged concentrated holdings of corporate

debt and equity by both financial institutions and other corporations. In these countries, concentrated holdings have also been encouraged by legal and regulatory impediments to the development of securities markets which have meant that, particularly in Japan, firms have had to rely on banks to provide a large share of their total financing needs. These differences appear to be a root cause of the reliance on different mechanisms of corporate control in different countries.[3]

Of course, as the legal and regulatory environment in a particular country changes, so may the method of corporate control. There have been significant regulatory changes in Japan throughout the 1980s and in Germany more recently. This paper will consider what these changes and the slower evolution of the regulatory environment in the Anglo-Saxon countries imply for the methods of corporate control in use in each country. In Japan, for example, regulatory changes already appear to have brought about a weakening of the power banks to monitor and influence firms, as many corporations have taken advantage of newly available sources of external finance to become more independent of bank financing.

A second theme of the paper is that concentrated holdings of a firm's financial claims may, in general, be the most efficient way of resolving agency problems in firms. This is reflected in a number of theoretical results which compare the costs involved with those of other mechanisms of corporate control such as takeovers. It is also reflected in the available empirical evidence, which suggests that the concentrated holding of debt and equity claims may mitigate a number of agency problems inherent in the firm. In light of this, the recent movement away from the close relationships between firms and banks in Japan appears somewhat paradoxical. It suggests that the legal and regulatory structures that determine the mechanisms of corporate control themselves have costs which may affect a much broader range of aspects than those associated with issues of corporate control. The recent Japanese experience is an example of a legal and regulatory structure becoming untenable in the wake of both market-driven financial innovation and pressure from

[3] While this argument has been made before for the United States, it has not been generally realised that the corporate control mechanisms in Japan and Germany also result from a particular legal and regulatory environment that encourages the concentrated holding of a firm's financial claims. See Prowse (1990) and Roe (1993) for the argument as applied to the United States.

domestic interest groups and from abroad for financial system reform. It suggests that mechanisms of corporate control that rely on too rigid a regulatory structure may not be viable in the long run, even though they appear to be efficient means of resolving corporate agency problems.

The paper is structured as follows. The first section provides an overview of the nature of the problems facing the firm's various stakeholders and the primary mechanisms for resolving these problems. The second section details the main differences between the legal and regulatory systems under which firms operate in the four countries under study that are important in determining the corporate control mechanisms employed. These include the antitrust environment, severity of insider trading laws, restrictions on financial institutions acting as "active" investors and restrictions on non-bank sources of external finance for firms. The third section details the main differences in corporate control mechanisms between countries. It looks at differences in the ownership of the equity and debt of the firm, the structure of the board, methods of management compensation and the frequency of takeovers. The fourth section evaluates some costs and benefits of the various methods of corporate control. The final section concludes the analysis and derives some lessons for policy-makers who have the task of developing systems of corporate finance and governance.

I. Problems of external finance and corporate control in large firms

The traditional neo-classical theory of the firm makes no distinction between the firm's managers, creditors and owners. The firm is treated as a single homogeneous entity that acts to maximise total value by maximising the discounted value of expected future cash flows. It is assumed to suffer from no corporate control or external finance problems. External finance, whether from banks, or equity or bond investors, is simply treated as another input to the production process, with no effect on the objective function of the firm.

In reality, however, today's large firms are not the simple production functions represented in most microeconomic textbooks. Ever since Berle and Means (1932) and Coase (1937), economists have realised that firms may be vulnerable to problems involving corporate control and

external finance. These stem from the fact that the firm's shareholders, managers and creditors each have different preferences as to how the firm's resources should be employed and that providers of external finance have imperfect methods of assessing what managers are doing with their money. With regard to preferences, shareholders would simply like to maximise the value of the firm's equity, irrespective of the value of its debt. The shareholders of a limited liability firm with debt outstanding will want to take on more risk than is implied by an investment policy that maximises the total value of the firm, because they benefit from a risky action if it pays off, but can declare bankruptcy and avoid the full cost of the risky action should it fail. Creditors would like to maximise the probability that they will be repaid in full, i.e. they would prefer to take on less risk than the total value-maximising policy would dictate. Managers' preferences are for a policy that justifies paying them larger salaries (for example, by increasing the size of the firm), and in general for an easy life – they would prefer to shirk their responsibilities or divert resources for their personal benefit (in the form of larger offices and staffs) rather than that of the shareholders. In addition, if managers have a large amount of human capital specific to the firm, then, like creditors, they would prefer to minimise the probability of bankruptcy rather than maximise the total value of the firm.

These different preferences can result in non-value-maximising behaviour because information asymmetries between shareholders, managers and creditors make it impossible for providers of external finance to write contracts with the firm that guarantee the agent (i.e. management) will always act in the best interests of the principal. The situation is complicated still further by the fact that there are almost always multiple principals in a large firm, such as shareholders and debtholders, whose different preferences can lead to conflict.

There do, however, exist a number of mechanisms that can prevent the firm from deviating too far from value-maximising policies in favour of one stakeholder and at the expense of others. Stiglitz (1985) emphasises that the most important of these mechanisms involves the concentration with which the financial claims of the firm are held. If the equity of the firm is concentrated in the hands of a few investors, each investor will have sufficient private incentive to invest in information acquisition and monitoring of management. Secondly, their large shareholdings also give them the ability to exert control over management either through their

voting rights or through representation on the board of directors, or both. Of course, their large stakes have a cost: viz. the limited diversification which these investors can achieve. Large financial institutions (and other corporations) will clearly find these costs to be lower than would an individual with a smaller amount of wealth, simply because the former may be able to achieve diversification by taking a number of large stakeholdings in different firms.

Similarly, if the debt of the firm is concentrated in the hands of a few banks or other lenders, these investors will also have an incentive to engage in monitoring. Their position as large continuous lenders to the firm may also give them leverage over management decisions, because their threats to withhold funds from the firm unless management performs adequately are essentially cost-free and therefore very credible.[4] However, lenders are only interested in the bottom part of the tail of the distribution of returns. They need only concern themselves with the probability of default and the net worth of the firm in these low-return states. They need not concern themselves with whether the managers are maximising the value of the firm per se. As Stiglitz (1985) points out, this problem can be mitigated to the extent that the large lenders to the firm are also large shareholders – in this case the investors will have a large incentive to engage in monitoring and control but little incentive to skew the returns in favour of one investor class at the expense of another.

In the absence of concentrated claimholding, there are a number of indirect measures by which investors can control management. Lenders, for example, can set a term to the loan, at the end of which they can insist on their money back. During the term of the loan the borrower's behaviour can be controlled to some extent by the use of covenants, which specify under what conditions the lender can call in the loan regardless of the contractual term length. Although these mechanisms can clearly operate even under conditions of dispersed ownership of debt, they are likely to be more effective if the firm's loans are concentrated in the hands of a few lenders. This is because covenants require that the lender monitor the firm (to ensure compliance with the covenants) and renegotiate the covenants should they prove to be impeding value-maximising actions. Both monitoring and renegotiation are more feasible

[4] Of course, such threats are less credible for firms that do not need, or have easy access to, other sources of external finance.

and less costly when the firm's debt is concentrated in the hands of a small number of lenders.[5]

The first line of defence for shareholders against incompetent or lazy management is the board of directors. Boards are supposed to play an important role in corporate governance, particularly in monitoring top management. Directors are supposed to hire, fire and set the compensation of top management, supervise their actions, provide advice and veto poor decisions. Again, in practice, boards are only likely to be powerful to the degree that they are composed of large shareholders who have an incentive to invest the resources required to conduct such monitoring.

Well-functioning, competitive markets for managers, for equity capital and for the final product can also be important in providing management discipline. The management labour market can help to align the interests of managers and shareholders if management compensation is linked to the profitability of the firm (through performance bonuses or payment in the form of stock or stock options). In addition, managers may be motivated by the value of their services to other firms that may seek to employ them and thus have a stake in maintaining their reputation as profit-generators.

The capital markets can also place constraints on managers' behaviour. Management must worry about the terms on which capital will be supplied to the firm. Even lazy managers should be in favour of cheaper financing of their amenities.

A well-functioning takeover market can also be effective in controlling management. The credible threat of a takeover, in which management is usually replaced, may discipline managers to act in shareholders' interests. If managers are not maximising the value of the firm, then any individual could in theory purchase the firm, change the policy to a value-maximising one, and reap the resulting increase in value as a return to his improved management.

Finally, competition in the market for the final product can have a disciplining effect on management by providing the threat of bankruptcy for firms that are not run efficiently by their managers.

Of course, these indirect protection mechanisms may be far from perfect in practice. First, it may be hard to design management

[5] For an extended discussion of these points, see Carey et al. (1993).

compensation packages that fine-tune managers' rewards to reflect their efforts. Secondly, the capital markets can constrain management behaviour only in those firms that need external finance on a continuous basis. Firms with a large cash flow are unlikely to be disciplined by a market they have little need to tap. Thirdly, takeovers may prove to be a costly and therefore infrequently used solution to corporate control problems. Finally, while competition in the final-product market may threaten managers with bankruptcy unless they achieve some minimum level of efficiency (thereby increasing creditor protection), it may not be of sufficient strength to deter managers from eroding large amounts of shareholder wealth.

In practice, managerial discipline in the typical firm is likely to be achieved by reliance on some combination of all the mechanisms outlined above. Furthermore, the most effective mix of these mechanisms is likely to vary from firm to firm. In smaller firms, for example, investors may not have to bear great costs of limited risk diversification when taking large stakes in the firm. Direct shareholder and creditor monitoring may be a cheaper method of corporate control for small firms than for large firms, which may be forced to rely on other methods, such as the credible threat of a hostile takeover, to achieve management discipline.

Why should the mix of mechanisms differ across countries? Corporate governance mechanisms show large differences internationally. This poses a problem for the theory of corporate control. There is a best way to organise and finance large firms, so we should observe, according to theory, similar mechanisms of governance (and finance) in the large industrialised countries. The fact that this is not the case suggests that we should look at other factors which theory ignores – such as the laws, rules and regulations which govern the financial systems of industrialised countries and which do differ significantly.

A glance at the academic and policy-oriented work in this field suggests that this point has not been sufficiently digested. Some commentators in the United States, for example, believe that the system of corporate finance and governance in the United States represents the apex of evolutionary development – highly liquid securities markets, dispersed securities holdings by financial institutions, along with the reliance on management salaries linked to the firm's stock price and the threat of hostile takeovers to mitigate the associated agency problems that arise. They ignore the fact that the US financial system has developed

under a particular set of legal and regulatory constraints and to a large extent may be viewed as a unique product of these particular constraints. Others view the Japanese or German model as representing a more advanced financial system in terms of its ability to solve governance and finance problems, and something that the United States should actively try to emulate.[6] Similarly, many UK commentators have for a long time argued that the United Kingdom should imitate German methods of investing in industry.[7] However, these arguments fail to recognise that the Japanese and German systems themselves are the result of a particular legal and regulatory framework that may be difficult to put in place in the Anglo-Saxon countries.

The interaction between the legal and regulatory environment and the corporate governance and finance mechanisms in these four countries is examined in the following two sections.

II. Legal and regulatory determinants of corporate control mechanisms

There are large legal and regulatory differences between the four countries under study that affect the corporate control mechanisms employed. The differences are essentially of two kinds. The first is the severity of legal and regulatory constraints on large investors being "active" investors in firms, arising from differences in company and bankruptcy law, in the portfolio regulation of financial institutions, tax laws, insider trading laws, disclosure rules and antitrust laws. The US and UK laws are in general much more hostile to investors taking large, influential stakes in firms. The second difference relates to the degree to which firms are discouraged from tapping non-bank sources of external finance by laws that directly suppress the development of domestic corporate securities markets and the ability to tap foreign sources of finance. The choice of corporate control method may also be affected by differences in the comprehensiveness of disclosure laws that serve as a spur to the development of securities markets. The legal and regulatory environment in Japan and Germany has traditionally discriminated heavily against the development of non-intermediated sources of finance in comparison with the Anglo-Saxon countries.

[6] See Jensen (1989) and Porter (1992).

[7] See Carrington and Edwards (1979), Charkham (1989), and Cosh et al. (1990).

1. Legal and regulatory constraints on ownership of corporate equity

As Table 1 documents, financial institutions in Japan and Germany are generally given much more latitude to own shares in and exert control over large firms than are their counterparts in the United Kingdom and, particularly, 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.[8] Banks are simply prohibited from owning any stock on their own account by the Glass-Steagall Act of 1933.[9] Bank holding companies cannot own more than 5% of any one firm and their holdings must be passive.[10] Bank trust departments are allowed to hold equity for the beneficial owners. However, they cannot invest more than 10% of their trust funds in any one firm, and there are often other trustee laws that encourage further fragmentation of trust holdings.

Other financial institutions also face strict rules governing their equity investments. US insurance companies' stock investments are regulated by state law. Under New York insurance law, which currently applies to almost 60% of total life insurance industry assets, a life insurer may invest in equity no more than 20% of its assets, or one-half of its surplus, and no more than 2% of its assets in the equity of any one company. Other states have similar rules. Property and casualty insurers are prohibited outright from owning a non-insurer. Mutual funds are subject to tax and regulatory penalties if they own more than 10% of the stock of any one firm. Pension funds' investments are governed by the Employee Retirement Income Securities Act of 1974 (ERISA). ERISA requires all pension funds to be diversified, allowing little scope to acquire an influential position in a company. It also prohibits pension plans from taking a stake of more than 10% in the plan sponsor's own stock.

There are also impediments to non-financial firms taking large stakes in firms. Dividend tax rules discourage intercorporate holdings of stocks. In addition, US antitrust laws have historically been hostile to the intercorporate ties that would be implied by large intercorporate shareholdings – for example, Du Pont held a 25% stake in General

[8] For a detailed description of these restrictions, see Roe (1990) and Prowse (1990).

[9] Recently, the prohibitions on bank underwriting and dealing in securities have been somewhat eroded. However, the prohibition on bank ownership of equity remains in place.

[10] See Carey et al. (1993), Appendix C.

Table 1

Legal and regulatory constraints on corporate control

<table>
<tr><th>Institution</th><th>United States</th><th>United Kingdom</th><th>Japan</th><th>Germany</th></tr>
<tr><td>Banks</td><td>Stock ownership prohibited or requires prior approval of FRB and must be "passive". Source: Glass-Steagall and BHC Act.</td><td>Bank of England may discourage ownership on prudential grounds. Capital adequacy rules discourage large stakes.</td><td>Prior to 1987 banks could hold up to 10% of a firm's stock. After 1987 can hold up to 5%. Source: Anti-Monopoly Act.</td><td>No restrictions, apart from some generous prudential rules.</td></tr>
<tr><td>Life insurance companies</td><td>Can hold up to 2% of assets in a single company's securities. Can hold up to 20% of assets in equities. Source: NY Insurance Law.</td><td rowspan="2">Self-imposed limits on fund assets invested in any one company stemming from fiduciary requirement of liquidity.</td><td rowspan="2">Can hold up to 10% of a firm's stock. Source: Anti-Monopoly Act.</td><td>Can hold up to 20% of total assets in equities. Source: Insurance Law.</td></tr>
<tr><td>Other insurers</td><td>Control of non-insurance company prohibited. Source: NY Insurance Law.</td><td>No restrictions.</td></tr>
</table>

Table 1 (continued)

Institution	United States	United Kingdom	Japan	Germany
Mutual Funds	Tax penalties and regulatory restrictions if ownership exceeds 10% of a firm's stock. Source: Investment Company Act, IRS.	Cannot take large stakes in firms. Source: Financial Services Act, 1986	No restrictions	No restrictions
Pension Funds	Must diversify. Source: ERISA.	Self-imposed limits on fund assets invested in one company stemming from fiduciary requirement of	liquidity.	No restrictions No restrictions
General	SEC notification required for 5% ownership. Antitrust laws prohibit vertical restraints. Insider trading laws discouraging active shareholding. Creditor in control of firm liable to subordination of its loans. Source: Bankruptcy case law.	Insider trading laws discourage large stakeholders from exerting control. Source: Insider Dealing Act.	–	Regulatory notification required for 25% ownership.

Sources: For the United States, Roe (1990); for the other countries, various national sources.

Motors, until forced by a Supreme Court ruling in the late 1950s to sever all ties with the company.

In addition to regulations specific to particular institutions, US securities laws discourage concentrated active shareholding by any one investor. First, Sections 13 and 14 of the Securities Exchange Act require all entities acquiring 5% or more of a company to inform the SEC of the group's plans, revealing its ownership and sources of finance. Secondly, under Section 20 any stockholder who exercises control over a firm through either a majority or a minority shareholding may be liable for the acts of the firm. Thirdly, insider trading rules restrict large active shareholders from short-term trading of stock they own.[11] Bhide (1993) reports that pension fund managers are reluctant to receive private information from management or to go above a 10% ownership level in any firm because this would restrict the liquidity of their holdings, which by law they have a fiduciary responsibility to protect. Fourthly, SEC regulations have prohibited communication among large shareholders – until 1992, it was a violation of proxy rules for ten or more stockholders of a firm to speak about its policies or management. Finally, the legal doctrine of equitable subordination discourages all creditors from taking an equity position in a company, since their loans are potentially vulnerable to subordination should they be seen to exert control over the firm.

In the United Kingdom there are fewer formal restrictions on agents' ability to hold concentrated shareholdings in firms, but those that exist still appear substantial. There are no formal rules which prohibit financial institutions from owning non-financial firms: banks' equity holdings in non-financial enterprises are not subject to specific limits. Nevertheless, banks usually require the explicit approval of the Bank of England before they may acquire significant shareholdings in such firms. Banks' links with non-financial firms have been subject to strict prudential rules. Exposure (comprising all claims on the counterparty including equity holdings) in excess of 10% of a bank's capital must be reported to the Bank of England. In addition, there are negative implications for a bank's capital adequacy position if it has a stake of more than 20% in a non-financial firm. All such investments must be deducted from the capital base of the bank when calculating its risk asset ratio. For equity investments of less than 20%, the

[11] Purchases and sales of stock cannot take place within six months of each other.

value of the investment carries a risk weight of 100%.[12] These prudential rules appear to have been sufficiently strict enough to have effectively precluded significant equity investments by deposit banks in the United Kingdom.[13]

Insurance companies and pension funds in the United Kingdom typically operate according to self-imposed limits on their shareholdings in any one company for reasons of diversification similar to those that have made US pension funds reluctant to take large stakes in individual firms.[14] Funds normally invest no more than 2% and at most 5% of their assets in any one company. There is also a limit, usually of 5%, on the percentage of outstanding shares which may be held by a pension fund or insurance company. Mutual funds (unit trusts) in the United Kingdom are also subject to regulations under the Financial Services Act of 1986 regarding their power to take large stakes in firms for corporate control purposes.

As in the United States, insider trading laws in the United Kingdom discourage investors from holding large equity stakes and using them for purposes of corporate control, since doing so makes them insiders and therefore vulnerable to prosecution under the Insider Dealing Act.

In Japan the situation is somewhat different from that in the Anglo-Saxon countries. Financial institutions are subject to few regulations regarding the holding of corporate stock or the use of the stock they own for corporate control purposes. The sole restrictions derive from the Anti-Monopoly Act. For example, Japanese commercial banks are not prohibited from owning corporate stock, although they are subject to anti-monopoly regulations that until 1987 limited a single bank's holdings of a single firm's shares to 10% (the limit has since been lowered to 5%). Insurance companies are similarly restricted to owning at most 10% of a single firm. On paper, Japanese antitrust laws and insider trading regulations look similar to those in the United States. However, it is widely recognised that they are not enforced by the authorities.[15]

Germany is often cited as an example of a country in which the relationship between banks and industry is not burdened at all by

[12] This treatment was eased in 1993 under the EC Second Banking Co-ordination Directive, which limits the size of banks' holdings in non-financial firms so that no holding of more than 10% of a firm can exceed 15% of the banks' capital base, and the total of such holdings may not exceed 60% of capital.

[13] See Santomero and Langhorn (1985).

[14] See Minns (1980).

[15] See *The Economist*, 19th May 1990.

Table 2

Ownership of common stock in 1990

Percentage of outstanding shares owned

<table>
<tr><th></th><th>United States</th><th>United Kingdom</th><th>Japan</th><th>Germany</th></tr>
<tr><td>All corporations</td><td>44.5</td><td>62.9</td><td>72.9</td><td>64.0</td></tr>
<tr><td>Financial institutions</td><td>30.4</td><td>52.8</td><td>48.0</td><td>22.0</td></tr>
<tr><td>Banks</td><td>0</td><td>4.3</td><td>18.9</td><td>10.0</td></tr>
<tr><td>Insurance Companies</td><td>4.6</td><td rowspan="3">48.5</td><td>19.6</td><td rowspan="3">12.0</td></tr>
<tr><td>Pension funds</td><td>20.1</td><td rowspan="2">9.5</td></tr>
<tr><td>Other</td><td>5.7</td></tr>
<tr><td>Non-financial corporations</td><td>14.1</td><td>10.1</td><td>24.9</td><td>42.0</td></tr>
<tr><td>Individuals</td><td>50.2</td><td>28.0</td><td>22.4</td><td>17.0</td></tr>
<tr><td>Foreign</td><td>5.4</td><td>6.5</td><td>4.0</td><td>14.0</td></tr>
<tr><td>Government</td><td>0</td><td>2.5</td><td>0.7</td><td>5.0</td></tr>
</table>

Sources: US Federal Reserve Flow of Funds, UK Financial Statistics, Japanese Flow of Funds, Deutsche Bundesbank Monthly Report.

regulatory constraints. The institutional structure of the German financial system centres on the principle of universal banking. A universal bank is free to provide a wide range of services, from commercial to investment banking, and to invest in equities on its own account. Universal banks can hold whatever share of equity they like in any non-financial firm.[16] This freedom is limited only by a number of prudential rules, which do not appear to be particularly binding and give banks wide latitude to own equity.[17] There are few other aspects of the legal and regulatory environment that might restrict concentrated shareholdings. Antitrust laws have not been used to discourage intercorporate shareholdings as they have in the United States. There is no explicit legislation against insider trading: Germany has still to adopt the legal standards prescribed by the EC regarding the establishment of minimum levels of shareholder protection.

[16] However, specialised banks, such as savings banks, mortgage banks, and Länder banks are often subject to different and more restrictive legislation with regard to their equity holdings.

[17] The most onerous requirement appears to be 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 share of more than 10% in the enterprise. See Deutsche Bundesbank (1991a).

These legal and regulatory differences have implications for the structure of corporate ownership in the four countries under study. They are illustrated to some degree by a simple inspection of the aggregate statistics on the ownership of listed companies given in Table 2. Table 2 reveals the far greater role played by financial institutions (especially banks) in Japan compared with the United States. Also notable is the greater importance of non-financial corporate holdings in Japan and, particularly, Germany compared with the Anglo-Saxon countries.[18]

Some aspects of the aggregate shareholding pattern, however, do not seem to bear out the traditional distinctions often made between the financial systems of the Anglo-Saxon countries and those of Japan and Germany. The United Kingdom is closer to Japan in terms of the weight of the financial sector in aggregate holdings, while Germany is closer to the United States in this respect.[19] Similarly, individual ownership in the United Kingdom is closer to that observed in Japan and Germany than in the United States.

These aggregate figures, however, reveal nothing about the *concentration* of ownership nor about the identity of the large shareholders in a typical firm, which is important from a corporate control perspective. What is required is an analysis of the ownership patterns of a sample of firms in each country. Such an analysis is presented in Section 3. For now, a better perspective may be gained by reformulating the figures given in Table 2 on the basis of the degree to which the holder of the shares tends to take large stakes in the firm and engage in monitoring.[20] In Table 3 the ownership data presented in Table 2 has been adjusted in a number of ways. First, an attempt has been made to split financial institutions' shareholdings between those they own for

[18] The stock ownership patterns observed in Table 4 have been undergoing significant change in the last twenty-five years. In particular, both the United States and the United Kingdom have seen a significant increase in the shareholdings of corporations (both financial and non-financial) at the expense of individual holdings (see Prowse (1991)).

[19] This is partly a function of the differing institutional arrangements for pension provision in Germany. Since the state pension fund works on a pay-as-you-go basis, with current pensions being paid out of current contributions, there is little surplus free to invest in the capital markets. In addition, about two-thirds of the funds earmarked for the payment of private pensions is retained by the company as an unfunded liability. Only the remainder is invested outside the company via private pension funds. The funds retained by the company are used for general corporate purposes. The result is that there is less capital available for the capital market and less demand for outside financing than in the Anglo-Saxon countries, where the bulk of private pensions are channelled through private pension funds. See Edwards and Fisher (1993).

[20] The following methodology is borrowed from Porter (1992a).

their own account and those they hold as agents for other investors. For a variety of reasons shares held on own account are more likely to be held for long-term corporate control purposes.[21] In the United States and the United Kingdom, the overwhelming majority of shares held by financial institutions are held in their capacity as agents for other investors. In Japan and Germany however, ownership of shares by financial institutions on their own account is very substantial. Secondly, an attempt is made to adjust US individual and corporate holdings for those holdings which are traded on brokers' recommendations. Shares traded in this way are evidently not being held for the long term and therefore probably do not inspire much shareholder monitoring or other activism on the part of their owners. They are classified as part of financial institutions' holdings as agents.[22] Finally, for Germany the total for institutional owners includes stock which is owned by individuals but held and the voting rights exercised by banks (approximately 14% of outstanding equity). Banks have traditionally had wide powers to exercise the voting rights attached to such stock according to their wishes.[23]

Table 3 gives some idea of the percentages of shares held for trading and for corporate control purposes. Owing to legal constraints on concentrated ownership, fiduciary requirements that encourage diversification and a strong desire for liquidity, US and UK institutional agents tend to hold portfolios involving small stakes in hundreds of firms.[24] The majority of shares in the US and UK stock markets are held

[21] As discussed earlier, prudential regulatory considerations discourage the concentrated holding of shares for other investors. In addition, such shares may be subject to competitive pressures to maximise short-term returns rather than held for the long term (see Porter (1992a)).

[22] Porter (1992a) estimates that 30-40% of total individual holdings and perhaps more than 50% of corporate holdings are traded in this way in the United States. Minns (1980) estimates the proportion for individuals in the United Kingdom to be 20%. Unfortunately there is no data on the proportion of individual and corporate holdings in Japan and Germany that might be traded in this way. The stable corporate shareholding pattern in Japan and Germany suggests that the adjustments required for Japan and Germany would in any case be small.

[23] Under current law, proxy voting rights may only be given to one specific institution and for a maximum of fifteen months. During that time the bank must inform the beneficial owner on how it plans to vote on the various issues on the agenda at the annual shareholders' meeting, and ask the depositor for instructions on how to exercise the proxies. If no instructions are given, the bank can exercise the proxies according to its stated intentions. This law has been tightened over the years but it still appears that banks have wide powers to vote stock according to their wishes. Purrucker (1983) has estimated that 95% of private shareholders do not make use of their rights to instruct banks on voting matters.

[24] For example, one of the largest US pension funds, CALPERS, holds stock in over 2,000 companies, with the largest individual stake being only 0.7% of outstanding equity.

Table 3

Estimated comparative pattern of ownership and agency relationships

Percentage of total outstanding shares

	United States	United Kingdom	Japan	Germany
Individuals	30–35	22.4	22.4	3.0
Financial institutions-agents .	55–62	57.8	9.5	3.0
Financial institutions-owners	2.0	0.7	38.5	33.0
Non-financial corporations .	7.0	10.1	24.9	42.0
Foreign	5.4	6.5	4.0	14.0
Government	0	2.5	0.7	5.0

Note: Institutional agents are institutions such as pension funds, mutual funds or other money managers which hold equity as agents for other investors. Institutional owners are institutions which hold equity for their own accounts. For the United States, individual and corporate ownership of shares has been reduced (and added to the financial institutions as agents category) by the estimated proportion of shares that are traded on broker's recommendations (see Porter (1992a)). For the United Kingdom, a similar adjustment has been made to individual shareholdings based on data in Minns (1980). For Germany, the total for institutional owners includes stock which is owned by individuals but held and voting rights exercised by banks (approximately 14% of outstanding equity).

Sources: US Federal Reserve Flow of Funds, Japanese Flow of Funds, Deutsche Bundesbank Monthly Report, Porter (1992a), Minns (1980).

by these institutional agents. Shareholders such as non-financial corporations and financial institutions that own shares on their own account and could potentially use their shareholdings for purposes of corporate control hold only tiny fractions of corporate equity in the United States and the United Kingdom, but almost two-thirds of the outstanding equity in Japan and about three-quarters in Germany.

2. Legal and regulatory constraints on corporate finance

Corporate securities markets in Japan and Germany have been very underdeveloped for much of the post-war period. One reason for this has been the historical legal and regulatory bias against non-bank finance in these countries. The traditionally less stringent disclosure requirements for Japanese and German firms may have been a second factor which increased the costs for outside investors of obtaining information about companies and thereby discouraged the development of non-intermediated sources of corporate finance.

The implications of these differences for methods of corporate control stem from the much higher concentration of debt claims held by investors in countries with relatively inactive securities markets. Because intermediated loans are less standardised than securitised debt instruments they are much more illiquid. Banks and other financial intermediaries thus tend to hold loans for the long term and in a more concentrated fashion than holders of corporate bonds. This gives them more incentive and opportunity to monitor and influence management. Furthermore, being a large creditor of a firm gives a bank more ability to exercise control over management through its power over the firm's access to credit.[25] This influence may of course be increased to the extent that there are no viable alternative external sources of finance other than banks. It may similarly be increased if the lender also has an equity stake in the firm. More generally, the more developed securities markets in the Anglo-Saxon countries encourage both a more fragmented holding of all financial claims on the firm (debt and equity) by investors attempting to diversify fully their holdings, and also the short-term trading of these securities rather than holding them for corporate control purposes.

(a) Suppression of sources of non-bank finance in Japan and Germany

Table 4 documents some of the legal and regulatory constraints on access to external non-bank finance by non-financial firms in Japan and Germany. Until the mid-1980s in Japan and until very recently in Germany there have been significant obstacles facing firms wishing to raise external finance from sources other than banks.

In Japan these restrictions were gradually removed during the 1980s but prior to this were very stringent. Until the early 1980s the corporate sector had no direct recourse to capital markets for external finance. The domestic bond market was open to only very few government-owned firms or electricity utilities. The Bond Issuance Committee imposed severe eligibility requirements on issuers of corporate bonds through a detailed set of accounting criteria. The criteria were so strict that in 1979 only two firms were permitted to issue unsecured straight and convertible bonds domestically. These requirements were gradually

[25] Of course, this power is not absolute even if the firm does not have alternative non-intermediated sources of finance to which it can turn. For example, the firm could always go to another bank. But to the extent that this involves a new, uninformed lender extending funds to the company, it may involve significant costs of information acquisition which must be borne by the seeker of the loan.

Table 4

Legal and regulatory constraints on non-financial firms' access to non-bank finance

Instrument	Japan	Germany
Commercial paper	Issuance prohibited until November 1987.	Issuance discouraged until 1992 by issue authorisation procedure and securities transfer taxes.
Domestic bonds	Stringent criteria for issuance of straight and convertible bonds until 1987.	Issuance discouraged until 1992 by issue authorisation procedure and securities transfer taxes.
Euro-bonds	One-year approval period for foreign bond issuance until 1982. Restrictions on issuance of Euro-yen bonds until 1984. Withholding tax on interest income of non-residents until 1985. Euro-bond 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 transactions in equities until 1988.	New share issues must be offered to existing shareholders first. 1% corporation tax on all equity issues until 1992. Secondary trading in equities subject to securities transfer tax until 1992, ranging from 0.1 to 0.25%. Annual net asset tax of 1% on corporate net assets, payable irrespective of net income position.

Sources: International Financial Law Review (1990), Takeda and Turner (1992).

relaxed in the mid-1980s, so that by 1989 about 300 firms were eligible to issue unsecured straight bonds and 500 firms were eligible to issue unsecured convertible bonds.[26] Similar restrictions on access to the Euro-bond market were relaxed in stages from 1982. Commercial paper issuance was prohibited by the authorities until the end of 1987. And while

[26] See Hoshi, Kashyap and Scharfstein (1993) and Nomura Securities (1989).

transactions in equities were not directly restricted, they were subject to heavy taxes until 1988.

In addition to restrictions on non-bank finance the Japanese authorities imposed extensive interest rate controls on the economy until the mid-1980s, primarily as a means of persuading banks and other financial institutions to hold low-yielding government debt.[27] By holding down deposit interest rates, banks were able to lend at below market rates and still make profits. This made potential alternative sources of external finance generally uncompetitive with bank finance. The practice of attaching subsidies to loans from public financial institutions to "target" industries placed non-intermediated sources of finance at an additional disadvantage in these cases.

Restrictions on non-bank finance in Germany were also significant until even more recently. Issuance of commercial paper and longer-term bonds was hampered by requirements under the issue authorisation procedure and the securities transfer tax.[28] The issue authorisation requirements included obtaining prior approval from the Federal Ministry for Economic Affairs. According to the German Civil Code, approval was granted if the credit standing of the issuer was beyond reasonable doubt and if the application was supported by a bank. While this was little more than a formality for the large German firms, it added to the effective cost of a bond issue relative to a bank loan because firms could not generally issue the bonds at a time of their 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. These restrictions meant that the issuance of negotiable securities was "not a viable alternative for most German businesses".[29] Foreign issuance of corporate debt was subject to similar restrictions. Interest rate controls were less important in Germany than in Japan, operating only until the mid-1960s. Equity issuance and secondary trading of equities were historically subject to a variety of taxes that generally made equity uncompetitive with bank loans as a form of external finance.[30] Most significant, however, were the legal requirements

[27] See Takeda and Turner (1992).

[28] See *Monthly Report* of the Deutsche Bundesbank, March 1992.

[29] See Döser and Brodersen (1990), p. 104. The removal of these restrictions at the end of 1991 sparked the immediate development of a commercial paper market for non-financial firms.

[30] Döser and Brodersen (1990), pp. 101-102.

for employee representation on boards of AGs. These were extremely important in discouraging the only form of organisation able to raise funds on the public markets.[31]

All this is not to say that there were no restrictions in the past on access to non-intermediated finance in the Anglo-Saxon countries. These restrictions were, however, less burdensome and were generally relaxed earlier. For example, it was not until 1986 that the authorities allowed the commercial paper market in the United Kingdom to begin operating, although this was still earlier than in either Japan or Germany.

(b) Fostering non-bank finance in the United States and the United Kingdom through requirements on information disclosure

Quite apart from the active discrimination against non-intermediated forms of finance that has existed for much of the post-war period in Japan and Germany, the easier disclosure requirements in these countries may have been an additional factor in discouraging the development of non-bank sources of corporate finance.

Firms in the United States and the United Kingdom wishing to issue securities to the public are required to disclose much more information than those in Japan and Germany. A recent OECD survey illustrates this pattern.[32] In a study of multinational firms' consolidated financial statements, the OECD rated their disclosure relative to OECD guidelines as "full", "partial", or "not implemented". Table 5 illustrates the results for two areas of disclosure-operating results and intragroup pricing policies. Two-thirds of US firms and three-quarters of UK 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 1% of those surveyed had fully implemented the guidelines. The results for the disclosure of intragroup pricing policies (and other areas of disclosure not reported here) reveal a similar pattern.

The large differences in the degree to which firms are required by their home countries' regulatory bodies to reveal information to the capital markets may have marked implications for the development of an active market for non-intermediated finance.[33] With little disclosure of

[31] See Borio (1990).
[32] See OECD, *Working Document by the Working Group on Accounting Standards*, No. 6, "Disclosure of Information by Multinational Enterprises", 1989.

Table 5

Selected results from a survey of the implementation of the 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
United Kingdom	19	6	0	6	0	14
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.

financial information, potential outside investors will be discouraged from supplying funds to firms through bond or equity markets. For strategic competitive reasons, firms may not have sufficient incentive voluntarily to provide the financial information outside investors require before they will consider extending such finance (for example, they may be afraid that competitors could take advantage of such information). In the absence of a legal and regulatory framework requiring adequate disclosure to outside investors, such as has existed in the United States and the United Kingdom throughout the post-war period, the development of a liquid market for corporate securities may be effectively impeded.[34]

[33] Although note that Bisignano (1990) argues that the differences in the provision of information (and, by implication, the differences in the regulatory environment concerning disclosure) may result from, rather than cause, a country's historical dependence on intermediated finance.

[34] Sylla and Smith (1993) use just such an argument to explain the differing speeds of development of stock markets in the United States and the United Kingdom. They attribute the faster development of the stock market in the United Kingdom in the nineteenth and early twentieth century to the various Companies Acts passed between 1844 and 1900, which were responsible for requiring substantial amounts of disclosure by firms wishing to raise money in the capital markets. Disclosure requirements were significantly less onerous in the United States until the 1930s, when the Securities Acts of 1933 and 1934 went beyond even the UK legislation and were responsible for putting the United States ahead of the United Kingdom in terms of the size and depth of the stock market in the immediate post-war period.

Table 6

Stock market capitalisation, 1985

As a percentage of GNP

	United States	United Kingdom	Japan	Germany
Unadjusted	51	90	71	29
Adjusted	48	81	37	14

Note: Adjusted figures are corrected for the double-counting of shares associated with intercorporate shareholdings.

Sources: Borio (1990) and national data.

The legal and regulatory differences described above are clearly reflected in the relative importance of securities markets in the different countries. Table 6 shows stock market capitalisation as a proportion of GNP in 1985 for the four countries under study.[35] Comparing unadjusted levels of stock market capitalisation can be misleading if there is a high degree of intercorporate shareholding in one country, because these shares are double-counted. Table 6 adjusts for this bias by removing these shares from the calculation. Stock markets in the Anglo-Saxon countries are clearly larger than those in either Japan or Germany once a correction is made for the double-counting associated with intercorporate shareholding.

The differences are also reflected in the relative importance of corporate bond markets across countries. Table 7 illustrates the large differences between the proportion of corporate debt outstanding in the form of securities and that in the form of intermediated loans. In Japan and Germany less than 9% of non-financial corporations' credit market debt was in the form of securities in 1985, whereas it was more than twice as large in the United Kingdom and over 50% in the United States. Flow data is consistent with the stock data and also reveals the impact of deregulation in Japan in recent years. Table 8 shows that between 1970 and 1985 non-financial corporations in the United Kingdom raised over 40% of their external funds from securities markets, in the form of commercial paper and other short-term bills, bonds or equity, compared

[35] 1985 is chosen as the year for comparison in Tables 6 and 7 because this reflects the situation in Japan prior to much of the deregulation of the second half of the 1980s.

Table 7

Composition of companies' credit market debt, 1985

In percentages

	United States	United Kingdom	Japan	Germany
Intermediated debt	45	77	91	94
of which, from banks . . .	36	69	n.a.	88
Securities	55	23	9	6

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.

with 15% for non-financial firms in Japan and 12% for those in Germany.[36] Financial intermediaries, principally banks, provided the lion's share of external finance for German and Japanese companies in the form of short and long-term intermediated loans.[37] The direct relation between financing patterns and the legal and regulatory restrictions on non-bank finance is illustrated by the changes in the composition of external finance in Japan since many of the regulations described above were relaxed. As a share of total gross financing, debt and equity finance raised from the securities markets in the period 1986–90 in Japan was double the figure for the previous fifteen-year period, while the importance of intermediated debt declined by about 20%.[38]

[36] The United States is excluded from this comparison because the flow-of-funds sources and uses data are largely treated on a net basis. However, Table 7 indicates that, of the four countries under study, the United States is the most dependent on securities markets for raising external finance.

[37] Insurance companies also provide some intermediated finance in Japan and Germany, although the amounts are small in comparison with bank loans.

[38] Some caution should be used in interpreting the figures in Tables 7 and 8. For example, some securities issued in the Anglo-Saxon countries, such as privately placed corporate bonds, are better thought of as intermediated loans. This means that the importance of intermediated debt may be understated for the United States and the United Kingdom. However, some securities issued in Japan and Germany are bought by banks and other financial intermediaries with close ties to the firm, and may be thought of as securitised forms of intermediated finance. This means that the figures for Japan and Germany may also be understating the importance of intermediated finance. In any case, the adjustments required are small enough to suggest that the general patterns presented in Tables 7 and 8 are unlikely to be altered by these considerations. More generally, Borio (1990), Mayer (1988 and 1990) and Berglof (1991) show that cross-country comparisons of corporate financing behaviour are quite sensitive to the data sources used, their coverage, whether stocks or flows of financial assets are analysed and other methodological issues. This paper is primarily concerned with differences across countries in the importance of intermediated finance versus financing through securities markets, differences which appear robust, whatever the method used to analyse the data.

Table 8

Gross funding of non-financial corporations

As a percentage of total gross financing

	1970–85		
	United Kingdom	Japan	Germany
Retentions	68	52	76
External finance	32	48	24
Intermediated debt	19	41	21
Securities	13	7	3
	1986–90		
	United Kingdom	Japan	Germany
Retentions	50	54	78
External finance	50	46	22
Intermediated debt	35	32	18
Securities	15	14	4

Note: Total gross financing excludes trade credit and some overseas financing. Intermediated debt refers to loans from financial institutions. Securities includes public equity and short and long-term bills and bonds.

Sources: OECD Financial Statistics, Part III and national data.

Table 8 also suggests differences between firms in Japan and Germany in their dependence on bank debt as a fraction of total financing needs. While the distribution of their debt between loans and securities is roughly equivalent (see Table 7), because German firms have relied greatly on internal finance they have been much less dependent on external debt financing from banks than have firms in Japan; from 1970 to 1985, for example, Japanese firms relied on loans from financial institutions for more than 40% of their total financing needs, compared with about half that for German firms. This suggests that Japanese firms in particular may have been subject to extensive influence by banks, given from their role as major providers of finance for firms. The recent decline in the dependence of firms on bank loans in turn suggests that the effectiveness of the bank as a monitor of management may have weakened somewhat in Japan.

Overall, these differences suggest that banks in Germany and, particularly, in Japan may have a more effective role in monitoring the firm than in the Anglo-Saxon countries by virtue of their role as major

providers of finance. However, the importance of banks from a corporate control perspective may have declined in recent years in Japan as firms have taken advantage of opportunities to tap other forms of external finance.

III. Corporate governance in an international perspective

Do the different legal and regulatory environments outlined above affect how corporations govern themselves? While this paper does not formally test theories about reasons for international differences in corporate governance, the differences observed accord with the different legal and regulatory regimes described above.

1. Corporate ownership structure

The structure of corporate ownership – the concentration of ownership and the identity of the large shareholders – is clearly important in determining how a firm's managers are disciplined. In a diffusely held firm the number of shareholders is so large and the amount of the firm held by each is so small that monitoring by shareholders of management's actions is likely to be insignificant. No individual shareholder has a large enough stake in the firm to justify investing the resources required to collect information and exert control over management (by obtaining representation on the board of directors, by voting at shareholders' meetings, etc.). Where ownership is sufficiently concentrated in the hands of a few large shareholders, these will have an incentive to make such an investment and some degree of management discipline will be achieved by direct shareholder monitoring.

The identity of a firm's large shareholders may also have implications for governance. Individuals (or families), financial institutions and non-financial corporations may have different monitoring skills, a greater or lesser incentive to monitor and even different objectives.[39] In addition, as discussed previously, there are regulatory or legal impediments to certain classes of shareholder exerting control over a firm in the Anglo-Saxon countries.

[39] See, for example, Demsetz and Lehn (1985) and Barclay and Holderness (1989).

There are large differences in the ownership structure of firms in the four countries under study. Table 9 gives some data on ownership concentration in a sample of large listed US, UK, Japanese and German non-financial firms at various periods in the past two decades. Although the size of the samples differs, all the firms are among the largest non-financial firms in each country and are drawn from a wide variety of industries within the non-financial sector. The table highlights a number of differences in ownership concentration across countries. It is similar in the United States and the United Kingdom, where the five largest shareholders hold on average between a fifth and a quarter of the outstanding shares of the firms selected. Ownership concentration is significantly higher in Japan, but is by far the highest in German companies, where the holdings of the five largest shareholders average over 40%. This is more than twice the degree of concentration for UK firms, more than 60% greater than that of US firms and about 25% greater than that of Japanese firms.[40]

What is behind these large differences in ownership concentration? One factor may be differences in firm size in the samples under study. The larger the firm, the greater the cost of achieving a given fraction of ownership. In addition, risk-averse owners will only increase their ownership of the firm at lower, risk-compensating prices. This increased cost of capital will discourage owners of large firms from attaining as highly concentrated ownership structures as owners of small firms. Thus, ownership may be more concentrated in Japan and Germany simply because firms there are smaller. However, Table 9 shows that mean firm size (measured by total assets or market value of equity) in the US and German samples are very similar, while the UK firms are actually smaller than those in the other countries. While the Japanese firms sampled are smaller than the US firms, the differences do not seem large enough to explain the differences in ownership concentration.[41] A more likely reason for the low levels of concentration observed in the United States and the United Kingdom is the legal and regulatory environment of the large institutional investors documented earlier.

[40] All the differences in mean ownership concentration are statistically significant at the 1% level, except between the United States and the United Kingdom.

[41] Using the coefficients obtained from a regression analysis of ownership concentration on the size of the firm for the sample of US and Japanese firms, Prowse (1992) finds that differences in firm size are capable of explaining only about 15% of the difference in concentration.

Table 9

Summary statistics of ownership concentration of large non-financial corporations

Percentage of outstanding shares owned by the largest five shareholders

	United States	United Kingdom	Japan	Germany
Mean	25.4	20.9	33.1	41.5
Median	20.9	15.1	29.7	37.0
Standard deviation	16.0	16.0	13.8	14.5
Minimum	1.3	5.0	10.9	15.0
Maximum	87.1	87.7	85.0	89.6
Mean firm size[1] (millions of US$, 1980)	3,505	1,031	1,835	3,483
Mean firm size[2] (millions of US$, 1980)	1,287	n.a.	811	1,497

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

Samples: United States: 457 non-financial corporations in 1980.
United Kingdom: 85 manufacturing corporations in 1970.
Japan: 143 mining and manufacturing corporations in 1984.
Germany: 41 non-financial corporations in 1990.

Sources: For the United States and Japan, Prowse (1992); for the United Kingdom, author's estimates from data in Collett and Yarrow (1976); and for Germany, Prowse (1993). Size data converted to US$, using 1980 average exchange rates and deflated by US consumer prices.

The high ownership concentration in German corporations makes that country stand out even in comparison with Japan. Another aspect of corporate ownership in which Germany stands out is the large proportion of listed companies which have a single large shareholder holding more than 50% of the outstanding equity. Majority-owned listed firms are more frequent in Germany than in the other three countries. Table 10 presents statistics on the frequency of majority-owned firms in each country derived from a variety of studies. Majority ownership is roughly equivalent in terms of its frequency in Japan, the United States and the United Kingdom. However, it is much more prevalent in Germany, where over one-quarter of the listed firms have a majority owner.

There are reasons to believe that ownership may be more concentrated in Germany than even these data suggest. First, listed companies in Germany – the only ones with the potential to be widely held – make up a much smaller portion of the corporate sector than they do in the other three countries. In 1986 listed companies in Germany accounted for under 20% of total sales of the corporate sector, compared

Table 10

Frequency of majority ownership and the identity of the majority shareholder

In percentages

	United States	United Kingdom	Japan	Germany
Frequency of majority ownership[1]	10.8	9.8	8.4	25.1
Identity of majority owner:[2]				
Individual	5.1	6.7	2.1	6.4
Financial institution	5.7	0	3.6	3.7
Non-financial firm		1.8	2.7	8.7
Other[3]		1.3	n.a.	6.4

[1] Number of majority-owned firms as a percentage of total number of firms in the sample. For the United States, number of majority-owned firms identified from the total of all listed companies. [2] Number of firms majority-owned by a certain shareholder class as a percentage of all firms in the sample. [3] Includes foreign and government majority-owned companies. For Japan, foreign-owned companies are subsumed in the other categories.

Sources: For the United States, first row: data in Holderness and Sheehan (1988), other rows: data from sample of 114 listed firms in 1979–84 analysed by Holderness and Sheehan (1988); for the United Kingdom, data from sample of 224 listed companies in 1975 analysed by Nyman and Silberston (1978); for Japan, data from 734 listed non-financial firms in 1984 from Prowse (1991); and for Germany, data from 310 listed non-financial firms in 1991 from Prowse (1993).

to 80% for the United Kingdom.[42] Secondly, unlike in the other three countries, the ownership data may understate the concentration of voting power in the typical large German firm. This is because, as discussed previously, banks in Germany have traditionally been given wide latitude to exercise the voting rights attaching to the shares they hold in trust for smaller shareholders. Proxy votes exercised by the banks on behalf of beneficial shareholders are very important in the large German corporations. The Monopolkommission study of 1978 found that of the one hundred largest AGs in Germany, banks had a combined voting power (from their direct holdings and proxies) of more than 25% in forty-one of them. In the fifty-six AGs in which banks had a combined voting power of more than 5% their average share of the vote was almost 57%. In the remaining forty-four AGs there was a dominant non-bank

[42] See Edwards and Fisher (1993). For example, Bosch, Krupp and Messerschmidt are among the twenty-five largest firms in Germany in terms of total sales. However, all are non-listed Gmbhs and closely held by the founding family and/or other large shareholders.

shareholder with a stake of more than 25%, but even among these firms banks often held large combined voting stakes. It is clear that the proxy voting system in Germany serves to make the control of voting rights even more concentrated than ownership, by concentrating them in the hands of the banks. This may be particularly true of the few widely held companies in Germany where shares are deposited by shareholders with the banks. For example, Pfeiffer (1989) reports that throughout most of the 1980s, the three big universal banks controlled over half the voting rights in BASF, a widely held company. Even companies that are widely held in terms of beneficial ownership may, therefore, have their voting rights concentrated in the hands of a few banks.

Table 10 also provides information on the identity of the majority shareholders in the four countries. In Germany, a large fraction of listed firms are majority-owned by all shareholder classes – individuals, financial institutions and non-financial firms, as well as foreign corporations and government. The importance of individual majority owners is due to the large number of family-owned firms that went public in the mid-1980s but in which the family has a majority holding.[43] Non-financial firms are somewhat more important than financial institutions as majority owners. For the other countries, the fraction of companies that are majority-owned is so small that the identity of the majority shareholder does not seem material. However, data from other sources point to the relatively greater importance of financial institutions as large shareholders in Japan compared with the United States and the United Kingdom.[44]

In sum, in the United States and the United Kingdom ownership concentration is relatively low. This is a result of the legal and regulatory

[43] Since 1983 158 companies have gone public in Germany, representing almost 20% of all listed companies in Germany in 1991.

[44] These studies are not directly comparable but some rough comparisons can be made. In Japan large shareholders are predominantly financial institutions, which is not the case in the United States. In Prowse's (1992) sample of Japanese non-financial firms, financial institutions *ranking among the top five shareholders* held on average 25% of the firm's shares, whereas non-financial corporations held under 5% and individuals 3%. This contrasts with the much smaller holdings of financial institutions in the United States – in Demsetz and Lehn's (1985) sample of non-financial firms, the mean holdings of *the five largest* financial institution shareholders were only 18.4%, while those of *the five largest* individual shareholders was 9.1%. In the United Kingdom financial institutions rarely take large shareholdings in individual firms, while individuals and non-financial firms do so somewhat more frequently. Nyman and Silberston (1978) report that in a sample of fifty-three firms out of the largest 250 in 1975 that had a large shareholder with a stake of more than 20%, that shareholder was a financial institution in only one case, a non-financial firm in fourteen cases, and an individual (usually a director of the company) in the remaining thirty-eight cases.

costs of taking a large, active equity position in a company. Previous research has indicated that direct monitoring of management in large US firms is not non-existent – in particular, firms which are likely to suffer from potentially more severe management agency problems have a higher ownership concentration than those that do not.[45] However, compared to Japan and Germany, the United States and the United Kingdom appear to exhibit significantly less reliance on direct shareholder monitoring of management.

In Japan ownership concentration is somewhat higher than in the Anglo-Saxon countries. The most important large shareholders are financial institutions, particularly banks. There is a significant level of intercorporate shareholding on an aggregate basis but this appears to consist of non-financial firms taking relatively small shareholdings (up to 5%) in a large number of firms – they are rarely important as large shareholders.[46] Among shareholders, therefore, the primary responsibility for monitoring management appears to lie with the banks. However, the source of banks' power over management may come as much from their control over credit as from their position as large shareholders.

Ownership concentration is substantially higher in Germany than in the other countries, reflecting the virtual absence of restrictions on investors taking large equity stakes in firms. Majority-owned firms are much more prevalent in Germany than in the other countries, and non-financial corporations and individuals appear to be as important as large shareholders, which is not the case in Japan, the United States or the United Kingdom. Although banks' own shareholdings do not make them very important large shareholders, their ability to exercise by proxy the voting rights of small shareholders gives them a potentially powerful position in influencing management, especially in firms that are diffusely held. Whether they in fact use this power for purposes of corporate control is an issue that has recently been questioned.[47] However, the high ownership concentration of the small number of listed corporations combined with the importance of the closely held non-listed and non-

[45] See Demsetz and Lehn (1985).

[46] Kester (1991) has suggested that the motivation for such intercorporate shareholding may be a desire to internalise externalities (the "hold-up" problem) rather than a desire to ensure management follows value-maximising policies (although the two motivations are clearly closely related).

[47] See Edwards and Fischer (1993).

incorporated firms in the economy suggests that there is much more direct shareholder monitoring in Germany than in the other countries.[48]

2. Ownership of corporate debt

There are likely to be similar differences between countries in the ownership concentration of debt claims on firms, although the available data is much more sparse. The greater reliance on securities markets than on intermediated markets for debt finance in the Anglo-Saxon countries, illustrated in Table 7, may be taken as a rough indicator that fragmentation of debt claims is higher in the United States and the United Kingdom. A second indicator may be differences in the regulatory limits on banks' exposures to individual customers – these limits are generally less binding in Germany and Japan than in the United States or the United Kingdom. For example, in the United States, banks may not lend more than 15% of their capital to any one borrower, whereas in Japan and Germany the limits are 30% and 50% respectively. In the United Kingdom there are no formal limits, but exposures exceeding 10% are subject to close examination by the authorities.[49]

Furthermore, there are also legal and regulatory differences in the degree to which investors are permitted to take debt and equity stakes in the same firm. Prowse (1990) has found that, where the law allows it, financial institutions do indeed take large share positions in firms to which they lend – the motivation for this may be to ease agency problems between debtors and shareholders. Data for Japan and the United States indicate that differences in this respect may be substantial. Prowse (1990) reports that in over 40% of a sample of large Japanese manufacturing firms the largest debtholder was also the largest shareholder; on average, the largest debtholder held almost one-quarter of the firm's outstanding debt and over 5% of the firm's outstanding equity, while the five largest debtholders of the firm held over half of the firm's debt and almost 20% of its equity. In contrast, Clyde (1989) finds in a sample of US Fortune 500 companies that in only a few cases do any of the five largest shareholders hold any of the firm's debt and that in these few cases the debtholdings of

[48] This assumes of course that the large shareholders, to the extent that they are financial or non-financial corporations, are motivated to monitor the firms they invest in and do not themselves suffer from management agency problems. The issue of "who monitors the monitor?" is addressed in Section IV below.

[49] See Borio (1990).

the largest shareholders are minuscule. These differences probably stem from the fact that, as detailed in Section II.1, while traditional lenders in the United States are restricted from doing so, Japanese financial institutions are free to take large equity stakes in the firms to which they lend. This suggests that the potential for mitigation of the shareholder/debtholder agency problem is much greater in Japan than in the United States. Unfortunately, there is no data available on this aspect for the United Kingdom and Germany, although the banks' role in holding and exercising the voting rights attaching to large equity stakes in Germany suggests that, as in Japan, large lenders may also be large equity holders to a significant degree.

3. Board independence and power

In all countries, the board of directors is responsible for monitoring management on behalf of shareholders. It has, at least nominally, the power to hire and fire the CEO, set his compensation, and block any major corporate projects.

In one sense the structure of the board and its independence of management may be directly related to the power of large shareholders, if they choose to exercise their power through the board. However, the structure of the board and its independence from management is governed by the rules and regulations of a country's corporate law, and differences here may lead to differences in the effectiveness of the board as an overseer of corporate policy, regardless of ownership structure. Table 11 documents some of the main differences between the structure of the board in the four countries under study.

There is a host of evidence of the weakness of boards in the United States.[50] There is less direct evidence of the effectiveness of boards in the United Kingdom, but board structures in the two countries are very similar. Members of the board in both countries must be elected by the shareholders. However, because share ownership is so diffuse, the board is effectively chosen by the CEO. The board typically consists of a significant number of the existing management team. Rarely does any shareholder have the voting rights attaching to a large enough stake to get active representation on the board. The primary controlling element on the board is supposed to be the outside directors, who, however, owe

[50] See, for example, Mace (1971), Weisbach (1989) and Jensen (1989).

Table 11

Differences in the structure of the boards of large non-financial firms

	United States	United Kingdom	Japan	Germany*
Effective method of board appointment	By invitation of CEO	By invitation of CEO	By invitation of CEO	50% of board elected by shareholders, the rest by employees. CEO may not be a member.
Method of appointment of chairman of the board	Selected by board	Selected by board	Selected by board	Elected by shareholder/ employee representatives. Usually a shareholder representative.
CEO and chairman of the Board are the same person?	Frequently	Frequently	Frequently	Never
Sources of information	Management	Management	Management. Informally, President's Club members of stakeholder firms.	Management
Ratio of management directors to total directors	High	High	High	Zero
Presence of large shareholders of board	Rarely	Rarely	Sometimes	Always
Presence of banks on board	Rarely	Rarely	Sometimes	Always

* Refers to AGs with more than 2000 employees.

their appointment to the board to the CEO, and who may often have a financial interest in the continuity of the current management team. Even when the board is determined to fulfil its fiduciary duty vis-à-vis the shareholders as regards value-maximisation, it usually lacks detailed knowledge about the firm's business, and thus has little basis on which to challenge management decisions. Collecting the necessary information is costly, so it rarely pays a director without a large ownership stake to do so. Nor are the managers themselves likely to provide directors with the knowledge required for effective monitoring.[51]

The board of directors of a Japanese company looks remarkably similar to that of an Anglo-Saxon company in structure. Although formally elected by stockholders, the board is typically chosen by the CEO (although perhaps after some consultation with the large shareholders), and consists of both outsiders and members of the management team. As in the United States, large shareholders are not usually represented on boards in Japan, unless the firm is in serious distress. Large shareholders appear to prefer to gather information and influence the firm through the informal President's Club meetings that take place regularly among closely related (Keiretsu) firms. Top management and large creditors and shareholders hold regular monthly meetings, which, although not formal governance structures, resemble a second board along the lines of the supervisory board in Germany. They may use these informal meetings to discuss planned projects or the succession plan for the CEO.[52] Anecdotal accounts of these meetings suggest that they are a forum for large stakeholders and management to discuss general firm policy.

Under the German Joint Stock Corporation Act, an AG has two boards: the Vorstand (board of managing directors), and the Aufsichtsrat (the supervisory board). The Vorstand manages the company on a day-to-day basis. Its members are appointed by the supervisory board. They may only be dismissed by the supervisory board and only on serious grounds, such as gross neglect. The supervisory board is the controlling body. It must supervise the activities of the Vorstand but may not assume any

[51] The Cadbury Report (1992) recommends a number of changes in the structure of boards of UK companies to try to remedy some of these problems. Notable among the recommendations are a formal process for the selection of a significant number of independent non-executive directors to the board, a formal process for directors to take independent professional advice at the firm's expense and the setting-up of an audit committee comprising at least three non-executive directors.

[52] See Anderson (1984) and Roe (1993).

management functions. The Vorstand must report regularly to the supervisory board, and certain transactions may only be concluded with explicit consent of the supervisory board. In large companies the supervisory board must consist of equal numbers of representatives of shareholders and employees, with the chairman (who has the casting vote) being elected by a two-thirds majority vote.[53] In practice, the chairman is normally from the shareholder side and his deputy from among the employee representatives. Banks, representing both themselves and their trustees, are almost always on the board and often provide the chairman. No one may be a member of both the Vorstand and the supervisory board, and cross-company board memberships are restricted.

The general task of the supervisory board is to exert control over the Vorstand. This requires information about the company's activities, for which the Vorstand itself is by far the most important source. In a number of large firms the chairman of the supervisory board is often the retired CEO of the company, who will have easier access to informal sources of information about the firm's business. The supervisory board has the right of appointment and dismissal of the Vorstand. Although outright dismissals are rare, members of the Vorstand who no longer have the confidence of the supervisory board often resign. They must in any case stand for re-election after five years.

There are those who argue that the supervisory board system has evolved into a closed shop, where members all work to perpetuate each other's power and perks.[54] Yet it would seem to have two advantages over the Anglo-Saxon structures. First, membership is not determined by the CEO but consists by law of shareholder representatives. Management is *forced* to interact with a board which consists of representatives of large shareholders. Secondly, no insiders, including the CEO, can sit on the supervisory board, let alone dominate it, as is the case in a lot of US and UK firms.

It might be argued that Anglo-Saxon boards might be more assertive in their monitoring role if they were restructured along the lines of the

[53] The structure differs somewhat for smaller companies. Only one-third of board members of AGs and Gmbhs with fewer than 2,000 employees are required to be employee representatives. Gmbhs with fewer than 500 employees need not have a supervisory board at all. And there are special rules for firms in certain lines of business, such as iron, coal and steel. See Schneider-Lenne (1989).

[54] See Ogger (1993).

supervisory board in Germany. However, the differences are probably of only minor importance. Much of the success attributed to the German board's function can be put down to the existence of large shareholders and creditors motivated to protect their investment by virtue of their large holdings in the firm. The same argument may also apply to Japan. The large shareholders of Japanese firms are often also large debtholders, and having such a sizable investment in the firm makes them very motivated to gather information, monitor and influence management. This they appear to choose to do informally through the President's Club meetings rather than through the more cumbersome formal structures of the board. It is the concentration of ownership and debt claims motivating stakeholders to be active investors in firms, rather than any technical superiority of board structure, that is likely to mean that German boards, or their informal equivalents in Japan, operate more effectively than their counterparts in the Anglo-Saxon countries.

4. Management compensation

Even if the board cannot dictate a course of action to the manager, it can still design a compensation contract to provide an incentive to maximise value. This second internal control device – management compensation – consists of paying management for their performance, thereby tying management's welfare to shareholder wealth and helping to align the private and social costs and benefits of alternative actions, thus providing an incentive for management to maximise shareholder value.[55]

There are many mechanisms through which compensation policy can provide value-increasing incentives, including performance-based cash bonuses and salary revisions, stock options, outright ownership of the firm's equity and performance-based dismissal decisions. While there is a large amount of data on management compensation and its relation to performance in the United States, data for the other three countries is sparse. However, some impressions can be gleaned from the few empirical studies that have been done.

Kaplan (1993a) performs a comparative study of top management compensation in large US and Japanese firms. He finds that *cash* compensation in both countries is positively related to a variety of performance measures, including stock prices, and sales and earnings

[55] See Fama (1980).

growth. The sensitivities of compensation to performance are roughly similar.[56] However, one significant difference is the degree to which top executives own shares in the firms they manage: Japanese executives' shareholdings are between one-quarter and one-half of those of their US counterparts.[57] This difference probably implies a steeper pay/performance gradient when total compensation is considered, giving a greater incentive to US managers to maximise share price.

There is little data on pay/performance relationships for top management in Germany and the United Kingdom. However, we can form some impression of its relative importance in these countries by focusing on management shareholding: for the United States, at least, this comprises the largest element of the pay/performance relationship. For Germany, as already documented, there are a sizable number of listed firms that have gone public in the last decade that are still majority-owned by the founding family. In these firms management has a clear incentive related to its own wealth to maximise value. However, management ownership in those firms not majority-owned by individuals appears low. Prowse (1993) reports that in those firms not majority-owned by individuals, individuals are rarely among the five largest shareholders.

For the United Kingdom, management ownership appears fairly substantial. In their study of the 250 largest UK firms in 1975, Nyman and Silberston (1978) report that directors held stakes of more than 5% of the firm in just under 30% of their sample. The average management ownership in their sample was over 13% of the firm's shares.

It may be easy to over-emphasise the role that management compensation currently plays as a mechanism of corporate control in the countries under study. In their study of the 250 largest NYSE-listed firms, Jensen and Murphy (1990) found that, taking account of all forms of management compensation, the median CEO's wealth increased by $3.25 for every $1,000 increase in shareholder value. They view this as providing very little incentive for the top executive to maximise shareholder value.[58]

[56] Nonetheless, as is widely believed, the *levels* of compensation of US top management are significantly – at least three times – higher than those of their Japanese counterparts.

[57] See also Prowse (1992).

[58] For example, Jensen (1993) points out that it costs the median CEO just $32,500 for a $10 million loss in shareholder value. In practical terms, this means that the median CEO who likes to travel in style can order the corporate purchase of a Lear Jet (roughly $10 million) at a cost to himself of less than the price of a BMW!

Indeed, given the levels of management ownership observed in the Anglo-Saxon countries, managers may in fact be more entrenched and thus less responsive to shareholder concerns than otherwise.[59] Germany appears to stand out in terms of its reliance on management ownership as a spur to managerial discipline, at least for the substantial number of firms that are owner-managed.

5. Market for corporate control

The takeover market is widely recognised as a potentially important mechanism by which capital markets ensure management discipline. If managers are not maximising the value of the firm, then any individual could in theory purchase the firm, change the policy to a value-maximising one, and reap the resulting increase in value as a return to his improved management.

One of the most striking differences between the Anglo-Saxon financial systems and those of Germany and Japan is the frequency of takeovers that would appear to be motivated by management failure. Although comparable figures are hard to come by, the market for corporate control appears much less active in Japan and Germany. Data on the volume of completed domestic merger and acquisition transactions for the second half of the 1980s is given in Table 12. Care is needed in comparing the figures of merger and acquisition activity across countries, for coverage varies considerably. However, Table 12 reveals differences between the Anglo-Saxon economies and Japan and Germany that are too large to be plausibly explained by differences in the comprehensiveness of the coverage. Part of the reason for the greater merger activity is, of course, the larger number of companies listed on stock markets in the United States and the United Kingdom. However, even normalising the dollar value of mergers and acquisitions by stock market capitalisation fails to alter the impression that the merger market is much more active in the Anglo-Saxon countries – fifteen to twenty times more active in the United States and five to ten times more so in the United Kingdom. Other empirical evidence supports the claim that the number of mergers and acquisitions in Japan is far lower than in the United States: in Kaplan (1993a), just over 2% of his sample of large

[59] See Morck, Shleifer and Vishny (1988a), who find evidence of management entrenchment for levels of management stock ownership of between 5% and 25%.

Table 12

Average annual volume of completed domestic mergers and corporate transactions with disclosed values, 1985–89

	United States	United Kingdom	Japan	Germany
Volume (in billions of US$)	1,070	107.6	61.3	4.2
As a percentage of total market capitalisation	41.1	18.7	3.1	2.3

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

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

Japanese firms were taken over or merged in the period 1980–89, compared with over 22% of his sample of large US firms.

One characteristic of mergers and acquisitions in the United States and the United Kingdom is that they occur in waves. Time series data for the United States, for example, shows dramatic fluctuations in the number of mergers and acquisitions over time.[60] Table 13 illustrates the changing incidence of mergers and acquisitions in the United States since 1900. While there are problems of comparability and consistency over time, the large fluctuations are quite striking, both in terms of their number and in terms of the aggregate volume normalised by GDP. For example, the most recent merger wave pales into insignificance compared with the merger boom which occurred around 1900. There are also large differences in the frequency of mergers over the business cycle. Although there is no general consensus in the literature on the precise determinants of merger and acquisition activity, there is general agreement that mergers and acquisitions are influenced by the level of economic activity.[61]

Of course, mergers and acquisitions occur for a wide variety of reasons, some of which are not motivated by corporate control considerations. A more accurate measure of the frequency of corporate control related transactions would consider only those transactions

[60] See Golbe and White (1988).

[61] See Weston, Huang and Chung (1990) and Comment and Schwert (1993).

Table 13
US mergers and acquisitions

Period	Number of mergers per US$ billion of real GNP	Value of assets acquired in mergers as a percentage of GNP
1895–1905	2.3	5.5
1905–15	0.45	0.65
1920–30	1.2	n.a.
1930–40	0.5	n.a.
1940–50	0.2	n.a.
1950–60	0.5	0.45
1960–70	0.9	1.2
1970–80	0.9	2.0*
1980–85	1.0	3.0

* Indicates a break in series.

Source: Golbe and White (1988).

which involve the replacement of current management or a radical transformation of its incentives. It would, for example, include transactions such as hostile takeovers, management buyouts and buyins, and leveraged buyouts.[62] One measure of the importance of corporate control related transactions is given in Table 14. It shows the percentage of hostile offers (whether or not ultimately successful) made for corporations as a percentage of all attempted transactions for the United States, the United Kingdom, and the rest of Europe. The data reveal the much lower incidence of hostile takeover activity among continental European countries compared with the Anglo-Saxon countries.

The differences across countries in actual completed hostile takeovers may be even more striking. Since the Second World War, for example, there have only been four successful hostile takeovers in Germany.[63] They appear to be almost as rare in Japan. Kester (1991) claims that the use of takeovers as a device for replacing inefficient management in large Japanese firms is very infrequent. Conversely, in the United States almost 10% of firms included in the Fortune 500 in 1980 have since been acquired in a transaction that was hostile or started off as hostile. Franks and Mayer

[62] Of course, this approach neglects the fact that some friendly mergers may be completed out of fear of being subject to hostile tender offer. Also that even friendly mergers often lead to changes in the target company's top management.

[63] See Franks and Mayer (1993).

Table 14

Hostile takeovers and leveraged buyouts as a percentage of all attempted transactions, 1985–89

	United States	United Kingdom	Rest of Europe
Hostile takeovers . . .	17.8	37.1	9.6
Leveraged buyouts. . .	20.0	5.9	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 Corporation, Mergers and Corporate Transactions database.

(1992) report that in just two years in the mid-1980s there were thirty-five successful hostile bids made in the United Kingdom.

What is behind these differences in the frequency of takeovers? There is a widely held belief that hostile takeovers are rare in Germany and Japan because of legal and regulatory impediments. However, in Japan there are few explicit legal barriers to acquisition activity. Those that do exist primarily relate to takeovers by foreign investors, and were significantly relaxed in the early 1980s. For purely domestic combinations, the established legal and regulatory apparatus appears largely neutral.[64] Government approval is only required when mergers are proposed in certain selected industries. Anti-monopoly regulations are loosely interpreted. In addition, potential raiders are not currently required to disclose large stakes in potential targets. The neutral regulatory environment is illustrated by Kester's (1991) observation that for small and medium-sized Japanese firms there is quite a sizable merger and acquisition market, on a par with that in the United States.

It is hard to say whether the legal and regulatory environment in Germany is more or less conducive to hostile takeovers than that of the Anglo-Saxon countries. On the one hand, the presence of employee representatives on the supervisory board means that the board will tend to support existing management against any takeovers. The ability of German firms to restrict the number of votes that can be exercised by a single shareholder may also be an impediment to takeovers (US and UK firms are discouraged from doing this by Stock Exchange regulations).

[64] See Beiter (1990).

However, voting restrictions do not rule out takeovers altogether – it is possible for a group of non-related shareholders to pool their votes in Germany.[65] On the other hand, unlike in the United States and the United Kingdom, there are no restrictions in Germany on shareholders acting in concert. In addition, the threshold at which a large equity stake must be disclosed is much higher in Germany (25%) than in the United States and the United Kingdom, where it is 5%. A raider in Germany would thus find it much easier to accumulate a large stake in a German company without alerting current management than would be the case in the United States and the United Kingdom. There is in addition no legal obligation to make a bid once a certain threshold of ownership is reached, as there is in the United Kingdom. And minority shareholders in Germany generally have far fewer rights than they do in the United States or the United Kingdom.

Regardless of the net effect of the legal and regulatory environment in Germany on takeover activity, it is clear that the structure of corporate ownership in Germany and Japan is a major impediment. For example, with very few listed companies in Germany having a diffuse ownership structure, it is clear that a bidder would find it difficult to attain a sufficiently large stake in a German firm to take it over without the consent of the largest shareholder(s). The same is true of a typical large Japanese firm with its relatively high level of ownership concentration and large number of cross-shareholding arrangements with "friendly" firms. However, this impediment should not be regarded as detrimental to the corporate control of German or Japanese firms. The structure of corporate ownership is, after all, an endogenous response by investors to the costs and benefits of maintaining management discipline weighed along with other factors. The fact that the corporate ownership structure in Germany and Japan impedes the development of an active market for corporate control is irrelevant to the extent that the structure of ownership in these countries itself mitigates many of the problems that the active corporate control market is supposed to resolve.

6. Importance of corporate control mechanisms across countries

Table 15 summarises the relationship between the major mechanisms of corporate control and the countries in which they are important. While

[65] Indeed, this was the tactic employed in two successful hostile takeovers in Germany (see Franks and Mayer (1993)).

Japan and Germany appear very similar in their general reliance on direct shareholder monitoring as the primary mechanism of corporate control, the table masks differences between the two countries, some of which have been discussed in previous sections. The same is true for the United States and the United Kingdom, although probably to a lesser extent. The rest of this section summarises the main elements of the corporate control mechanisms in each country in somewhat more detail.

The reliance of US firms on the external market for corporate control does not mean that the internal mechanisms of corporate control are non-existent – just that they are likely to be weaker and to act more slowly than internal mechanisms in some other countries. The recent large number of internally precipitated CEO dismissals in the United States is evidence of the fact that boards in the United States can play a role in corporate control. However, the fact that in many cases these dismissals took place years after problems first emerged in the company, and only after many billions of dollars of shareholder value had been lost, suggests that board discipline of management is a very blunt instrument in the United States. Consequently, there tends to be a much greater reliance on the external mechanism of corporate control – the takeover.

It also does not mean that banks and other financial institutions do not exert control over firms when the law allows them to do so. For example, in firms that file for bankruptcy or restructure their debt privately, banks assume an important monitoring role in the restructured firm.[66] Gilson (1990) reports that in a sample of 111 listed companies that filed for bankruptcy or restructured their debt privately between 1979 and 1985, in over 75% of the cases bank lenders and other financial institutions with debt outstanding to the firm received significant blocks of voting stock. On average, banks received over one-third of the restructured companies' equity. In a number of cases banks appointed their representatives to the board of directors and inserted restrictive covenants in the company's restructured lending agreements to give them more say in the firm's investment and financing policies. At the same time, the percentage of the firm's stock held by large non-management blockholders tended to rise sharply after a financially distressed firm restructured its debt privately or through the courts.

[66] US law allows banks a significantly more active role in the governance of the firm once it defaults on loans owed to the bank.

Table 15

Importance of different corporate control mechanisms in large non-financial firms

Mechanism	United States	United Kingdom	Japan	Germany
Board independence/ power over management	Little	Little	Little formally. More influence informally through President's Club meetings.	Greatest
Importance of pay/perfor-mance relationship in top management compensation package	Small	Unknown, probably small	Less	Important for those firms that are owner-managed.
Monitoring by financial institution stakeholders	Little	Little	Substantial	Some
Monitoring by non-financial firm stakeholders	Little	Little	Some	Substantial
Monitoring by individual stakeholders	Little	Little	Little	Important for those firms that are owner-managed.
Frequency of hostile takeovers	Frequent	Frequent	Virtually non-existent	Virtually non-existent

US firms that have suffered financial distress thus appear to take on some of the characteristics exhibited by the typical Japanese and German firm – notably, high ownership concentration, large equity and debt stakes held by banks and other financial institutions and bank representation on the board of directors. Some of these characteristics are also shared by another set of US firms – those that have undergone a leveraged buyout. Jensen (1989) characterises the LBO organisation as having highly concentrated stock ownership and lenders that are active in implementing corporate policy. The substantial improvements in operating performance documented for firms that have undergone leveraged buyouts suggests that for some firms at least, the LBO form of corporate organisation represents an improvement over the typical form of organisation found in the United States.[67]

Given the similar legal and regulatory environment of the firm and its investors in the United Kingdom, it is not surprising that the major elements of corporate governance are also similar. Although financial institutions own a large share of the outstanding corporate equity in the aggregate, almost all of this is held as agents for beneficial owners. These agents – mutual funds, pension funds, life insurance companies and banks – have strong incentives from portfolio regulations and insider trading laws to keep their portfolios liquid by taking very small holdings in a wide variety of companies. Consequently, ownership tends to be diffuse and shareholder monitoring weak. Management ownership of stock appears on a par with that in the United States, and although there are no formal studies on the pay/performance relationship of top UK management, it would be somewhat surprising to find a substantially steeper pay/performance gradient than exists in the United States. External mechanisms of corporate control have become the primary mechanism of disciplining management in the United Kingdom, with management and leveraged buyouts appearing just as important as in the United States and showing very similar features to the situation there.

In Japan the corporate control framework is related to the Keiretsu form of corporate organisation in Japan, where a group of firms based in different industries are centred around a core set of financial institutions. The non-financial firms in the group tend to have product market links and take small equity stakes in each other. They all tend to have strong but

[67] See Kaplan (1989).

not exclusive borrowing links with the financial institutions in the Keiretsu, who also take large equity stakes in them. Ownership concentration is relatively high, as is the concentration of debt claims. Banks are the most important large shareholders of firms and until recently have also been their only major source of external finance. Consequently, they have a potentially very powerful position as active monitors of management either through the board or more informally through the President's Club meetings, and through their control of the firm's access to external funds. Restrictions on banks' equity holdings in firms may mean that the primary means of exerting control over firms has been through the control of credit. The market for corporate control among large firms is inactive. Hostile takeovers and other transactions between firms involving corporate control changes are rare. This does not mean that management turnover in response to poor performance is infrequent, merely that it occurs by other means, namely pressure from banks. For example, Kaplan (1993a) reports that the frequency of top management turnover in his sample of large US and Japanese firms reflects a similar sensitivity to measures of poor performance.

In Germany there appears to be even more reliance on direct shareholder monitoring. Ownership concentration is high among large firms, high enough to give the large shareholders a substantial incentive to monitor management.[68] A substantial number of firms are majority-owned by individuals or non-financial firms. Banks appear to have the potential to engage in monitoring and influencing management, particularly in the diffusely held firms where their control of voting rights may be important, although there is some controversy over the extent to which they perform such functions. They appear to have somewhat less control (compared with Japanese banks) over firms through their control of external sources of finance, since German firms rely more on internally generated funds. Reliance on management compensation packages to provide an incentive for profit maximisation is high in the substantial number of owner-managed firms that exist, low elsewhere. Hostile takeovers are almost non-existent. The success of the German corporate control mechanism appears, in brief, to be due to the ability of large shareholders to monitor management.

[68] This, of course, assumes that the monitors are themselves value-maximisers, which may not necessarily be the case. The issue of "who monitors the monitor?" is addressed in the following section.

Edwards and Fisher (1993) take issue with much of the conventional wisdom about the role of German banks in the corporate governance system in Germany and suggest an important difference between the German and Japanese systems – namely that the primary corporate control function of direct shareholder monitoring in Germany may lie with large non-financial shareholders rather than with financial institutions. They present a variety of evidence that suggests that banks may not, in fact, have the degree of influence as lenders, shareholders, exercisers of proxy votes or representatives on the board which has been widely assumed. They find that bank control of equity voting rights is only weakly related to the number of bank representatives on the supervisory board, a result somewhat at odds with the belief that banks use their control of voting rights to further their control over management.[69] They also find that bank representation on the supervisory board does not mean that the firm borrows more from banks, again something that might be expected if banks used their board membership to reduce the costs of providing external finance to the firm.

As Edwards and Fisher admit, the evidence provided both for and against the importance of banks in the corporate control function of German firms is very incomplete. Perhaps the most that can be said about the issue at the moment is that while it is likely that banks in Germany probably play some role in the corporate control of firms, it is not at all clear that they play the primary role. The structure of corporate ownership in Germany discussed earlier suggests that the role of non-financial firms and individuals that are large shareholders may be as important as that of the banks.[70]

IV. Evaluating the effectiveness of different systems

In any international comparison of economic systems and institutions there is a temptation to make judgements about which system works

[69] Though not completely inconsistent if banks use their votes to elect members to the supervisory board who are sympathetic to bank interests even though they are not themselves bankers. This may be a distinct possibility in Germany, where there has been a tradition of criticism of the banks for exerting undue influence over firms and where there may be a strong incentive for banks to conceal their influence.

[70] Indeed, Edwards and Fisher's results may be a product of the fact that banks play an important corporate governance role *only in those firms that are widely held and that do not enjoy the benefits of large shareholder monitoring*. The Monopolkommission's (1978) findings, that banks' voting power from direct holdings and from the exercise of proxy votes is greatest in those firms which are widely held, are consistent with this view.

"best". For this paper, that would mean judging which system mitigated the greatest number of agency problems for the least cost in terms of resources. One system may be superior in this sense, even though each system is "optimal" within its own legal and regulatory constraints. Given the sparse evidence to date on the relative performance of different systems of corporate governance, such judgements are inherently somewhat subjective.[71] Nevertheless, the ample literature on US and UK companies and the emerging research on these issues in Germany and Japan allow some light to be shed on the costs and benefits of each system.

1. Evidence of the costs and benefits of direct shareholder monitoring through the concentrated holding of financial claims on the firm

Stiglitz' (1985) discussion of the primary means of controlling a firm's management presented earlier points to a number of potential advantages, from the corporate governance perspective, of a system that allows large equity and debtholders of the firm to be the same agents, encourages the concentrated holding of debt and equity claims, and restricts firms' sources of external finance to banks. The legal and regulatory environment in Germany and Japan has encouraged this concentration of firms' claims in the hands of a few agents to a much greater extent than in the United States and the United Kingdom. It has also given the banks – in Japan in particular – a potentially very effective monitoring role by allowing them to control much of the firms' external financing. A priori then, one might expect that the German and Japanese models would encourage a more efficient form of corporate governance than those of the United States and the United Kingdom.

Recent research provides some empirical evidence on this issue. Prowse (1990) finds that the tendency for financial institutions to take large debt and equity positions in the same firm may mean that the agency problems of debt finance are less severe for firms in Japan than in the United States, where institutional investors are prohibited from being large debt and equity holders in the same firm. Prowse also finds that

[71] I do not address the costs and benefits of the legal and regulatory environment that generate the observed systems of corporate governance since this would be an issue too broad and complex for this paper. I merely note that in response to the perceived costs of the current legal and regulatory regime, the public authorities appear to be changing much of the legal and regulatory environment in Germany and, particularly, in Japan.

leverage ratios are higher in Japanese firms than in US firms, partly because of the lower agency costs of debt experienced by Japanese firms. Hoshi et al. (1990a) find that Japanese firms that are members of Keiretsu experience fewer liquidity effects on investment than firms that are not members. Keiretsu members typically have strong ties to a main bank, which, along with other firms in the group, takes a significant equity position in the firm and holds a large fraction of the firm's outstanding debt. They conclude that membership of a group and close ties to the group's main bank are important in mitigating the information problems that are typically associated with external finance and governance. Lichtenburg and Pushner (1993) provide evidence that suggests that financial institutions are the major monitors of firms' behaviour in Japan. Japanese firms with substantial financial institution ownership show higher levels of productivity and profitability than other Japanese firms. They also analyse **how** financial institutions exert their control over firms in which they have large stakes. They distinguish between two methods of monitoring: continuous direct monitoring of the firm and significant intervention in the firm's business only after the firm has encountered financial difficulties. They find that substantial financial institution ownership reduces both the frequency and the severity of lapses from efficiency and profitability. This would suggest that, in some contrast to the conventional wisdom on how Japanese financial institutions behave towards the firms which they own, financial institutions engage in **both** types of intervention.[72]

Less research has been done on Germany than on Japan. Until recently, Cable (1985) provided the only comprehensive analysis of German firms' performance and its relation to the closeness of bank ties. He provided evidence that banks do perform an important corporate control function: profitability among the large German firms was positively related to the proportion of equity voting rights controlled by the three big universal banks and to bank representation on the board of directors.[73] He concluded that banks did use their control of voting rights and their presence on the board to monitor and influence management with a view to profit maximisation. Elston (1993), in a study modelled on

[72] The conventional wisdom has been that banks use their monitoring and disciplining role only in times of financial distress. See Sheard (1988).

[73] The three big universal banks are Deutsche Bank, Dresdner Bank and Commerzbank.

that of Hoshi et al. (1990), finds evidence that firms in Germany with closer bank ties exhibit investment behaviour which is less sensitive to liquidity constraints than firms with weaker ties, suggesting that bank ties are important in mitigating the information and agency problems associated with external finance and governance.[74]

However, there is also evidence that the concentrated holdings of equity and debt observed in Germany and Japan may also have costs. There is some evidence of agency problems in Japanese firms. Lichtenberg and Pushner, for example, find that, unlike substantial financial institution ownership, substantial intercorporate (non-financial firm) ownership reduced the profitability and productivity of the firm.[75] Whether this is because non-financial firm ownership tends to insulate and entrench current management, or because non-financial firms use their influence to transfer wealth to themselves at the expense of the firm they control is impossible to say. Nevertheless, they appear to have identified a possible shortcoming in the Japanese system.[76] Whether this problem is also apparent in German firms has yet to be researched.

Hoshi et al. (1990b, 1993) also provide evidence of agency problems among Japanese firms, the source of which appears to be the increasing accessibility of non-bank finance. They find that despite the advantages they document for Japanese firms from close bank relationships in terms of fewer information problems and liquidity restraints, many Japanese firms were actively *reducing* the strength of their bank ties in the 1980s as deregulation led to many opportunities for external finance apart from bank finance. They analyse the firms that have increased their use of the public debt markets and reduced their reliance on bank loans. They find that more profitable and successful firms, as well as less successful firms in which managers have significant share ownership, have been the most aggressive in reducing their reliance on banks. They interpret these findings in the following way: first, because intermediated finance involves a significant amount of monitoring by the bank, it has costs that successful

[74] As discussed earlier, Edwards and Fisher (1993) take issue with Cable and Elston's conclusions about the role of banks in German corporate governance.

[75] Kester (1991) argues that intercorporate cross-ownership of shares is important in Japan in cementing long-term implicit contracts, and resolving potentially important hold-up problems between firms. Lichtenberg and Pushner's evidence casts some doubt on this assertion.

[76] This problem of intercorporate management entrenchment would seem to be the counterpart of the well-documented problem in the United States of management entrenchment through its ownership of a significant fraction of the firm's shares.

firms with good investment opportunities would prefer not to bear. Thus, when the opportunity to tap public debt markets arises, these firms react in a profit-maximising way by taking advantage of these cheaper forms of finance. However, managers of *all* firms have an incentive to tap such finance, because they will then be subject to less scrutiny and monitoring by stakeholders and will have more opportunity to shirk their responsibilities. Thus, firms in which managers are entrenched may also be expected to reduce their reliance on banks and finance themselves through the public markets. In this case their response is not the profit-maximising one, but the one that maximises the managers' preferences. Hoshi et al.'s evidence points to there being some degree of management entrenchment in Japanese firms. It also indicates that the corporate control mechanism in Japan may have ceased to operate as effectively as it had done over the period when the legal and regulatory environment prevented firms from tapping non-bank sources of external finance.

Another issue with regard to both Japanese and German methods of corporate control is "who monitors the monitor?". In systems which rely on direct shareholder or creditor monitoring, the large shareholders and creditors – German banks and non-financial firms and Japanese financial institutions – have a particularly important role to play. However, as Edwards and Fisher point out, these are often the very institutions that are themselves diffusely held. There may be a problem in ensuring that these agents act to maximise value and perform the monitoring and influencing function in an efficient manner in the firms in which they have large stakes.

Evidence suggests this may be an important issue in both Japan and Germany. In their sample of 300 large German firms, Schreyögg and Steinmann (1981) classify a firm as owner or manager-controlled on the basis of **direct** ownership, without taking into account the identity of the large shareholders. A firm is manager-controlled if no single shareholder owns more than 1% of the voting rights, or, where this is the case, where the sum of the holdings of such owners is less than 25% of the voting rights.[77] They then reclassify firms according to the same criterion but this time based on the firm's **ultimate** share ownership. Ultimate ownership takes into account the fact that large corporate owners of the firm could

[77] Schreyögg and Steinmann inferred the distribution of voting rights from the distribution of shares held.

themselves be manager-controlled.[78] Schreyögg and Steinmann found that whereas almost 90% of their sample could be classified as owner-controlled on the basis of direct ownership, less than half their sample could be so classified on the basis of ultimate ownership. Those firms classified as manager-controlled under the second criterion included most of the largest firms in their sample. Table 16 provides a concrete example of this, by presenting the ownership tree of Daimler-Benz AG. At first glance, the ownership of Daimler would appear to be conducive to a significant degree of direct shareholder monitoring: three large shareholders hold over two-thirds of the firm's shares. However, the largest shareholder is Deutsche Bank, and the second-largest is Mercedes Holding Company AG, which is itself held by two large holding company shareholders, Stella and Stern. Stella is completely owned by four large shareholders: Commerzbank, the Voith family and two holding companies (Star and Südwest-Star), which are each owned by a variety of banks, insurance companies and wealthy families. Similarly, Stern is completely held by four large shareholders: Dresdner Bank, Bayerische Landesbank, the Bosch family and Komet holding company, which has an insurance company as a large shareholder. Banks and insurance companies in Germany are typically widely held. If, as a result, they are not attentive shareholders, this raises the possibility that the large shareholders of Daimler may not in fact be motivated by their large stakes to perform their governance responsibilities.[79]

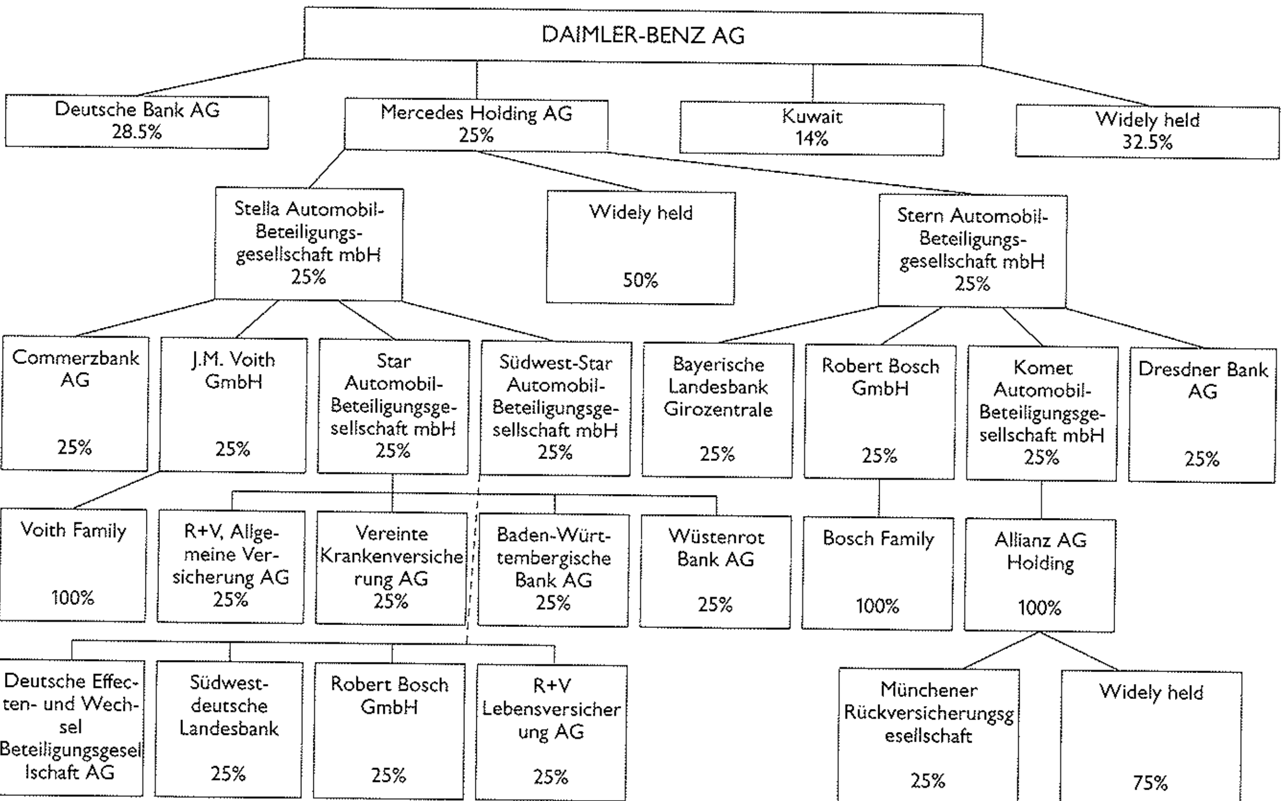
As in Germany, the most important monitors in Japan – the large financial institutions – are themselves diffusely held. For example, the five largest shareholders of the eighteen largest banks and bank trust companies in Japan hold on average only 15.7% of the outstanding shares of the bank. The average holdings of the five largest shareholders of the largest non-financial firms in Japan is almost double this figure (see Table 9). Furthermore, in thirteen of the eighteen largest banks, the largest shareholder is a life insurer. Life insurance companies are themselves also large shareholders in non-financial firms. Interestingly, by

[78] For example, if 75% of firm A is held by firm B, which is itself a widely held company, then according to the classification based on direct ownership, A is owner-controlled and B is manager-controlled. However, according to the classification based on ultimate ownership, both A and B are manager-controlled.

[79] Daimler's ownership structure is not unique in Germany. It is mirrored in a number of other large firms, notably Thyssen, Mannesman, MAN, Karstadt, Preussag, Linde, Degussa and Metallgesellschaft.

Table 16

Ownership tree of Daimler-Benz AG



Source: Commerzbank (1991)

law all large life insurers in Japan are mutual organisations – none are publicly owned companies listed on a stock exchange. If such mutual organisations were particularly susceptible to corporate control problems then this would be further evidence, in addition to the relatively diffuse ownership of banks, that banks' managements may not have diligent large shareholders expecting them to maximise the value of the investments in other firms. In fact, there is considerable literature on the corporate control problems in mutual companies, with the bulk of the evidence suggesting that the managements of mutualised firms may have less incentive to maximise value than the managements of stock companies.[80]

The problem of "who monitors the monitor?" may thus be a real one for corporate control in Japan and Germany. Diamond (1984) addresses this issue in his model of financial intermediation. In his model there are two ways of controlling incentive problems: monitoring and contracting. An important general feature of most principal/agent problems is that if there is little underlying uncertainty, then an agent's performance can be closely linked to his behaviour. In the context of financial markets, this means that bank depositors can use debt contracts to induce diversified banks (which are exposed to little uncertainty) to monitor efficiently those firms to which they have lent money, which in turn leads to efficient firm behaviour.

How applicable is Diamond's model to the institutional and regulatory set-up in Germany and Japan? Diamond's model requires that banks can be given the proper incentive to monitor efficiently by having debt contracts with depositors. This is certainly the case with German and Japanese banks – the lion's share of their finance comes from deposits. However, there are a number of additional real-world complications that cloud the applicability of Diamond's result. The first is deposit insurance, which Diamond does not consider in his model. Deposit insurance, which exists in both Germany and Japan, removes a depositor's incentive to penalise the bank, through higher deposit rates, if the bank does not monitor its loans efficiently.[81] The second is that German and, particularly, Japanese banks hold equity as well as debt in the firms that they monitor.

[80] This literature is admittedly limited to US companies. See, for example, Spiller (1972), Frech (1980) and O'Hara (1981). Mayers and Smith (1986) provide a dissenting view.

[81] Admittedly, deposit insurance is very limited in Japan. However, the crucial consideration here is the universal unwillingness of governments (in all countries) to allow large banks to fail.

A third factor is that non-financial firms in Germany as well as banks are potentially important monitors of firms. They differ in two distinct respects from Diamond's banks: first, they have primarily equity, rather than debt, stakes in other firms. Secondly, they are equity-financed to a much greater degree than the banks in Diamond's model, which get the proper incentive to monitor from their debt contracts with depositors. Whether these differences are material and would change Diamond's result is hard to say. Even if they are, and Japanese banks and German banks and non-financial firms are not run in a value-maximising way, this does not prevent them from maximising the value of their investments in other companies. Indeed, since maximising the returns from investments allows more resources for the pursuit of management interests, management might monitor and influence firms in an efficient manner even though they were themselves largely independent of any shareholder influence. In the end, the Diamond model can tell us little about the severity of this problem in Germany and Japan in practice – empirical evidence is required on the issue, of which we have little to date.

2. Costs and benefits of takeovers as external mechanisms of corporate control

There are a number of impediments to takeovers as an effective mechanism of corporate control. The first is the free-rider problem in making a successful tender offer for a firm. Grossman and Hart (1980) observed that small shareholders of the targeted firm have an incentive not to tender their shares unless the value of the bid fully reflects the expected increase in profitability under new management. But if the bidder must pay a price that reflects the full increase in profitability he cannot gain by acquiring the firm, and therefore will not submit a tender offer.

A second impediment is the inability to keep tender offers secret. It is costly to undertake the research necessary to determine which firms are underperforming relative to their potential. But once the research is done, any takeover bid made on the basis of such research immediately signals to competitors that they should focus on the target firm. If these competitors come to the same conclusion about the target as the original bidder, they too will offer competing tenders: in equilibrium this will drive the expected profits of the takeover for the competing bidders to zero. However, this implies that the original bidder (who had to expend resources to identify the target as a potentially profitable takeover victim)

will have a negative expected profit, and will therefore have little incentive to undertake such research in the first place.

Finally, current managers are often well-placed to take strategic action to deter takeovers. This includes everything from golden parachutes, poison pills, changing the corporate charter to make takeovers more costly, resorting to legal action on the basis of antitrust laws or SEC regulations, to long-term contracts with other stakeholders imposing severe penalties in the event of breach of contract.

Although these considerations may make hostile takeovers more costly and therefore more infrequent, the experience of the 1980s indicates that they certainly do not rule them out altogether. Despite the free-rider problem, bids can in fact be profitable for a number of reasons. First, the bidder may have the power to divert some of the value gains from the takeover to himself and not share them with non-tendering shareholders. If the shareholders know this they will have an incentive to tender at a price below the full price and the bidder can profit from a successful takeover. Secondly, the bidder has the opportunity to accumulate shares secretly at a price that reflects the value of the shares under the old management, before he must publicly declare his stake. On shares so accumulated (5 to 10% under current regulations in the United States and the United Kingdom) the bidder can reap the full value of any managerial improvement he may subsequently make and hence will profit from a bid. This is also one way in which original bidders can make a return on their research to identify potential targets.

In addition, recent work by Comment and Schwert (1993) has downplayed the power of anti-takeover amendments to deter takeovers. The conventional wisdom has been that the large-scale adoption of such measures in the late 1980s led to the end of the recent merger wave.[82] In their study of a large sample of US firms between 1977 and 1991, Comment and Schwert find that whether or not a firm has anti-takeover provisions in its charter has little explanatory power for whether that firm will be the subject of a successful takeover bid.

While finding little evidence that the adoption of anti-takeover amendments was a reason for the decline in recent merger and acquisition activity in the United States, Comment and Schwert single out

[82] More than 1,500 firms adopted poison pills or other anti-takeover devices in the second half of the 1980s.

an important potential weakness of the market: namely that it is very sensitive to the business cycle. Previous merger waves have proved very sensitive to downturns in economic activity.[83] The credit crunch of the early 1990s was a critical factor in the most recent decline of the market: commercial banks had been the dominant providers of bridge or transaction financing for large cash acquisitions in the 1980s. Commercial bank lending to the corporate sector collapsed from $33 billion in 1989 to just $2 billion in 1990. The availability of long-term and subordinated financing also dried up following the crunch in the below-investment-grade corporate bond market which began in late 1989.

The cyclical nature of the takeover market may be an important weakness from a corporate control perspective. There are periods in which the market shuts down, typically in recessions, when finance is hard to obtain. In these periods, the takeover threat may not be credible to many managements and therefore one important mechanism for achieving managerial discipline is removed.

Recent experience suggests another weakness of the market for corporate control – its vulnerability to broad political and regulatory forces. The late 1980s saw a whole host of legal and regulatory actions that, taken together, arguably provided a large impediment to merger and acquisition activity.[84] Whether the market for corporate control will recover in line with the level of economic activity in the United States is a matter for concern given the more restricted environment that now exists for hostile takeovers and other corporate control transactions.

What about the effect of takeovers on corporate performance? The literature on the post-takeover performance of US and UK firms is vast.[85] As is always the case with a large body of literature, there is no unanimous agreement on the extent to which takeovers promote social welfare by generating net efficiency gains. There is a general consensus that target shareholders gain substantially from takeovers. This is not to say that

[83] See Weston, Chung and Hoag (1990), Chapter 11.

[84] In September 1988 the SEC sued Drexel Burnham Lambert, the investment bank most active in the financing of leveraged buyouts and hostile takeovers. Drexel subsequently went bankrupt when the junk bond market crashed as a result of both the slowdown in economic activity and a whole host of regulatory actions that restricted junk bond offerings, and their purchase by savings and loan associations, banks and insurance companies. See Yago (1991) and Carey et al. (1993). In addition, at least eleven states have passed laws restricting takeovers. See Jensen (1988).

[85] See Jensen (1988) and Palepu (1990) for a review of the evidence.

there is not substantial evidence of there being losers in the aftermath of a takeover. Bondholders, employees, long-term customers or clients and, most obviously, existing management can all lose in the aftermath of a takeover. But their combined losses in general cannot explain the gross gains that accrue mainly to target shareholders. Some researchers have concluded that there are net gains, sometimes substantial, that come from improved operating performance and a more efficient allocation of corporate assets. Part of the problem is that takeovers are motivated by a wide variety of reasons. Improved corporate control is only one such motivation. Others may be the desire for increased market power, synergy with another company's operations, tax benefits, and the opportunity to expropriate wealth from the target's other stakeholders, including workers and bondholders. Those studies that have focused on takeovers and other transactions such as leveraged or management buyouts that are plausibly motivated by corporate control considerations generally find that returns to target shareholders are higher, turnover of top management is more frequent and operating performance improves more dramatically than after other forms of takeover.[86]

3. Comparing direct shareholder monitoring and takeovers as corporate control devices

To what extent is direct internal monitoring by stakeholders a more efficient method of maintaining management discipline than the external mechanism of a takeover threat?

It is a priori plausible that takeovers are a more costly method of achieving in the Anglo-Saxon countries what internal control mechanisms achieve in Japan and Germany. Shareholder monitoring is a more continuous and direct method of maintaining managerial discipline than a hostile takeover. Given that takeovers involve normal transactions costs and also a cost in terms of the analysis of potential targets, and given the variety of mechanisms which incumbent managers have at their disposal to make takeovers more costly to the bidder, it would appear that takeovers may only be important in correcting the most egregious cases of managerial laziness or incompetence. In addition, since takeovers appear to be sensitive to the business cycle there may be periods where the takeover threat is not credible even in extreme cases.

[86] See Morck, Shleifer and Vishny (1988b), Kaplan (1989), and Martin and McConnell (1990).

Both systems appear to have the power to cure the most egregious cases of management indiscipline. Kaplan (1993a, 1993b) reports that top management turnover exhibits similar sensitivity to measures of poor firm performance in the United States, Japan and Germany. As we have seen, there is also some evidence that both systems have certain costs. However, if the incentive problem for the monitoring institutions in Japan and Germany is not large, it would appear that the costs of monitoring management are somewhat lower in these countries than in countries where the primary reliance is on a credible takeover threat. This may be illustrated by the observed preference that financial institutions and other investors have shown in the United States. In today's environment, *where the law has allowed it*, some firms in the United States have adopted governance characteristics similar to those observed in Japanese firms. History also reveals a preference for these types of corporate control arrangements. Prior to the reform of the financial system in the 1930s, Wall Street banks such as J.P. Morgan were directly involved in the strategy and governance of public companies. They took large equity and debt stakes in firms, sat on boards and actively monitored management performance.[87] Their activities, however, lasted only until they were effectively outlawed by the securities laws that were passed in the mid-1930s.[88]

4. Competition in the final-product market as a substitute corporate control mechanism

Can competition in other markets substitute for competition between governance systems? In theory, given competitive markets for final goods and for all inputs, the method of corporate governance should be immaterial – those firms which do not seek to maximise total value will

[87] See De Long (1990).

[88] Firms vary in the degree and nature of the agency problems they face. Some firms may thus be more suited to one system of corporate control and other firms more suited to another. Franks and Mayer (1992) argue that the Anglo-American system is better suited to firms involved in corporate activities heavily dependent on the assessment of future prospects of different investment strategies. In contrast, the Japanese or German system is better suited to firms whose performance relies heavily on the evaluation of the quality of employees and managers in performing certain fairly standard tasks. One may associate the former activities with more high-tech speculative ventures such as oil exploration, biotechnology and pharmaceuticals, and computer software. The Japanese or German system may be superior in firms where standard manufacturing production takes place, where there are known skills that have to be applied. It may be no accident that the performance of different industries in different countries appears to be related to the advantages of the different systems.

soon be forced into bankruptcy. However, perfectly competitive markets exist only in textbooks. Nevertheless, firms that must compete in international markets may face competitive pressures that themselves mitigate the major corporate control problems. Given that multinational firms in Germany, Japan, the United States, the United Kingdom and a host of other countries have been competing with each other for decades, it is likely that the pressure of competition has been sufficient to eliminate the worst abuses of management power. However, this argument is subject to a number of qualifications. The first is that even in the most open markets product market competition is likely to be beset by informational problems and other frictions. Secondly, large firms that have built up strong brand names in the past may be able to live off the quasi-rents so generated for a long time while being inefficiently run. Finally, if managers perceive the state to have a "too big to fail" policy, then they may well be rather more sanguine about the threat of bankruptcy than otherwise. Of course, the likelihood of a state bailout increases with the size of the firm, and so large non-financial firms may be particularly affected. More competition among firms is obviously better than less in terms of the discipline it may impose on managers, particularly in those firms that have traditionally operated in protected sectors of the economy. However, it is likely that product market competition *by itself* is too blunt an instrument to be a substitute for efficient corporate control mechanisms. And in sectors where competition is weak, the importance of an efficiently operating corporate control mechanism is all the more important.

5. Competition between legal and regulatory environments

An important issue is the sustainability of the regulatory and legal environment that supports the corporate governance system in the face of financial innovation and domestic and international pressures for financial system reform. This paper has argued that the reliance on a particular mechanism of corporate control is critically dependent on the nature of the legal and regulatory environment of the firm and its investors. But 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 control that the systems support. These costs may of course change over time in response to changes in the power of vested interests, financial innovation and other market developments. If

these costs become too great, the authorities will endeavour to change the laws and regulations. And as the legal and regulatory environment changes, so presumably will the corporate control mechanisms in use.

Japan is the clearest and most recent example of this phenomenon. While it remained largely unaltered until the early 1970s, the regulatory and legal structure of the Japanese financial system has been slowly changing since then, under both domestic and international pressure for reform. From a corporate control perspective, the most important aspect of Japanese deregulation has been the gradual and continuing removal of restrictions on non-bank finance. Rosenbluth (1988) argues that the strict regulation of corporate finance in favour of bank lending that characterised the Japanese financial landscape until the early 1980s proved unsustainable in the face of growing competition from the Euro-markets and the decline in the profitability of domestic bank lending after the removal of interest rate controls. There is now plenty of evidence that ties between banks and large firms that have easy access to the Euro-markets and the developing domestic bond market are weakening substantially in response to this deregulation.[89] What this means for the mechanisms of corporate control employed is not clear. It may mean that banks and other financial institutions, having lost some of their leverage over firms through control of their access to credit, may start to rely more on their power as large shareholders. If the current regulations on banks' equity investments in firms prove to be too restrictive, it may mean that takeovers start to be more frequently used as a measure to discipline management. However, as the methods of corporate control evolve in Japan, it is likely that there will be some changes from the previous regime. It is somewhat ironic that the legal and regulatory framework in Japan that arguably supports a lower-cost mechanism of corporate control than in the Anglo-Saxon countries is perceived in a wider context to impose greater costs, and therefore to have required substantial reform.

The German legal and regulatory environment has also shown signs of changing recently. As part of the attempt to compete with London as a financial centre, many of the restrictions on corporate finance have been relaxed.[90] In addition, other aspects of the German legal and regulatory

[89] See Hoshi et al. (1993) and Kester (1992).
[90] See *Monthly Report* of the Deutsche Bundesbank, March (1992).

framework will have to change under the planned EC reforms. Again, how the methods of corporate control employed will change is unclear. The implications for Germany, however, may differ somewhat from those for Japan. To the extent that corporate control in Germany has been based more on direct shareholder control of firms and bank control through the proxy voting system, rather than bank control through the supply of credit, the current system of corporate governance may be more impervious to the recent and planned changes to the financial system.[91] If this is indeed the case, then the German system of corporate control may prove rather more sustainable in the long term than the Japanese system.

The US and the UK financial systems have also been changing, albeit more slowly than those in Japan and Germany. In the United States the debate centres on whether the current restrictions on the ability of financial institutions to be active investors in firms are impediments to a more efficient corporate governance mechanism. Some restrictions, such as the SEC's rules on shareholder activism, have already been relaxed, and this has led some institutional investors to flex their muscles somewhat. However, the wide variety of different laws that support the US system of corporate control – ranging from portfolio regulations on financial institutions, tax laws, antitrust rules and securities laws – mean that any changes are likely to be evolutionary rather than revolutionary.

The preceding discussion suggests that some mechanisms of corporate control may simply not be viable in the long run. In particular, the Japanese experience suggests that corporate control mechanisms based on restrictions on access to credit may be particularly vulnerable to change. How impervious the legal and regulatory structures in other countries are to financial innovation and other pressures for reform remains to be seen. In the light of the (admittedly very gradual) erosion of the restrictions on large investor activism in the United States, the evolving legal and regulatory environment in Germany, which, it appears, will combine ease of access to securities markets with the traditional absence of restrictions on active investors, may prove to be the most viable system in the long run, and the one towards which each country may ultimately be moving.

[91] The planned EC reforms do not appear to prevent non-financial firms and individuals from taking large stakes, or banks from exercising the voting rights attaching to the large numbers of shares they hold in trust.

Conclusion

This paper has presented evidence and analysis of the mechanisms of corporate control employed in large publicly held non-financial firms in the United States, the United Kingdom, Japan and Germany. It has argued that the corporate control systems observed in each country are uniquely related to the broad legal and regulatory environment of the firm. This environment includes laws on antitrust, insider trading, financial disclosure, the ability of financial institutions to be large stakeholders in firms and the ability of firms to tap non-bank sources of external finance. Each system appears to have adopted mechanisms of corporate control to curb the worst abuses of shareholder wealth within the legal and regulatory constraints under which it operates. Each system has strengths and weaknesses. The primary strength of the Japanese and German systems appears to be their use of the lower-cost direct monitoring of managers by banks and large shareholders, compared with the Anglo-Saxon countries' reliance on higher-cost takeovers to achieve the same ends. However, in the Japanese case at any rate, the legal and regulatory environment that allows such a system to work may prove to be unsustainable in the long term. In other words, while the Japanese model may be better from the point of view of maximising a firm's value, it may have other costs that could undermine it in the long run.

Do these conclusions yield any firm policy recommendations? "Let the market decide" might be an appropriate shorthand for the main implication of the above analysis. In all four countries the system of corporate control has evolved under a variety of differing legal and regulatory constraints on the behaviour of firms and investors. In the United States and the United Kingdom the disincentives to large and active shareholding in the form of portfolio regulation of financial institutions, insider trading and antitrust regulations have meant that it has been necessary to rely on methods of corporate control other than direct shareholder or bank monitoring. In Japan and Germany the severe restrictions on non-bank finance have meant illiquid securities markets that force institutional investors to incur higher costs in trading, slow the reallocation of capital between slow and fast-growing sectors, and increase the costs of diversification. Each of these four countries may benefit from moving towards a regulatory environment that allows market forces a greater role in determining which is the optimal method

of corporate control for a particular firm. In the United States and the United Kingdom this would mean relaxing constraints on large investors taking large, active stakes in firms. In Japan and Germany this would mean opening up their corporate securities markets, which to a large extent is already under way. For other industrialised countries, such as France and Italy, which are considering new ways of organising their financial markets, the same lesson applies. Of course, there may be some areas in which the development of liquid securities markets may be in direct conflict with moves to allow investors to take large stakes in firms and actively monitor them – insider trading regulations for example. Here policy-makers will have to make compromises in one direction or another.

What would the optimal corporate governance system look like under a regulatory environment which combined the ease of access to securities markets of the Anglo-Saxon countries with the lighter regulatory burden on large, active investors that characterises Japan and Germany? This is a difficult question to answer, since it is hard to point to such a system in any country's recent past. One clue may, however, be found in the experience of the United States in the early part of this century. In the United States in the 1920s firms had relatively free access to non-bank finance, securities markets were relatively liquid, and there were few restrictions on the ability of financial institutions to take equity and debt positions in firms of a size to confer some control. Under such a system, there might plausibly be some firms that would be able to solve their governance problems better by active large shareholder monitoring, and conversely, some that could solve their problems better by relying on an active market for corporate control and other means. Just how and why this "mix" occurs is a subject worthy of further investigation in the form of a more detailed analysis of this period of US financial history.

The lessons for the industrialised countries also apply in modified form to those countries in eastern Europe which are introducing completely new systems of property rights, business law and financial markets. For these countries the lessons from this paper are three: first, the public authorities can choose the type of corporate control system they would like to see in their country through the legal and regulatory framework they adopt. Secondly, the initial conditions in the eastern European countries mean that the benefits from liquid securities markets are a long way off. The biggest impediments to any system of corporate governance in these countries are the lack of information about the financial viability

of newly privatised firms and the lack of human capital able to evaluate such information. This clearly places a premium on a system of corporate control that economises on such resources. The system of direct monitoring by insiders appears to have a clear advantage in that the only institutions required to have some knowledge of a firm's prospects as a going concern are the banks. A system which relies on takeovers as the primary mechanism of corporate control needs a lot of outsiders to have plenty of information about the firm and plenty of people – stock pickers, bond raters, potential raiders, etc. – to have the expertise to evaluate that information. In addition, it requires very liquid and sophisticated capital markets. Clearly, the infrastructure for making such a system work does not exist in eastern Europe at present. What is required is simply expertise at the banks and some assurance that banks will be monitored sufficiently so as to have an incentive to maximise value from their investments in firms. However, in adopting such a system the public authorities should be aware of some of the potential problems, namely that those who run the banks must be competent and have the proper incentive to monitor effectively. Thirdly, the public authorities should realise that the legal and regulatory framework that underlies the corporate control system may not be viable in the very long term, and that at some time in the distant future they may have to manage the transition to a new legal and regulatory environment, as Japan is now doing. By then, of course, we may have a better understanding of what the optimal mechanisms of corporate control are in a more neutral regulatory environment.

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