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CORPORATE GOVERNANCE. COMPETITION AND PERFORMANCE

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INTRODUCTION

Corporate governance has become a subject of active academic and policy debate throughout the world. In the United Kingdom and the United States, there is much discussion of the deficiencies of the market system in delivering effective governance. In continental Europe, there is a concern that existing systems of governance are stifling innovation and growth. In eastern Europe, privatisation has given way to questions about the way in which private enterprises should be governed. China is experimenting with forms of corporate governance which attempt to blend some of the features of market systems with state ownership of enterprises.

Despite the intense debate, evidence on the effects of different governance systems is still sparse. Corporate governance has become a subject on which opinion has drowned fact. The purpose of this paper is to review what is known about the relation of corporate governance and corporate performance.

Policy formulation would be most readily assisted by evidence on the direct relation between governance and performance. The equivalent of a reduced form relation which identifies the effect of changing governance on performance is what is generally regarded as the bottom line of the governance debate. However, such a relation is extremely difficult to uncover. The range of factors which bear on cross-firm or cross-country variations in performance is considerable. This does not stop many from equating differences in economic performance between, for example, Germany and the United Kingdom to their different forms of corporate governance. Indeed, the origins of the long-standing debate on governance can be attributed to associations of this sort.

What is more realistic than trying to provide a "macro" answer is to consider the way in which governance can bear on performance. There are five channels through which such a relation might emerge – incentives, disciplining, restructuring, finance/investment, and commitment/trust. This paper will consider the evidence on the influence of corporate governance on each of these in turn. It will draw on the academic literature available on corporate governance systems in several different countries.

A particular focus with which this analysis is concerned is the interaction between competition, governance and performance. The interaction is important for several reasons. Firstly, the effectiveness of different types of governance systems may be influenced by the degree of product market competition. For example, competition in product markets may be particularly needed to encourage good corporate performance where there is limited competition in capital markets for the ownership of firms

Secondly, forms of corporate governance may be affected by degrees of product market competition. It has been suggested (see Mayer, 1988; Petersen and Rajan, 1995) that competition in financial markets may undermine the ability of firms and financial institutions to establish long-term relations. Attempts therefore to extend competition, through for example deregulation of markets, may have significant effects on the way in which corporate governance functions.

The view that there are important interactions between governance and competition leads to the systems approach to governance as advanced most forcibly by Aoki (1994*a*). According to this, the governance of companies must be considered in the context of the overall structure of economies. Differences across countries in the structure of capital markets, labour markets and product markets are all closely interlinked. "The main bank system and the imperfect labour market situations do not exist independently, but together form a cluster of complementary institutions" (Aoki, 1994*b*, p. 19). It is not therefore possible to consider significant changes in one independent of the others. In particular, policies which promote the adoption of specific forms of governance have to take account of the product and labour markets context within which they are being contemplated

This is not unrelated to the view that proposals to alter corporate governance systems ignore the cultural context within which such systems have emerged. The advantage of Aoki's approach is that it allows analysis to be performed of the interactions between different parts of an economy. The drawback of the cultural assertions is that they are difficult to formulate in a precise way.

The paper begins by providing a framework for the analysis. It discusses the meaning of corporate governance and its relation to the structure of firms. It identifies the criteria by which the performance of governance systems should be judged

It then discusses the first way in which differences in corporate governance systems may manifest themselves, namely in regard to managerial incentives It presents evidence on the relation of different forms of governance to incentives. The following section examines the role of governance systems in disciplining management and restructuring poorly performing companies. Disillusionment with forms of governance rapidly emerges when they fail to restructure or save ailing companies.

Next, the paper considers finance and investment. Do different governance systems elicit different levels of investment and forms in which investment is undertaken? The paper then turns to the relation between corporate governance, commitment and trust. The role of stakeholders (such as creditors, suppliers, purchasers and employees) in addition to shareholders in corporate policy has been the subject of much recent discussion.

The paper then discusses the relation between the structure of product markets and governance. As noted above, competition may affect and be affected by governance systems. In considering policy towards corporate governance, the influence of competition is a particularly important element. The last section concludes and summarises the paper.

A FRAMEWORK

Corporate governance has been traditionally associated with a principal-agent relationship problem Investors (the principals) employ managers (the agents) to run firms on their behalf. The interests and objectives of investors and managers differ. Corporate governance is concerned with ways of bringing the interests of the two parties into line and ensuring that firms are run for the benefit of investors. For example, Demb and Neubauer (1992) state that "corporate governance is a question of performance accountability".

The exercise of corporate governance is frequently associated with the structure and function of boards of companies. There has been much discussion of the role of non-executives, separate chairmen and chief executives, and remuneration, audit and nominating committees. The fiduciary duties of directors in representing the interests of shareholders has received much emphasis.

The role of shareholders in exercising good governance has also been a theme Institutional investors, which are the largest group of shareholders in the United Kingdom and have a substantial presence in the United States, have been exhorted to play a more active role in the monitoring and control of firms. It has been suggested that the duties of investors in overseeing the functioning of companies extends beyond that of their own financial interests to the stewardship of firms According to this view, large shareholders have an implicit obligation to other shareholders in ensuring that firms are run in the interests of all shareholders

Recently the debate has been extended to the notion that firms have responsibilities to parties other than shareholders. At one level, it has been proposed that it is in the interests of shareholders to take account of a broader constituency including employees, suppliers and purchasers from the firm This view regards the development of long-term relations, trust and commitment as part of the successful development of firms. The best firms, according to this line of argument, are the ones with committed suppliers, customers and employees

However, there is a broader concept that firms should not simply be run in the interests of their shareholders They have responsibilities to other stakeholders which may on occasion conflict with their objective of wealth maximisation for shareholders. This line of argument sees the firm as an entity which is distinct from its shareholders, where ownership and control is spread amongst a number of parties. Kester (1992), for example, states that "the central problem of governance is to devise specialised systems of incentives, safeguards, and dispute resolution processes that will promote the continuity of business relationships that are efficient in the presence of self-interested opportunism".

The criteria by which performance is judged differ between the two concepts of the firm. According to the shareholder model, the objective of the firm is to maximise its market value through allocative, productive and dynamic efficiency. According to the stakeholder approach, performance is judged by a wider constituency interested in employment, market share and growth in trading relations with suppliers and purchasers as well as financial performance

Differences in participation in corporate control in large part reflect different patterns of ownership. In the United Kingdom and United States, ownership is importantly associated with institutional investors. At the same time, individual ownership is greater in the United States than in the United Kingdom. In both countries, the control of firms is dominated by institutional investors – they are generally regarded as the marginal investor. However, that is not true of most countries. As will be discussed further below, ownership in most countries is in the hands of either other corporations or individual investors Cross-ownership of shares by one firm in another is commonplace and large family holdings frequently dominate institutional investments. This gives rise to a system of ownership which has been described as an "insider system" (Franks and Mayer, 1994) to distinguish it from the "outsider system" of the United Kingdom and United States where ownership and control rests with outside, usually institutional, investors.[1] Inter-corporate shareholdings often give rise to associated positions on the boards of firms The principal-agent view of corporate governance does not make sense in the context of corporate systems in which companies are owned and controlled by each other. Instead, as Kester suggests, firms are more appropriately viewed as co-ordination devices for aligning self-interest with the collective good of several parties

Ownership and the structure of boards affect the way in which companies are managed and controlled There are a number of forms which these differences can take Firstly, the flow of information to investors may differ Closer relations between investors in companies on continental Europe and in Japan may encourage better informed investors. For example, it is frequently suggested that investors in Germany derive information from their positions on supervisory boards. However,

critics point to such obvious failures as Metallgesellschaft as evidence that information flows in the German system can be seriously deficient.

Secondly, investors in different countries may have different incentives to intervene. Dispersed shareholdings in the United Kingdom and United States systems of corporate governance may provide insufficient incentives for any one investor to monitor and control the performance of firms. Where there are large dominant shareholders, the returns to active governance are greater.

Thirdly, markets for corporate control, in particular hostile take-overs, are less active in most countries than in the United Kingdom and United States. The market for corporate control is regarded as an important discipline on the behaviour of firms.

These differences in monitoring and control will manifest themselves in several ways. Firstly, according to the principal-agent models of the firm, incentives are a key determinant of performance. Incentive systems are a function of information asymmetries between investors and managers, the relative degree of risk aversion of investors and managers and the influence of incentives on the productivity of managers. If patterns of ownership differ significantly across countries then the information available to investors and the degree of risk sharing between investors and managers may vary. For example, where there are large dominant shareholders then they may be better informed but less able to spread risks than small dispersed shareholders. They may therefore impose high powered incentives on managers which are more directly related to the performance of firms.

Secondly, in addition to carrots, principal-agent models emphasize sticks in bringing the objectives of managers into line with those of investors. Where there are concentrated shareholders then there may be a greater willingness to discipline poorly performing management; there is more incentive to intervene and exercise "voice" rather than "exit". On the other hand, long-term relations may make it hard to take action where investors' reputations may suffer as a consequence of attempts to dismiss management. In addition, there may be some substitution between carrots and sticks: systems which encourage the use of high powered incentives schemes may not require such strong sticks.

This is particularly related to the restructuring of poorly performing firms. The role of financial institutions in financing failing companies is regarded as a particularly important distinction between different countries' governance systems. The role of Japanese banks in restructuring poorly performing firms is thought to be an important feature of the country's financial system. In the United Kingdom and United States, it is sometimes asserted that financial institutions (banks, pension funds and life assurance companies) intervene too late in corporate restructurings. There may be difficulties in organising restructurings and orderly bankruptcy proce-

dures where there are multiple creditors and incentives for creditors to withdraw finance at the earliest opportunity.

Thirdly, governance systems may differ in the incentives which they provide for finance and investment. Continental European and Japanese systems are thought to be characterised by long-term relations which encourage long-term, primarily bank, finance. On the other hand, the United Kingdom and United States are regarded as benefiting from high levels of equity risk capital

In summary, the above suggests a relationship between different patterns of ownership, board representation and forms of monitoring and control which manifest themselves in different types of incentives, disciplining, restructuring of firms, finance and investment

These relations are affected by the legal and regulatory framework within which companies operate. Regulation impinges on ownership through, for example, stock exchange rules regarding the ability of firms to issue dual class shares, take-over codes which require firms to make full tender offers once they have acquired more than a certain percentage of the shares of a firm, and banking laws on the separation of commercial and investment banking which limit bank equity holdings. Legal forms of companies lay down rules regarding the issuance and transference of shares, the composition and size of boards, and the duties and responsibilities of board members. Bankruptcy codes influence the claims and control of different investors in the event of insolvency.

Regulation is therefore a crucial influence on governance structures. However, regulation is also a product of different governance systems. More market oriented financial systems require greater disclosure of information and insider trading rules to promote liquidity. Take-over codes are introduced to protect minority shareholders. Bankruptcy rules may be more debtor oriented in systems which otherwise provide little protection for wider stakeholder interests, such as those of employees. Regulation is therefore a reflection, as well as a cause, of different governance systems.

INCENTIVES

The first potential effect of governance which will be considered is on incentives. Principal-agent models suggest that to align interests of shareholders and managers, there should be a close relation between executive remuneration and corporate performance measured in particular by the value of a firm. Empirical analysis of the relation between executive pay and corporate performance has a long history. Much of this work has focused on the relative importance of shareholder returns and size of company on managerial remuneration (see Murphy, 1985, and the survey by Rosen, 1992, in the United States, and by Conyon, Gregg and Machin, 1995, in the United Kingdom). These analyses find a weak relation between

pay and performance (a $3.25 increase in CEO wealth for every $1 000 increase in shareholder wealth according to Jensen and Murphy, 1990) and a stronger relation with the size of the firm.

These results were instrumental in promoting the view that management will be more concerned with the growth than the profitability of firms. However, more recent work has suggested the observed relations between pay and performance may not be out of line with those predicted by principal-agent models. Haubrich (1994) demonstrates that a $10 increase in remuneration for every $1 000 increase in shareholder value is quite consistent with certain parameter values regarding risk aversion, effort-leisure trade-offs, etc. Similarly Garden (1994) argues that the Jensen and Murphy results cannot be viewed as inconsistent with the principal-agent theory.

Over the last few years there has been a substantial increase in the use of options as a form of executive remuneration Options are a method of "gearing up" the relation between remuneration and performance. Since executive remuneration only rises above the exercise price, powerful relations between pay and performance can be established for given levels of expected remuneration. However, remuneration is also then more directly related to volatility of performance than with share schemes (Main, 1995) since executives do not lose from declines in share prices to the extent that they gain from increases. As a consequence, executives may be encouraged to pursue unduly risky strategies to activate their share options. In addition, option contracts present serious problems of self-dealing by which managers sign contracts from which they anticipate earning substantial returns. For example, Yermack (1995) reports that managers receive stock options shortly before shares appreciate in value.

There has been little analysis of the influence of governance arrangements, in particular board structures, on executive pay. Conyon (1994) finds that the incidence of remuneration committees has increased appreciably in the United Kingdom. In a longitudinal analysis of 214 large United Kingdom companies, he finds that there were remuneration committees in 94 per cent of companies in 1993 as against 54 per cent in 1988. He estimates that these committees have been associated with a 2 per cent reduction in CEOs' pay. However, Main and Johnston (1993) find that remuneration committees are associated with higher levels of remuneration, of the order of 17 per cent, and remuneration was no more incentive oriented with than without a committee.

It has been suggested that outside of the United Kingdom and the United States, managers are more concerned about the growth than the profitability of firms (see for example, Blinder, 1991) Milgrom and Roberts (1992) argue that "Japanese firms are not run in the interests of their shareholders" (p.443). Similar points have been made about Germany (see, for example, Schneider-Lenne, 1994). On the other hand, Grundfest, 1990; Hoshi, Kashyap and Scharfstein, 1990, 1991;

and Prowse, 1990, argue that close relationships reduce agency costs in Japan and allow investors to monitor management more effectively than in the United States.

Kaplan (1994) compares the relation between executive remuneration (salary and bonus) and performance as measured by earnings levels, changes in earnings and sales growth in large Japanese and United States companies in the 1980s Kaplan concludes that Japanese "compensation respond to all four performance measures, and the responses are generally similar to those in the United States ... Cash compensation is positively related to earnings, stock and sales performance. In most cases, the sensitivities in the two countries are not statistically different" (p. 512).

The relation between corporate governance and executive remuneration is therefore unclear. Superficially, the stock market economies of the United Kingdom and United States offer the opportunity of providing higher powered incentives in the form of, for example, managerial stock options. Close monitoring and well functioning remuneration committees should promote stronger relations between pay and performance in Japan and Germany. Alternatively, they may reduce the need for performance related incentive contracts. But thus far empirical evidence to support these propositions has not been forthcoming.

DISCIPLINING AND THE RESTRUCTURING OF POORLY PERFORMING FIRMS

The role of boards

The exercise of corporate governance is often associated with the replacement of poorly performing management Several studies report an association of board turnover with poor corporate performance in the United States (Coughlan and Schmidt, 1985, and Warner, Watts and Wruck, 1988). Weisbach (1988) was one of the first studies to report an association of board turnover, firm performance and the presence of outside directors. Fama (1980) argues that "the viability of the board as a market-induced mechanism for low-cost internal transfer of control might be enhanced by the inclusion of outside directors" (pp. 293-294) Echoing this view, the Cadbury Committee (1992) in the United Kingdom has argued for more non-executive director representation on the boards of firms and the separation of the role of chairman and chief executive. Consistent with this, Weisbach finds that "performance measures are more highly correlated with CEO turnover for firms in which outsiders dominate the boards of directors than for firms in which insiders dominate. Outsider-dominated boards tend to add to firm value through CEO changes" (p. 458)

In the United Kingdom, Franks, Mayer and Renneboog (1995) also find a relation between board turnover and firm performance and "there is more board turnover in poorly performing companies where there is a high proportion of non-

executive directors and where there is separation of chairman and chief executive officers" (p. 1).

The role of large share stakes

Board composition therefore appears to be an important influence on the exercise of corporate governance. However, a number of additional factors have been suggested. Dating back to the work of Berle and Means (1932) it has been appreciated that there is a potential free-rider problem of corporate control. In the presence of dispersed shareholders, there is little incentive on any one shareholder to exercise corporate control. Exit is in general cheaper than intervention and the revelation of an intervention may convey more unexpected bad news to the stock market about the performance of the firm than good news about the prospect of a recovery thereby depressing the value of the holdings of the active investor. Furthermore, there may be significant impediments to coalition formation amongst shareholders (Black and Coffee, 1993): institutions which are underweight in a particular stock may be made worse off relative to their competitors by a successful reorganisation. Where their performance is measured relative to their competitors, they may therefore oppose value enhancing restructurings.

Avoidance of the free rider problem of corporate control may require the presence of large shareholders. Shleifer and Vishny (1986) provide a theoretical demonstration that concentrated shareholdings can mitigate free rider problems of corporate control. Franks, Mayer and Renneboog (1995) examine the relation between board turnover in a sample of poorly performing firms in the United Kingdom and concentrations of shareholdings. They find that there is "a strong relation between board turnover and concentration of share ownership in the sample of poorly performing companies" (p. 1).

Morck, Shleifer and Vishny (1988), McConnell and Servaes (1990), and Wruck (1989) examine the relation between ownership concentration and corporate performance in the United States. They find that corporate performance as measured by Tobin's q initially rises with low levels of concentration of ownership (for example, up to 5% in Morck, Shleifer and Vishny's study) and then declines. A possible explanation for the subsequent decline has been given by Shleifer and Vishny (1995) who suggest that there may be significant disadvantages as well as advantages to concentrated shareholdings "The fundamental problem is that the concentrated owners represent their own interests, which need not coincide with the interests of other investors in the firm, or with the interests of employees and managers. In the process of using his control rights to maximize his welfare, the concentrated owner can therefore redistribute wealth – in both efficient and inefficient ways – from others" (p. 31)

Franks, Mayer and Renneboog (1995) provide support for this view. They find that, in the United Kingdom, the nature as well as the size of shareholdings is important in determining how corporate control is exercised. Large corporate investors exercise more control than institutional investors and those with private benefits of control, such as directors, appear to impede the exercise of good governance. Managerial entrenchment (the successful resistance of external intervention by incumbent management) is most in evidence where companies have recently come to the stock market and director shareholdings are particularly high.

Consistent with this result, Hermalin and Weisbach (1991) report that, in the United States, at low levels of ownership, corporate performance increases with managerial ownership as managers' and shareholders' interests are more closely aligned. However, it decreases above this level as management is able to insulate itself from disciplinary sanctions.

Franks and Mayer (1995*a*) examine the relation between both management and supervisory board turnover, performance and the size of shareholdings in Germany. They do not find evidence of a stronger relation between either management of supervisory board turnover and performance in firms with concentrated ownership and conclude that concentrations of ownership in Germany are "used to extract private benefits rather than wider shareholder interests" (p. 18).

In summary, the evidence available to date points to benefits in the exercise of corporate governance from modest levels of concentrations of ownership but possible exploitation of private benefits at high levels of concentration

Markets in share stakes

Burkhart, Gromb and Panunzi (1995) argue that the optimal ownership structure of a firm depends on its performance When it is performing well, diffuse ownership may help to limit the degree of undesirable interference from investors However, when a firm is performing poorly then concentrations of share ownership may be desirable to encourage active control

This points to the possibility of a dynamic evolution of patterns of ownership Ownership may evolve from concentrated to more dispersed forms as the required degree of active corporate control diminishes and then re-emerge in a concentrated form when firms encounter problems. Franks, Mayer and Renneboog (1995*a*) report evolving patterns of ownership in the United Kingdom which are quite consistent with this prediction "Where poor performance is observed, sales of share stakes occur between different investors. In particular, there is a market in shares between new and old non-institutional shareholders and directors These trades in shares are associated with significant changes in boards of poorly performing companies" (p. 14).

Franks and Mayer (1995*a*) report a similar result for Germany. Surprisingly, in the light of the supposed stability of the German and Japanese financial systems, they find evidence of a high level of turnover of large shareholdings in Germany. These sales of share stakes appear to be associated with poor performance of firms and changes to the supervisory (but not management) boards of companies. Corporate control is therefore particularly closely associated with sales of share stakes in both Germany and the United Kingdom.

Markets for corporate control

Following Manne (1965), the market for corporate control, or hostile take-overs, is generally viewed as an important method of correcting managerial failure. As Herzel and Shepro (1990) state "the most compelling argument in favour of hostile take-overs is that they are an important discipline on the management of likely target companies" (p 3). However, the evidence is not supportive of this. Franks and Mayer (1996) examine whether hostile take-overs are associated with dismissal of management and prior poor performance. They "find clear evidence of high board turnover and significant levels of restructuring in hostile take-overs. Large gains are anticipated, as reflected in high bid premiums paid to target shareholders. However, using a number of different benchmarks, we find little evidence that hostile take-overs are motivated by poor performance prior to bids. We therefore reject the view that hostile take-overs perform a disciplinary role" (p. 164).[2]

The role of banks

Banks are supposed to perform an important function in screening and monitoring firms. According to Diamond (1984), they can overcome the free-rider problem in information gathering which afflicts lending by a large number of dispersed investors. Recently, it has been suggested (Mayer, 1988; Sharpe, 1990; and von Thadden, 1995) that there may be advantages to long-term relations between banks and firms. Long-term relations improve banks' evaluations of the quality of firms and allow better lending decisions to be made. According to von Thadden, if banks are better informed than other investors, they may be less inclined to favour investments which generate immediate signals of their performance. Banks may thereby diminish short-term biases which would otherwise afflict lending decisions

However, banks may exploit their informational advantage by charging high lending rates to borrowers. Information introduces a switching cost into the market for credit which limits the extent to which borrowers are able to seek alternative sources of finance Von Thadden (1995) argues that long-term contracts may mitigate this problem by reducing the scope for banks to extract rents at future dates at the expense of borrowers. Sharpe (1990) suggests that monopoly exploitation may

also be discouraged by the desire of banks to preserve their reputations in lending markets.

Information is particularly important in the refinancing of failing firms. Failure of creditors to be able to distinguish between companies with good or bad prospects during periods of financial difficulties may result in premature liquidations. Furthermore, there may be conflicts between creditors leading to inefficiencies when firms are in financial distress (Bulow and Shoven, 1978, and White, 1980). Gertner and Scharfstein (1991) demonstrate that these inefficiencies persist when firms can renegotiate with corporate bondholders.

Hoshi, Kashyap and Scharfstein (1990 and 1991) examine the role of banks in reducing the costs of financial distress in Japan. They examine whether firms with close financial relationships with banks can more effectively overcome problems of financial distress. Using a sample of 121 firms over the period 1978 to 1985, they find that financially distressed firms with close bank relations invest more and have stronger sales performance than non-group firms in the years following the onset of financial distress. Firms that receive a larger fraction of their debt financing from one lender invest and sell more. These results suggest that financial distress is more costly when financial claims are spread out among many creditors than when they are concentrated in the hands of a few financial institutions. Miyami (1995) finds similar results for ex-zaibatsu companies over the earlier period, 1957 to 1964.

There is therefore clear evidence of a role for banks in japan in organising and financing the rescue of failing companies. In contrast, there is little evidence of German banks playing a direct role in the rescue of German firms. Surveying available evidence on Germany, Edwards and Fischer (1994) conclude that "the evidence on German bank behaviour when firms are in financial distress does not support the view that banks are able to reduce the costs of financial distress and bankruptcy by close monitoring and control of the actions of managers of firms in financial difficulty" (p. 175). Gorton and Schmid (1994) report an association between board turnover, poor performance and banks' own corporate shareholdings but not with banks' proxy shareholdings.

Corbett (1987) reports that when a company encounters financial difficulty in Japan the main bank will appoint a project team which may dispatch advisory managers to the client company In contrast, Edwards and Fischer state that "there is no evidence that German banks send managers to work with firms in financial distress which are attempting to reorganise" (p. 176).

There therefore appears to be a difference in the way in which banks operate in the two bank-oriented financial systems of Germany and Japan. There is more evidence of active involvement of Japanese than German banks in the rescuing of distressed firms.

The role of other financial institutions

Between 1970 and 1993, pension funds in the United States grew from owning less than 9 per cent of the stock market to nearly one-third of the market. Mutual funds and insurers owned a further 16 per cent, implying that nearly one-half of corporate equity was in institutional hands by 1993. In the United Kingdom, institutions hold about two-thirds of equity with more than 80 per cent of this being in the hands of pension funds and life assurance firms.

Despite the high proportion of institution holdings, there is a widely held view that institutions fail to monitor managers. The problem is said to lie in the dispersed nature of their shareholdings. While in aggregate institutions hold a large fraction of corporate equity in the United Kingdom and United States, this is dispersed amongst a large number of institutions, few of which hold significant fractions of shares in any one firm. There are good portfolio reasons, in addition to regulatory constraints, for why institutions may wish to diversify their holdings across a large number of firms. However, the degree of diversification of institutional investments appears considerably greater than that required to achieve most portfolio benefits and may have come at the expense of good corporate governance.

There is evidence of increased institutional involvement in both the United Kingdom and United States. Berkshire Hathaway and Calpers are two well known examples in the United States. "Concentrated blocks, frequently of 10 per cent or so of a firm's stock, allow Hathaway's senior executives, usually Warren Buffet or Charles Munger, to sit on the board. In a crisis they intervene, as Salomon Brothers' management found out" (Roe, 1994, p. 224).

In addition, there is evidence of active institutional involvement in the United Kingdom. Stapledon (1996) records that in a stratified sample (10 per cent) of the 695 companies in the United Kingdom FT-A All Share Index, the six institutions with the largest shareholdings held on average 31 per cent of the ordinary share capital. In the largest firms, the six largest shareholdings amounted to 19 per cent of issued share capital. Stapledon reports that coalition formation amongst institutions was not uncommon The coalitions represented between roughly 20 per cent and 40 per cent of the issued share capital. An ideal coalition comprised two or three members and four was thought to be a maximum. Stapledon finds that institutional interventions to change management in the United Kingdom have occurred since the 1950s and their prevalence in the 1990s suggests that they may be a substitute for takeovers. Successful interventions are most likely in small and medium sized companies because institutional shareholdings are too small to allow effective coalitions to be formed in the largest companies. However, all institutional shareholdings suffer from the indirect nature of their investments. Institutions themselves are prone to similar agency problems to the firms in which they invest and even

concentrated holdings by institutions do not overcome the problem of "who monitors the monitor".

FINANCE AND INVESTMENT

There is a great deal of evidence on the way in which companies in different countries finance their investment. Mayer (1990) reports a number of stylised facts about financing patterns. Retained earnings (gross of depreciation) are the dominant source of finance in all OECD countries. Bank finance is the single most important source of external finance. Bonds in general contribute little to the financing of firms in aggregate. New equity issues also only account for a small proportion of corporate finance.

There are, however, some important differences in financing patterns across countries. Bank finance is a much more important source of funding in some countries, most notably France and Japan, than others. Bank finance accounts for a particularly small amount of corporate funding in the United Kingdom and, surprisingly in view of its status as a bank oriented financial system, in Germany. Bond finance is a significant source of corporate finance in North America but not elsewhere. New equity issues have accounted for a particularly small {actually negative over the recent past) amount of corporate funding in the United Kingdom and United States. This is also surprising in the light of the apparently sophisticated equity markets of the United Kingdom and United States.

McCauley and Zimmer (1989 and 1994) have reported that costs of capital were higher in the United Kingdom and United States than in Germany and Japan during the 1980s. In Japan this resulted from higher levels of leverage and, during the second half of the 1980s, much lower costs of equity. During the 1990s there has been a marked convergence in costs of capital; in the case of Japan, this reflects the sharp fall in stock prices on the Tokyo exchange. McCauley and Zimmer measure the cost of equity in relation to price earnings ratios. However, international differences in price/earnings ratios can reflect different anticipated rates of growth of earnings as well as discount factors, so that high price/earnings ratios in Japan may result from high anticipated growth of earnings rather than low costs of capital.

Recently Poterba and Summers (1996) report survey evidence of higher costs of capital in the United States than in Japan. They sent a survey to all Fortune 1 000 companies in the United States and had responses from about a quarter. These firms reported average real hurdle rates of return of just over 12 per cent. This compares with an average real return on equities in the United States of around 7 per cent and a long-run real return on bonds of 7 per cent. A similar survey sent to a group of large Japanese firms elicited a target nominal return of 10 per cent.

There is little direct evidence of an influence of financial systems on differences in levels of investment across countries. Untangling the numerous factors which

may impinge on investment is complex. Mayer and Alexander (1990) report similar investment/profits ratios of large firms in Germany and the United Kingdom during the 1980s. United Kingdom firms had higher dividend pay-out ratios (as a proportion of earnings) than German firms but raised more external finance from banks and bond markets. The higher pay-out ratios may assist in achieving superior resource allocation.

Mayer and Alexander (1995) report evidence of an influence of corporate ownership on finance and investment from a comparison of firms with different ownership structures in the United Kingdom. They compare the financing and investment activities of quoted and unquoted (listed and unlisted) companies matched by size and industry over the period 1980 to 1987. They find that quoted firms pay out a significantly higher proportion of their profits as dividends but raise significantly more equity finance than unquoted companies. Overall, unquoted firms invest a significantly higher proportion of their total sources of finance in physical assets than quoted firms.

The main difference which Mayer and Alexander report between quoted and unquoted companies concerns the nature of investment. Quoted firms engage in much more acquisition activity than unquoted firms. Much of the new equity which they raise goes towards the purchase of other firms rather than internal growth. As a consequence, overall quoted firms grow far more rapidly than unquoted firms

In conclusion, while there are significant differences in the ways in which companies in different countries finance themselves, the implications of these differences is unclear. The higher level of dividend distributions associated with United Kingdom than German firms and of quoted than unquoted firms in the United Kingdom could be a sign of effectiveness of equity markets in rewarding shareholders. On the other hand, high dividends may reduce the availability of internal finance for investment. Thus, although there are several ways in which equity markets could affect corporate investment, through for example stock market reactions to new capital expenditure programmes, there is little conclusive evidence of an influence from the financing of firms.

Differences in costs of capital across countries have not been firmly established either. Higher target pay-out ratios in the United Kingdom than in Germany may reflect differences in the nature of investments undertaken by firms across countries. As the next section suggests, there may be good reasons for anticipating differences in the types of investments associated with different capital markets.

RELATIONSHIPS, COMMITMENT AND TRUST

Over the past decade there has been much discussion of the role of financial systems in promoting relationships between firms. This has been particularly considered in the context of relationships between banks and corporate borrowers. It is

believed that there are longer term relations between banks and borrowers in Germany and Japan than in the United Kingdom. Evidence in support of this is sometimes suggested to come from the maturity of bank lending in different countries. The average proportion of bank lending to companies with a maturity in excess of 1 year is around ⅔ in Germany and ⅓ in the United Kingdom. However, there are serious problems of measurement associated with these figures (see Edwards and Fischer, 1994) and it is unclear what is the implication of differences in maturity for corporate investment. According to recent incomplete contracts models (see, for example, Hart and Moore, 1994), short term debt may be used to limit risks of strategic default on the part of borrowers. If that is the case then short term debt may allow more external finance to be provided than would otherwise be the case.

There may be more significant differences in degrees of commitment associated with equity than debt finance. Franks and Mayer (19956) record striking variations in patterns of ownership of companies in different countries. In France and Germany, in more than 85 per cent of the largest quoted firms there are single shareholders owning more than 25 per cent of shares. In the United Kingdom, the equivalent figure is 16 per cent. In more than half of the largest French and German firms there is a single majority shareholder. The equivalent figure in the United Kingdom is 6 per cent.

Still more striking are the differences in the nature of equity investors. Outside of the United Kingdom and United States, private companies account for a substantial proportion of the largest firms. For example, in Germany joint stock companies only account for 20% of turnover and only a small proportion of these are quoted on stock markets. As noted above, in the United Kingdom (and to a slightly lesser extent in the United States), a majority of shares are held by financial institutions. In France and Germany the dominant shareholders are families and other companies. Contrary to conventional wisdom, banks do not hold a large proportion of German equity on their own account, although they do hold proxy votes on the bearer shares deposited by private investors for safe keeping

Two types of firms may be distinguished in continental Europe. Firstly, a majority of companies have large concentrated shareholders (defined as companies with single shareholdings of at least 25 per cent). In these Firms, control is exercised directly by these shareholders and bank control is limited. Secondly, there is a small proportion of widely held firms. Franks and Mayer (1995*a*) conclude that banks do exercise a significant degree of control in companies with dispersed shareholdings, primarily through proxy votes and supervisory board representation.

In addition to concentrated share stakes held by families and companies, Franks and Mayer (1995*a*) report complex systems of shareholdings. Where the main shareholding in a firm is another corporation then the question arises as to who owns that firm in turn. In some cases, ownership has to be traced back over several levels of a hierarchy before ultimate control can be identified. Secondly, in

France and to a lesser extent in Germany, there are interlocking shareholdings which may take the form of direct cross-shareholdings by which companies hold reciprocal shareholdings in each other or more complex webs of holdings.

As Franks and Mayer (1995*b*) note this gives rise to an "insider system" of corporate control by which companies are owned and controlled by each other and by families. There is little control exercised externally by outside shareholders. In contrast, the United Kingdom and United States have "outsider systems" of corporate control dominated by a large number of small shareholders.

The question that this raises is what differences do these patterns of corporate ownership have for the way in which firms are controlled and their performance. As noted above, one effect of concentrated shareholdings is to encourage more direct corporate governance and control. However, concentrated shareholdings may *also* encourage more relationships and commitment. Firstly, this may result from concentrated sharestakes being held by owners with which a firm has a trading relationship, *e.g.* as suppliers or purchasers. Williamson (1975) emphasizes the importance of transaction costs in encouraging the organisation of activities within the firm rather than through markets. Cross-shareholdings between firms may haw similar effects.

Secondly, even if ownership is not associated with trading relations, concentrated shareholdings may encourage greater commitment. In a system of dispersed shareholdings, individual shareholders can walk away from relations with other stakeholders (such as employees, suppliers and purchasers) without suffering any costs. However, a concentrated shareholder cannot sell out anonymously and is therefore accountable for the effects of his or her actions. Where stakeholders suffer as a consequence of a large shareholder disposing of his or her shares then the shareholder may incur reputational consequences. The United Kingdom and United States system of corporate ownership is therefore characterised by dispersed, anonymous shareholders where it is difficult to sustain trust and commitment. The continental European and Japanese systems are characterised by large, identifiable shareholdings where relations can be better sustained.

Commitment and trust are particularly important where productive activities depend on the involvement of and investment by a large number of stakeholders. Complex manufacturing processes which require several different supplier and purchaser arrangements may be particularly dependent on ownership patterns that promote commitment and trust. They are also relevant to activities which require firm specific investments by employees in training and acquisition of skills. incentives to undertake such investments may require commitments by employers to long-term employment and promotion policies within the firm.

Commitment and trust may be less relevant to productive activities which rely more on innovation and serendipity, for example high technology processes such as

biotechnology. Furthermore, complex patterns of ownership and large shareholdings may diminish adaptability to change and be positively disadvantageous for encouraging restructuring of firms and industries. Where for example, technological change demands wholesale rationalisation then this may be difficult to negotiate in the presence of large shareholdings. Mergers between firms through tender offers may be a much more effective mechanism for affecting such changes.

In summary, the most striking difference between financial systems does not concern patterns of finance and investment but ownership and control of firms. Differences in concentrations of ownership and the nature of owners are pronounced. Those differences are associated with the degree of monitoring and control which owners exercise. However, in addition they are also associated with differences in the degree of commitment and trust which exist between different stakeholders. While high levels of commitment and trust will be desirable for certain activities, that will not be invariably the case.

COMPETITION AND CORPORATE GOVERNANCE

Competition in product markets is generally associated with allocative and productive efficiency. Competition encourages the supply of goods and services at lowest costs and at prices which reflect the underlying costs of provision. However, in light of the above discussion, as noted by Mayer (1988) and formally set out in a model by Petersen and Rajan (1995), that does not necessarily apply in financial markets. Competition may undermine the development of long-term relations between firms and financial institutions. For example, the willingness of banks to provide rescue finance for companies in financial distress may hinge on the expectation that these investments will yield long-term returns. Where there is competition in financial markets and firms are free to shift to lowest costs suppliers of finance once they are out of financial distress then the provision of rescue funding by banks may be discouraged. On the other hand, limitations on competition in financial markets may result in monopoly exploitation of borrowers as noted by Hellwig (1991) and von Thadden (1995). For example, capital requirements create barriers to entry to new banks and confer monopoly rents on existing banks from the overcharging of corporate borrowers.

Mayer (1994) argues that there may be multi-equilibria in the structure of capital and product markets. He contrasts banking systems in which banks provide finance to firms in the middle stages of their developments {as banks provide finance to the Mittelstand in Germany) with cases where companies go to stock markets. In the case of economies in which firms seek stock market finance, the resulting dispersed ownership may discourage banks from having long-term relations with firms. Anticipating that firms will have dispersed, anonymous shareholders who will be unable to commit to one lender, banks will not provide finance and

firms will be forced to stock markets thereby justifying the unwiilingness of banks to provide finance. In contrast, where banks do provide finance then ownership can remain concentrated and firms can provide the degree of commitment to banks which is required to induce them to lend in the first place.

This suggests that there may be key differences in the life-cycle development of firms. In some economies, banks provide finance during the all important middle stage of development when firms elsewhere are seeking stock market funding. In the banking systems, ownership remains concentrated and long-term relations develop. In the stock market economies, there is dispersed ownership and more flexibility than commitment. This suggests an important interrelation between the structure of financial and product markets.

Differences in the life cycle development of firms affect industrial structure. Complex patterns of ownership with cross-shareholdings between firms create large corporate groupings and high product market concentration. Extensive family holdings result in concentration of ownership in the hands of a small number of families. These promote monopoly exploitation and allocative inefficiency.

While there may therefore be corporate governance and relationship benefits associated with insider systems of corporate ownership, there are also potential product market problems. The most successful systems of corporate governance may be those which combine insider systems with product market competition For example, monopoly abuse by *keiretsu* groups in japan has been avoided through the establishment of competing industrial groups.

Conversely, the degree of both product and financial market competition will influence the development of governance systems. In the presence of competitive markets, the most efficient forms of governance systems would be expected to emerge of their own accord. However, regulation and restrictions on trade may impede this process. In the absence of international competition, the natural selection of most efficient forms of governance systems may be weak. As noted in the introduction, governance arrangements are crucially influenced by legislation and regulation concerning the ownership and control of firms and financial institutions. For example, in much of continental Europe, the ability of markets for corporate control to emerge has been seriously restricted by rules concerning voting right restrictions, proxy votes and tenure of members of corporate boards Pressure for change has only come with greater international integration of both product and financial markets.

One of the most controversial aspects of alternative governance arrangements is competition in markets for corporate control, namely hostile take-over markets justification for them comes from the view that the desirable properties of product market competition can be extended to markets in ownership. However, it is product market competition which achieves allocative efficiency. Productive efficiency

may be achieved through several different forms of corporate governance of which a market for corporate control is only one. Not only may competitive ownership markets be unnecessary where there is product market competition, they may actually undermine the development of long-term relations between stakeholders which are required for dynamic efficiency.

Privatisation of utilities has raised the question of whether dispersed ownership and markets for corporate control are desirable where it is difficult to create product market competition. There is only very limited evidence available on this. Until recently, privatised utilities in the United Kingdom were protected by golden shares which conferred ultimate control rights on the government to determine whether changes in ownership should be permitted With the elimination of golden shares, an active market in corporate control for utilities has emerged. This may encourage firms to pursue productive efficiency and act in the interests of their shareholders by, for example, returning surplus cash to shareholders rather than pursuing unprofitable diversification. However, gains to shareholders may come at the expense of customers. In the absence of competitive markets, regulators are required to identify cases of monopoly abuse. But regulators only have limited information with which to do this and the regulator's function is complicated by take-overs which merge utilities with other activities. It is therefore far from evident that natural monopolies benefit from outsider systems and markets for corporate control.

Where outsider systems may be most relevant is in markets for monopoly rights. The main feature of the outsider system is that it provides markets in the rights to determine corporate policy. This encourages corporate policy to react rapidly to new opportunities; failure to respond results in changes in ownership and control. Outsider systems may therefore be particularly well placed to respond to the commercial opportunities created by the emergence of new technologies and new international markets. These require rapid adaptation which may be impeded by the complex webs of interrelations between firms and other stakeholders which exist in insider systems. The new found interest in insider systems in the United Kingdom and United States may thus be coming at exactly the moment when the information technology revolution and globalisation of markets make outsider systems most appropriate.

CONCLUSION

This paper has provided an overview of the interrelation of corporate governance and corporate performance. This is a subject which is in its infancy and it is unquestionably premature to believe that policy should be directed towards the selection of optimal governance arrangements. Indeed one of the most widely accepted views is that, in the light of our ignorance, competition between rather

than harmonisation of financial systems is desirable. We simply do not know whether insider dominate outsider systems and we suspect that even if this is true in some markets at some times, it is unlikely to be invariably the case.

The paper has examined the influence of corporate governance systems on managerial incentives and disciplining, the restructuring of firms, finance and investment, commitment and trust. It has noted that the relation between corporate governance systems and both incentives and disciplining is far from clear. Superficially, there would appear to be a difference between the high powered incentive arrangements in the United Kingdom and United States and those in Germany and Japan. However, the limited evidence available to date does not support that assertion. Likewise, while the disciplining system associated with a market for corporate control in the United Kingdom would appear to be quite different from supervisory boards in Germany, the mechanism by which discipline is actually imposed is quite similar in the two countries, namely the emergence of concentrated shareholdings in poorly performing firms and markets in partial share stakes. Neither carrots nor sticks appear to be fundamental differences between financial systems.

Similarly, while conventional wisdom would lead us to believe that there are fundamental differences between the way in which German and United Kingdom firms are financed, empirical evidence does not support this proposition. The German banking system is not associated with a high level of bank finance and the United Kingdom stock market does not provide much external finance in aggregate for United Kingdom industry. Japanese banks are involved in the restructuring of their failing firms but German banks are not to anything like the same extent. There may be differences in costs of capital across countries but these have not been established with any measure of confidence to date.

There are, however, important differences in corporate systems across countries. These relate to the ownership and control of firms. Concentration of ownership is markedly higher in continental Europe and Japan than it is in the United Kingdom and United States. While financial institutions are influential owners in the United Kingdom and United States, families and other companies are the most important owners in most other countries. Concentration of ownership encourages more active corporate governance and the development of long-term relations. However, concentrated ownership may be used to extract private benefits from firms rather than to pursue wider corporate interests. In addition, there may be positive advantages in not establishing long-term relations. Where changes in corporate policy are required then the replacement of commitments, vested interests, pressure groups, etc., by a simple market in corporate control may be beneficial.

One interpretation of the evidence is that the main differences in financial systems may concern the formulation, implementation and adaptation of corporate strategy rather than incentives, disciplining, finance and investment. insider sys-

tems are superior at implementing policies which require the development of relations with several stakeholders. Outsider systems are better at responding to change.

The paper has pointed to important interactions between competition and corporate governance. Firstly, competition in financial markets may affect the development of long-term relations between financial institutions and firms. Secondly, inter-corporate holdings can create large corporate groupings which impede product market competition. Thirdly, competition in product markets may affect the speed with which optimal corporate governance systems emerge.

Avoidance of monopoly abuse in insider systems may require the presence of competing corporate groups. However, the recent literature on corporate governance has suggested that the benefits of product market competition cannot be simply extended to markets for corporate control. Good corporate governance and corporate relations may be undermined by markets for corporate control. Instead, the design of governance systems should be determined by the forms of corporate activities which they are supposed to serve.

Regulation is a key influence on the development of governance systems. It reflects as well as influences national differences in corporate organisation. An implication of our limited understanding of governance systems is that regulation should be permissive rather than restrictive. Increasing globalisation of product and capital markets will hasten the emergence of optimal governance arrangements. Regulation which impedes this process will act to the competitive disadvantage of nations. Companies should as far as possible be free to choose their preferred forms of corporate organisation and relations with other firms and institutions. The fact that markets in corporate control may weaken corporate relations does not justify regulation to impede take-overs: companies should be allowed to choose forms of corporate governance which discourage them if they so wish. Likewise, potential abuses of minority shareholders and competitive practices require careful monitoring and effective sanctions but do not justify the imposition of regulations which inhibit choice of governance arrangements.

NOTES

1. It should be noted that there are a number of akernative definitions of insider and outsider systems. Inside ownership is sometimes used to refer to ownership by directors of firms to distinguish it from outside ownership by non-directors. In some cases, insider systems relate to the direct exercise of monitoring and control by investors (individual or institutional) as against external mechanisms such as take-overs.
2. It might be argued that the threat of a take-over might act as a disciplinary device even in the absence of poor performance on the part of targets. However, strong performance is not then necessarily the best defence against a take-over threat.

BIBLIOGRAPHY

AOKI, M. **(1994*a*)**, "The Japanese firm as a system of attributes: A survey and research agendas", in M. AOKI and R. DORE (eds.), *The Japanese firm: Sources* of *Competitive Strength,* Oxford University Press, Oxford.

AOKI, M. **(1994*b*)**, "The gains from organizational diversity: An evolutionary game parable", in H. Siebert (ed.), *Trends in Business Organization: Do Participation and Cooperation Increase Competitiveness,* J.C.B. Mohr, Tubingen.

BERLE, A. and G. MEANS **(1932)**, *The Modern Corporation and Private Property,* **MacMillan,** New York.

BLACK, B. and J. COFFEE **(1993)**, "Hail Britannia?: Institutional investor behaviour under limited regulation", mimeo.

BLINDER, A. **(*1991*)**, "Profit maximization and international competition", in R. O'Brien (ed.), *finance and the International Economy* **5:** *The AMEX* ***Bank*** *Review Prize Essays: In Memory of Robert Marlin,* Oxford, University Press, Oxford.

BULOW, J. and J. SHOVEN **(1978)**, "The bankruptcy decision", *Bell journal* of *Economics,* ***9,*** pp. ***437-456.***

CADBURY, A. **(1992)**, *Report of the Committee on the financial Aspects of Corporate Governance*, Gee & Co. Ltd.

CONYON, M. **(1994)**, "Corporate governance changes in UK companies between ***1988*** and **1993",** *Corporate Governance,* ***2,*** pp. ***87-99.***

CONYON, M., P. GREGG and S. MACHIN **(1995)**, "Taking care of business: Executive compensation in the UK", *Economic journal,* 105, pp. ***704-714***.

COUGHLAN, A. and R. SCHMIDT **(1985)**, "Executive compensation, managerial turnover and firm performance", *journal of Accounting and Economics,* ***7,*** pp. ***43-66.***

DIAMOND, D. **(1984)**, "Financial intermediation and delegated monitoring", *Review* of *Economic Studies,* ***51***, pp. ***393-414***.

EDWARDS, J. and K. FISCHER **(1994)**, ***Banks,*** *finance and Investment in Germany*, Cambridge University Press, Cambridge.

FAMA, E. **(1980)**, "Agency problems and the theory of the firm", *Journal of Political €conomy,* ***88,*** pp. ***288-307.***

FRANKS, J. and ***C.*** MAYER **(1995*a*)**, "Ownership, control and the performance of German corporations", mimeo.

FRANKS, J. and C. MAYER (1995*b*), "Ownership and control" in H. Siebert (ed.), *Trends in Business Organization: Do Participation and Cooperation Increase Competitiveness?,* J.C.B. Mohr, Tubingen.

FRANKS, J. and C. MAYER (1996), "Hostile takeovers and the correction of managerial failure", *journal of Financial Economics, 40,* pp. 163-181.

FRANKS, J., C. MAYER and L. RENNEBOOG (1995), "The role of large share stakes in poorly performing companies", mimeo.

GAREN, J. (1994), "Executive compensation and principal-agent theory", *journal of Political Economy, 102,* pp. 1175-1199.

GERTNER, R. and D. SCHARFSTEIN (1991), "A theory of workouts and the effects of reorganization law", *journal of Finance, 46,* pp. 1189-1222.

GORTON, G. and F. SCHMID (1994), "Universal banking and the performance of German firms", mimeo.

GRUNDFEST, J. (1990), "Subordination of American capital", *journal of Financial Economics, 27,* pp. 89-114.

HART, O. and J. MOORE (1994), "A theory of debt based on the inalienability of human capital", *Quarterly journal of Economics,* 109, pp. 840-879.

HAUBRICH, J. (1994), "Risk aversion, performance pay and the principal-agent problem", *Journal of Political Economy,* 102, pp. 258-276.

HELLWIG, M. (1991), "Banking, financial intermediation and corporate finance", in A. GIOVANNINI and C. MAYER (eds.), *European Financial Integration,* Cambridge University Press, Cambridge.

HERMALIN, B. and M. WEISBACH (1991), "The effects of board composition and direct incentives on firm performance", *Financial Management,* Winter, pp. 101-112.

HERZEL, L. and R. SHEPRO (1990), *Bidders and Targets: Mergers and Acquisitions in the US,* Blackwell, Oxford.

HOSHI, T., A. KASHYAP and D. SCHARFSTEIN (1990), "The role of banks in reducing the costs of financial distress in Japan", *journal of Financial Economics, 27,* pp. 67-88.

HOSHI, T., A. KASHYAP and D. SCHARFSTEIN (1991), "Corporate structure, liquidity, and investment: Evidence from Japanese industrial groups", *Quarterly journal of Economics, 106,* pp. 33-60.

JENSEN, M. and K. MURPHY (1990), "Performance pay and top-management incentives", *journal of Political Economy, 98,* pp. 225-264.

KAPLAN, S. (1994), "Top executive rewards and firm performance: A comparison of Japan and the United States", *journal of Political Economy,* 102, pp. 510-546.

McCAULEY, R. and S. ZIMMER (1989), "Explaining international differences in the cost of capital", *Federal Reserve Bank of New York Quarterly Review,* 14, pp. 7-28.

McCAULEY, R. and S. ZIMMER (1994), "Exchange rates and international differences in the cost of capital", in Y. Ahimred and R. Levich (eds.), *Exchange Rates and Corporate Performance,* Irwin, Burr Ridge, Ill.

McCONNELL, J. and H. SERVAES (1990), "Additional evidence on equity ownership and corporate value", *Journal of financial Economics,* **27,** pp. 595-612.

MAIN, B. (1995), "The governance of remuneration for senior executives", mimeo, university of Edinburgh.

MAIN, B. and J. JOHNSTON (1993), "Remuneration committees and corporate governance", *Accounting and Business Research,* **23,** pp. 351-362.

MANNE, H. (1965), "Mergers and the market for corporate control", *Journal of Political Economy,* **73,** pp. 110-120.

MAYER, C. (1988), "New issues in corporate finance", *European Economic Review,* **32,** pp. 1167-1189.

MAYER, C. (1990), "Financial systems, corporate finance and economic development", in R.G. Hubbard (ed.), *Asymmetric Information, Corporate Finance and Investment,* University of Chicago Press, Chicago.

MAYER, C. (1994), "Money and banking: Theory and evidence", *Oxford Review of Economic Policy,* **10,** pp. 1-13.

MAYER, C. and I. ALEXANDER (1990), "Banks and securities markets: Corporate financing in Germany and the United Kingdom", *Journal of the Japanese and International Economies,* **4,** pp. 450-475.

MAYER, C. and I. ALEXANDER (1994), "Stock markets and corporate performance: A comparison of publicly listed and private companies", mimeo,

MILGROM, P. and J. ROBERTS (1992), *Economics, Organization and Management,* Prentice-Hall, Englewood Cliffs, N.J.

MIYAMA, H. (1995), "Bank centred corporate groups and investment: Evidence from the first phase of high growth era in Japan", mimeo.

MORCK, R., A. SHLEIFER and R. VISHNY (1988), "Management ownership and market valuation: An empirical analysis", *Journal of financial Economics,* **20,** pp. 293-315.

MURPHY, K. (1994), "Corporate performance and managerial remuneration: An empirical analysis", *Journal of Accounting and Economics, 7,* pp. 11-42.

PETERSEN, M. and R. RAJAN (1995), "The effect of credit market competition on lending relationships", *Quarterly Journal of Economics,* **110,** pp. 407-443.

POTERBA, J. and L. SUMMERS (1996), "Time horizons and hurdle rates of American firms", *Sloan Management Review.*

PROWSE, S. (1990), "Institutional investment patterns and corporate financial behaviour in the United States and Japan", *Journal of Financial Economics,* **27,** pp. 43-66.

ROE, M. (1994), *Strong Managers, Weak Owners: The Political Roots of American Corporate Finance,* Princeton University Press, Princeton.

ROSEN, S. (1992), "Contracts and the market for executives" in L. Werin and H. Wijkander (eds.), *Contract Economics,* Blackwell, pp 181-211, Oxford.

SCHNEIDER-LENNE, E. (1994), "The roie of the German capital markets and the universal banks, supervisory boards and interlocking directorships", in N. Dimsdale and M. Prevezer (eds.), *Capital Markets and Corporate Governance,* Ciarendon Press, Oxford.

SHARPE, S. (1990), "Asymmetric information, bank lending and implicit contracts: A stylized model of customer relationships", *journal* of *finance, 45,* pp. 1069-1087.

SHLEIFER, A. and R. VISHNY (1986), "Large shareholders and corporate control", *journal* of *Political Economy, 94,* pp. 461-488.

SHLEIFER, A. and R. VISHNY (1996), "A survey of corporate governance", National Bureau of Economic Research working paper.

STAPLEDON, G.P. (1996), *Institutional Shareholders and Corporate Governance,* Oxford: Clarendon Press.

von THADDEN, E. (1995), "Long-term contracts, short-term investment and monitoring", *Review* of *Economic Studies, 62,* pp. 557-575.

WARNER, J., R. WATTS and K. WRUCK (1988), "Stock prices, event prediction and event studies: An examination of top management restructurings", *journal* of *financial Economics, 20.*

WEISBACH, M. (1988), "Outside directors and CEO turnover", *journal of financial Economics*, 20, pp. 431-460.

WHITE, M. (1980), "Public policy towards bankruptcy: Me-first and other priority rules", *Bell journal* of *Economics, 11*, pp. 550-564.

WILLIAMSON, O. (1975), *Markets and Hierarchies: Analysis and Antitrust Implications,* The free Press.

WRUCK, K. (1989), "Equity ownership concentration and firm value", *Journal* of *financial Economics*, *23,* pp. 3-28.

YERMACK, D. (1995), "Good timing: CEO stock option awards and company news announcements", manuscript, New York University.