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CHAPTER 1

Corporate Governance: Does It Matter?

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I. Introduction

The influential work of Berle and Means (1932) suggested that the modern corporation was run by professional managers who were unaccountable to dispersed shareholders. This pointed to a narrow view of corporate governance (CG): how to ensure that managers follow the interests of shareholders. This view fits in the principal–agent paradigm. The principals (shareholders) have to solve an adverse selection problem: select good managers. They also have to solve a moral hazard problem: check that the managers put forth appropriate effort and make decisions aligned with the interests of shareholders (for example, taking the right amount of risk and not pursuing their own private benefits). "Somewhat more generally we can define corporate governance as the set of methods to ensure that investors (suppliers of finance, shareholders, or creditors) get a return on their money." (Shleifer and Vishny 1997)

More recently a broader definition of corporate governance, related to the concept of the stakeholder society, is gaining ground (see, for example, Kay 1996). A firm has many stakeholders other than its shareholders: employees, customers, suppliers, and neighbors, whose welfare must be taken into account. Corporate governance would refer then to the design of institutions to make managers internalize the welfare of stakeholders in the firm (Tirole 1999).

The interest in the topic is not only academic. There is a lively debate about how to improve corporate governance practices, with codes of best practice for boards of directors (Calpers in the United States, Cadbury in the United Kingdom, Vienot in France, Olivencia in Spain), for example, and about which system of CG is better, market oriented versus bank oriented or relations based being the principal models. The outcome of the debate is important as well for developing countries and transition economies. The topic is charged furthermore from the busi-

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ness ethics point of view and has close connections with political economy issues.

As we will see in this book, there is limited evidence of the effectiveness of internal and external mechanisms of governance, managers seem to get their way most of the time, nonprofit institutions fare well in competition with for-profit firms, and other factors, like competition in the product market, seem to be more important for economic performance. According to this view different systems of CG are more or less on an equal footing in terms of economic efficiency. All this points to a puzzle in which the main question is: Does corporate governance matter?

In this chapter I start in Section 2 by reviewing briefly the main features of the existing CG systems. In Section 3 I consider the standard agency approach to CG from the theoretical and empirical perspectives. After taking stock of the received knowledge, the new ideas contributed by the authors in the volume are reviewed. Section 4 presents a criticism of the standard view by Allen and Gale (Chapter 2) on the role of competition, and by Hellwig (Chapter 3) on the political economy of CG. Section 5 introduces new results by Carlin and Mayer (Chapter 4) on the effect of CG on economic performance, Aoki (Chapter 5) on the role of venture capital as CG mechanism, and Rajan and Zingales (Chapter 6) on CG in the new corporation. The concluding remarks contain a personal assessment of corporate governance systems and the necessary development of a research agenda.

II. An Overview of Corporate Governance Systems

In a broad (and somewhat impressionistic) sense we can distinguish between market-oriented (mostly the US and the UK) versus bank-oriented or relations-based systems (continental Europe with Germany as main model and Japan). In the latter system firms and banks enter into long-term relationships as opposed to the arm's-length finance associated to market-oriented regimes.

In the United Kingdom and the United States large companies are listed in stock markets and have their ownership dispersed among institutional and individual investors (ownership concentration is modest), there is a market for corporate control (in which the threat of a hostile takeover is important), and banks play a limited role. (In the United States the Glass–Steagall Act, repealed in November 1999, kept banks out of CG – they could not own equity – but in the United Kingdom banks could have gotten involved and they chose not to do so.) Furthermore, there are limitations on cross holdings so that competition in

the product market is not restricted. In theory corporate governance works balancing internal controls (such as the board of directors) with external ones (such as hostile takeovers).

In continental Europe, and for that matter outside the Anglo-Saxon world, most companies are private, the ownership of listed companies is highly concentrated, and family ownership is very important, hostile takeovers are rare, and pyramidal control schemes are common (La Porta, López-de-Silanes, and Shleifer 1999).[1] Bank ownership of equity is important only in some countries.[2]

In Germany there is concentrated ownership, large commercial banks control companies through proxy votes, and there are family owners for smaller companies. The *hausbank* of a firm plays a monitoring role and organizes proxy votes. Furthermore, there is a two-tiered system of company board for public corporations over 500 employees, which is consistent with the stakeholder society idea. There is a supervisory board (in a codetermination regime with a 50 percent worker representation, the other 50 percent being other major stakeholders including suppliers and customers) and a management board. In France there is a choice between the Anglo-Saxon and the German system of boards (the first, which predominates, with mostly outside directors – typically nominated by incumbent management). In any case workers are observers in the board. There is also a tradition of government intervention coupled with cross-shareholdings (with a system of *noyeau dur* or core investors) and revolving door for bureaucrats.[3]

In Japan the main bank system is in place. A long-term relationship between the bank and the client firm is established, the bank holds both debt and equity of the firm, and intervenes when the firm is in financial distress. Shareholders have more rights in theory than in the Anglo-Saxon world, but in practice the chief executive officer is in control. Boards are large and have a very limited number of outside directors.

It is important to emphasize that, although in all developed countries the level of legal protection to investors is high, there are important differences between civil and common law systems (La Porta et al. 1998).

Legal protection measures the quality of corporate governance in at least three ways:

[1] La Porta et al. (1999) examine ownership and control in the 20 largest publicly traded firms in the richest 27 countries. Controlling shareholders typically use pyramidal schemes and management participation to obtain power over and above their cash flow rights.

[2] Bank control through equity is important in Belgium, Germany, Sweden, Portugal, Greece, and Spain.

[3] See OECD (1995). However, according to La Porta et al. (1999) cross-share holdings in the control chain are significant only in Germany, Austria, and Sweden.

i The rights of shareholders (the right to vote on important matters, such as mergers or the election of board of directors, and protective measures such as vote by mail, suppression of nonvoting shares, and the protection of minority interests). Managers have a fiduciary duty to shareholders in Organization for Economic Cooperation and Development (OECD) countries (with the United States being tough on managers in the interpretation of the duty).

ii The rights of creditors, in terms of repossession of assets or collateral, priority in getting their money back, and limiting or eliminating the intervention of managers in a reorganization.

iii The level and quality of law enforcement and the standards of accounting.

La Porta et al. (1998) argue that common law countries dominate in all aspects French civil law countries in terms of the legal protection of investors (with German and Scandinavian civil law countries faring in between). The quality of law enforcement is highest in Scandinavia and German civil law countries and lowest in French civil law countries. The authors also find that the concentration of ownership in large public companies is inversely related to investor protection. Furthermore, in countries with low investor protection, capital markets are smaller and narrower (La Porta et al. 1997).

III. The Agency Approach to Corporate Governance: Where Do We Stand?

A standard approach is to view CG as helping to overcome the incentive problems between an entrepreneur or manager and outside financiers. The basic agency problem is between a principal or principals (investors or financiers or, more generally, stakeholders) and the agent (manager or entrepreneur) due the presence of moral hazard or adverse selection.

Let us concentrate on the relationship between the owners and the manager. The contract between shareholders and the manager leaves the latter a lot of discretion because the manager has the knowledge and the ability to run the company. The consequence is that the manager may engage in all kinds of behavior that are detrimental to the firm: pure theft (for example, by setting up a company and using transfer pricing to appropriate funds); enjoying private benefits of control (perks, pet projects, empire building, and favoring friends and family); entrenchment (to protect the private benefits of control); exerting insufficient effort;

and taking biased decisions (too much or too little risk taking, for example).

There is some evidence pointing to the severity of the agency problem. Jensen (1986) found that in the oil industry free cash flow was reinvested in the presence of poor investment opportunities instead of returning it to investors. The returns of a bidder for a firm are often negative when the acquisition is announced (and more if the motive of the manager is diversification or growth, see Morck et al. 1990). Managers tend to resist takeovers to protect private benefits of control. Control is valued: the shares with superior voting rights trade at a premium. In general, owner-controlled firms tend to do better than manager-controlled firms (Short 1994).

The result of the agency problem is that investors will be reluctant to put funds. It is well established that because of the agency problem external finance is more costly than internal funds (Myers and Majluf 1984). A positive net present value project may not be funded when the entrepreneur does not have enough inside capital (internal funds) or the agency problem is severe (for example, private benefits of control are high).[4] CG attempts to solve or alleviate the problem. The methods are the provision of incentives, the exercise of monitoring or control, and legal protection. We have already discussed the effect of the latter.

Provision of Incentives

Incentives can be monetary or based on career concerns and have to be based on an observable measure of performance (better if it is verifiable in court). This performance measure can be absolute or relative to the performance of rivals or the market.

Monetary incentives (executive compensation) may be based on accounting data (bonuses for targets on sales, cost reduction, profits, . . .) or on market data (share ownership, stock options).[5]

Rewards and punishments with regard to the *career* of the manager are decisions about promotion, tenure, or threat of dismissal. The optimal contract will take into account, among other things, the risk aversion of the manager and the effect of his or her decisions on the firm.

However, there are problems associated with the implementation of incentive contracts, because they can be manipulated by the management. Examples include manipulating accounting data or controlling the release of information to favor stock option payments, or capturing the board of directors or the accounting procedure. Furthermore, limited

[4] Tirole (1999) provides a simple moral hazard model to illustrate this point.

[5] Diamond and Verrecchia (1982) and Hölmstrom and Tirole (1993) study-reward schemes dependent on the share price.

liability of stock owners may induce excessive risk taking (from the point of view of other stakeholders).

In practice, the literature has found a small sensitivity of executive compensation to the share price (Jensen and Murphy 1990), although this may be optimal due to risk aversion (Haubrich 1994). New studies find a stronger relationship between CEO compensation and performance (Hall and Liebman 1998). There are large differences in executive pay in different countries (higher in the US than in Europe, where it is in turn higher than in Japan), but the sensitivity of pay and dismissal to performance is similar in the three geographic areas (Kaplan 1994a,b).[6] There is little relative performance evaluation (Hall and Liebman 1998) and little "bonding" of managers (for example, in terms of pension plans contingent on performance). However, perhaps relative performance evaluation is important in hiring and firing decisions.

Monitoring and Control

Monitoring and control take basically two forms: passive (or "exit") and active (or "voice").

Passive control aims at measuring better the manager's performance (rather than trying to increase the value of the projects of the firm). The basic idea is that better information reduces the agency problem by reducing the incentive cost (the compensation to the manager for performance) (Tirole 1999). Informative signals can come from the stock market. For example, an institutional investor or pension fund disinvests ("exits") if performance is poor. There is presently a debate about the role of institutional investors, their degree of activism, and whether investment managers are short-termist and take biased decisions.[7] Another form of exit is the nonrenewal of a short-term loan to the firm by a financial institution.

Active control is made with the board of directors, by a large shareholder, a large creditor, or the market for corporate control.

Board of Directors

The evidence points at boards of directors dominated by management. However, having a moderate number of inside directors tends to improve profitability (Bhagat and Black 1998) and if the board is dominated by outside directors it may remove top management after poor performance. In general there is mixed evidence on the effectiveness of

[6] However, turnover and compensation in Japan are more sensitive to negative earnings.

[7] See Gompers and Metrick (1998) for an analysis of institutional ownership.

boards of directors because of passiveness. In spite of having different CG systems, the turnover in boards after bad performance is similar in Japan, Germany, and the United States.[8]

Institutional investors are being more active, putting pressure on poor management, imposing changes like reduction in pay for managers, reducing the size of the board, and teaming up with others to change management.

Large Shareholders

Concentration of ownership improves the control of managers (by overcoming free ride problems in corporate control (Jensen and Meckling 1976; Grossman and Hart 1980, 1988; Shleifer and Vishny 1986), but it creates private benefits of control and a large shareholder may hurt the interests of small shareholders or debtholders. Controlling shareholders must retain important cash flow rights to have an incentive to monitor management and maximize profits. Otherwise (for example, if control is exerted with a pyramid scheme where control is decoupled from cash flow rights), controlling shareholders will be concerned with appropriating private benefits of control instead. Furthermore, the expropriation of other stakeholders creates adverse incentive effects (such as less investment in firm-specific capital and reduced incentives of the manager to invest and take initiative (Burkart, Gromb, and Panunzi 1997;[9] Rajan 1992). Other factors related to ownership concentration are the trade-off between liquidity and control (Bolton and von Thadden 1988); risk-taking incentives biased toward too much risk; and collusion with managers to expropriate minority interests.

On the positive side, the evidence of La Porta et al. (1999) suggests that in large firms (except the United States perhaps) the problem of separation of ownership and control is not the classical Berle and Means problem (of dispersed shareholders not being able to control management) but the potential expropriation of minority interests by large controlling shareholders. Indeed, those authors find the following: (1) Even the largest firms have, in general, owners (outside the United States), which are typically families or the State. (2) Controlling shareholders have control rights well in excess of cash flow rights because of pyramid schemes or because they manage the firms they control. (3) Significant

[8] In Japan, after poor performance, firms are most likely to receive new directors with links to their main bank (Kaplan 1994a).

[9] Too much control may be bad because if management does not get enough rents it will not perform. The problem is that it is not possible to commit to compensate the manager. In this case the discretion of the manager may be good because then he or she has an incentive to acquire and use information.

bank ownership is infrequent. (4) There is little separation between ownership and control in family-controlled firms.

On the normative side, the evidence on the effect of large shareholders is mixed. On the one hand, large shareholders seem to improve performance in Germany (Franks and Mayer 1997) and Japan, where the main bank system eases liquidity constraints and reduces agency costs (Hoshi, Kashyap, and Scharfstein 1990, 1991; Aoki and Patrick 1994). However, the evidence is disputed (Hayashi 1997) and bank control raises the cost of finance and extracts rents from the firm (Weinstein and Yafeh 1998). Similarly, when Japanese firms were allowed to borrow in the capital market, their net worth increased (Hoshi et al. 1993). Evidence in favor of the monitoring role of banks is weak. In Japan banks intervene only when the firm is in distress and bank-dependent firms suffer more when the stock market declines (Kang and Stulz 1997). In Germany banks exert modest control via proxy votes and presence in supervisory boards, and German banks tend to control themselves. The effectiveness of bank involvement seems to have been overemphasized (Edwards and Fischer 1994, Wenger and Kaserer 1998). Finally, managerial ownership of equity beyond a certain level is bad for performance (Nickell, Nicolitsas, and Dryden 1997).

Large Creditors

Debt is another instrument to discipline managers and reduce agency costs. The failure to repay implies the transfer of control from the manager to the creditor.[10] Debt holders are tough on managers after default (Dewatripont and Tirole 1994) because they are conservative (they have a concave objective). In contrast, in good times control should go to shareholders, who like risk (they have a convex objective). According to Jensen's (1986) free cash flow theory, debt increases the probability of default and the manager works hard to avoid it. Leveraged buyouts (LBO) where managers purchase firms and finance it with debt may have similar effects. Proposed as mechanisms that ensure (some) repayment of the debt are reputation (Diamond 1989) and the threat of liquidation in the event of default (Hart 1995).

There are problems associated with the use of debt. Among them are debt overhang, where the manager does not choose a good project because most returns will go to debt holders (Myers 1977), and excessive incentive to take risk (Jensen and Meckling 1976). Furthermore, a bank with monopoly power may extract rents from firms with high loan rates.

[10] This can be modeled assuming costly state verification or incomplete contracts.

The evidence shows that public debt is not used much, whereas bank debt is used more. LBOs (which should be seen as a temporary financing tool) reduce agency costs that take the form of excessive size and diversification (conglomerates). There is also some evidence that debt improves productivity (Nickell et al. 1997).

Market for Corporate Control

The instruments of the market for corporate control are proxy contests, friendly mergers, and hostile takeovers. Takeovers may be complementary with internal control mechanisms (board dismissals) to discipline management (Hirshleifer and Thakor 1998). Hostile takeovers are important in the United States and the United Kingdom (although they first appeared only in 1956) but not elsewhere (see Prowse 1995; Franks and Mayer 1992, 1993). Even in the United States there have been only three waves of takeover activity, starting in the 1960s. Takeovers peaked in the late '80s, then they were replaced by downsizing and restructuring. Recently there is a comeback of merger and acquisitions and takeover activity.

There are several problems associated with takeovers as a control mechanism: free riding makes them expensive (Grossman and Hart 1980); there may be excessive bidder competition to obtain private benefits of control; managers may get entrenched with antitakeover tactics; takeovers need a liquid capital market (junk bonds helped in this respect); and finally, they may be blocked by political concerns promoting national champions in Europe or by antitakeover laws in the United States.

The evidence of the effect of takeovers is mixed. Takeover targets typically are poor performers (Morck, Shleifer, and Vishny 1988, 1989). Takeovers tend to increase the combined value of target and acquirer. However, while the target's shareholders gain, the raider's shareholders do not (Jensen and Ruback 1983), and some of the gains come from the employees. Furthermore, there is scant evidence that operating performance increases after a takeover (Ravenscraft and Scherer 1987).

IV. Criticism of the Standard View

The standard view of CG helping to solve agency concerns that arise because of the need of outside finance is not without problems.

We have already seen that a clear relation between different CG systems and economic performance does not emerge from the empirical studies and that theory provides effects of CG instruments that go in

different directions. There is no strong evidence that CG mechanisms (be they internal, monitoring, or external, market based) are effective.[11]

Other factors that the theory must confront are the following:

a Internal finance is very important. Even a large stock market capitalization in an economy may be just an indication of high retained earnings (see Chapter 3 of this book, by Hellwig).

b The corporate finance problem may be more of misallocation than scarcity of funds to be conveyed from households to firms. That is, funds should be distributed from firms with excess cash to those with excess investment opportunities (Hellwig, Chapter 3). Inefficient cross subsidization of divisions in conglomerate firms would be an example of the problem (Rajan, Servaes, and Zingales 1999).

c Nonprofit firms, despite their weak governance mechanisms, compete successfully with for-profit firms (Allen and Gale, Chapter 2). Examples in the United States are health care and universities (most of which are nonprofit); and in the financial sector mutual savings and loans (formally controlled by depositors or by a mixture of depositors, founding institutions, and local government).[12]

Let us consider in turn the role of competition as a substitute for corporate governance mechanisms (Allen and Gale, Chapter 2) and the hypothesis that CG is explained best by political economy considerations as the outcome of the interests of insiders to the firm (Hellwig, Chapter 3).

4.1. The Role of Competition

It has been argued that competition in the product market may act as a substitute for CG mechanisms or, at least, that in competitive markets CG loses importance in terms of enhancing economic efficiency.

There is by now a literature that supports the role of competition in enhancing efficiency. The role of competition is to provide information (on the cost structure of firms, for example) and enlarged opportunities of comparison, and therefore stronger incentives. For example, the increase in the proportion of entrepreneurial firms in a market may reduce managerial slack (Hart 1983) although certain conditions must be fulfilled (Scharfstein 1988; Hermalin 1992). In an intertemporal

[11] This message is emphasized by Allen and Gale in Chapter 2 of this book.

[12] A potential explanation of the good performance of nonprofit institutions is that weak control leaves stakeholders with substantial rents and, in consequence, they have incentives to invest in the institution.

framework the effect of competition on managerial effort is positive if productivity shocks across competitors are more correlated than managers' abilities (Meyer and Vickers 1985). A source of ambiguity on the effect of competition on managers' effort to reduce costs is that enhanced competition tends to reduce profits (which is bad to induce effort) but increases margin pressure (which is good to induce effort) (Willig 1987). However, when competition increases the probability of liquidation, the manager works hard to avoid it (and the profit reduction effect is important only if the manager is paid more than his reservation wage (Schmidt 1997).[13]

Allen and Gale (Chapter 2) acknowledge the role of competition and question the agency approach (particularly in its moral hazard aspect rather than in its adverse selection aspect). The authors favor an evolutionary argument according to which competition eliminates inefficient firms: if managers waste resources, the firm will not be able to survive in the long run and all stakeholders will suffer. Badly run firms will not survive and the market will be taken over by efficient firms. This argument goes back at least to Alchian (1950) and Stigler (1958).[14] The explanation of Allen and Gale (Chapter 2) for the comparable performance of different CG systems as well as for-profit and nonprofit firms is the disciplining effect of product market competition.

Evidence on the positive effects of competition for technical efficiency, productivity, and productivity growth and innovative activity is accumulating (Nickell 1996 and Nickell et al. 1997; Blundell, Griffith, and Van Reenen 1995; Caves and Barton 1990; Graham, Kaplan, and Sibley 1983; Porter 1990). There is also evidence on the substitutability between CG and competition. Nickell et al. (1997), with data from the United Kingdom, find that dominant or large external shareholder control, financial pressure (debt), and competition contribute to increased productivity growth and that the first two effects can substitute for the latter. That is, competitive pressure is important for efficiency when corporate governance is weak. Similarly, Aghion and Howitt (1996) find a stronger

[13] Aghion, Dewatripont, and Rey (1998) show that the effect of competition on the incentives for cost reduction may depend on the level of outside finance needed by the firm. If the need is low (high), then more competition may lead to less (more) effort. The nature of strategic interaction changes from one regime to the other. Hermalin (1994) shows that asymmetric equilibria in terms of organizational form (incentive structure) among firms competing in a market may arise due to nonconvexities introduced by the agency problem between a firm and its manager. That is, a best response to rival firms providing strong incentives to their managers may be to provide weak incentives to their own manager.

[14] The traditional argument by Friedman (1953) and Machlup (1967) is that competition among firms will select profit maximizers.

positive effect of competition on growth in firms with weak shareholder control. Finally, in assessing the relative efficiency of private versus public firms, what seems to matter most is whether firms operate in a competitive environment (more than the form of property).

4.2. The Political Economy of Corporate Governance

According to Hellwig (Chapter 3), the view of CG as an ex ante efficient, incentive-compatible contract is problematic because managers (or insiders in general) have the incentive and the ability to manipulate the game form. In consequence, the applied mechanism design as well as the incomplete contracts approaches are not without problems.

Insiders try to immunize themselves from the interference of outsiders to preserve their autonomy. They have available many instruments to accomplish this: nonvoting shares, name shares, limitations on voting rights, pyramid schemes, cross holdings, changes in corporate charters, and antitakeover measures. In practice it is as if insiders had the residual right to rewrite contracts and the rules of the game. In many instances there is an insider team. For example, in Germany, the bank and the managers exchange proxy votes (no interference with management) for service fees for the bank. In this view the agency problem comes from the anticipation of excessive retention by management (à la Jensen). The situation is maintained with the capture or the exchange of favors between insiders and the political establishment.

The view of Hellwig (Chapter 3) is that in the United States this network of insiders is challenged only by periodic waves of takeovers (which are helped by independent of investment banks with no conflict of interest) and it is limited by an environment with more legal protection for the investor.

V. New Ideas and Results

5.1. Corporate Governance, Growth, and Performance

There are not many studies that relate CG to economic performance. There is evidence though about the relationship of financial development and growth. King and Levine (1993a–c) show that stock market liquidity and banking sector development are correlated with economic growth. However, it is difficult to control for factors that affect growth. Comparing growth rates of different industries across countries, Rajan and Zingales (1998) find that industries dependent on external finance (selected according to U.S. data) grow faster in countries that have a

highly developed financial system (in terms of, among other things, accounting standards).

Carlin and Mayer (Chapter 4 of this book) provide evidence of the links between financial and CG systems and performance. The authors relate variables of country structure (size of the banking sector, size of securities markets, degree of concentration of ownership, accounting standards) and industry characteristics (degree of external financing from banks and equity, skill of workers) with activity levels of industries (growth rates, shares of value added devoted to fixed capital formation, and research and development). They find that industrial activity (particularly R&D) is related to the characteristics of industries and the financial and CG structure. In particular:

i the growth of equity financed and skill-intensive industries is positively associated with market-based systems, and the effect comes from R&D expenditure;
ii there is a positive (negative) relation in less (more) developed countries between activity in bank-dependent industries and the bank-oriented system of the country;
iii there is a negative (positive) relation in less (more) developed countries between activity in equity financed and skill-intensive industries and concentrated ownership (that is, concentration of ownership may help alleviate agency problems in developed countries in certain types of industries).

The results are broadly consistent with the idea of Gerschenkron (1962) about the stages of development from bank-oriented to market-oriented systems and with more recent ideas that stock markets are good at financing new risky activities (because they aggregate information) and banks good at monitoring mature activities (Allen 1993).

The authors take their results to mean that there is not an appropriate financial and CG system that is universally appropriate across countries and industries.

5.2. The Role of Venture Capital

Venture capitalists retain a control block of shares in entrepreneurial firms and perform a governance role. Two characteristics of venture capital financing are duplication (the venture capitalist finances several entrepreneurs with overlapping activities) and staged capital commitment (only a fraction of capital is committed at the beginning). A cluster of innovating firms develop related products – modules – which need to fit together in the industry or in the design of larger companies. The

process works as follows. First, there is project selection and effort expenditure by entrepreneurs. Selected projects obtain start-up financing. Second, the entrepreneurs tentatively specify product design attributes and exchange information to settle on a standard with the help of the venture capitalist. Third, final project selection follows (projects not selected do not get refinancing). Interestingly, this is helped by labor mobility because good engineers tend to leave bad projects, signaling the lack of prospects of the latter. Finally, the distribution of the value is realized (according to the ex ante agreement). Venture capitalists obtain funds typically from institutional investors, and reputational incentives keep venture capitalists in check.

According to the analysis of Silicon Valley by Aoki (Chapter 5 of this book), venture capital performs two main roles apart from its financing character. First, it mediates information sharing about emerging product specifications among independent start-ups and helps the emergence of de facto standards. Second, it introduces governance through tournament. The tournament design may be optimal despite the duplication of investment and monitoring if the R&D effort elasticity of entrepreneurs is small (that is, total value created is high relative to marginal value). In this case competition among entrepreneurs elicits high levels of effort that compensate for the duplication costs.

5.3. Human Capital and Control in the New Corporation

We are witnessing a transformation in which the importance of physical assets as a source of rents (and therefore control) is weakening while human capital is becoming more important. This is visible in the financial sector where the share of high skill workers is increasing dramatically.[15]

Traditional CG instruments deal with ways to ensure that financiers get a return on their investment. In this scheme shareholders should have residual rights of control since otherwise the investment would evaporate. The passivity of outside investors is seen as a failure of CG.

According to Rajan and Zingales (1999), in the new corporation power may derive not only from the ownership of physical assets (a de jure mechanism) but also from control of "access" (a de facto mechanism), which encourages specialization. For example, an individual may

[15] General evidence of changes in relative wages between skilled and unskilled is presented in Katz and Murphy (1992).

have control over the human capital of others because he controls a key input, which need not be capital. Others are specialized to him or to an asset he owns. In a world of incomplete contracts the allocation of power matters. The role of CG is then to allocate power to the stakeholders of the firm in order to maximize creation of surplus.

In this perspective, why do outside investors need to be protected with residual rights of control? A potential problem is that (concentrated) ownership may discourage effort by other agents and may distort the investment of the owner. It may be better then to assign ownership to a third party with no control rights. This may explain why passive financiers may be owners.

The CG of the new corporation involves

i flat hierarchies (the decreased importance of physical assets reduces the need of layers of intermediate management – for protection purposes – and increases its cost – because managers have become too important to the firm and have "hold-up" power);

ii the generalized award of long-term stock options to employees (this ensures employees a share in the product without giving them control and reduces incentive to leave);

iii venture capital financing for new projects (where the outside financier is given some control in the organization because the ownership of physical assets does not give control).

VI. Conclusion

The picture that emerges of the role and effectiveness of CG is mixed from both the theoretical and the empirical perspective. One could be tempted to conclude that CG does not matter much and that other factors, such as product market competition, drive economic performance. In this sense differences in the CG systems would not be significant and would just indicate an adaptation to the different environments.

Perhaps it could be even concluded that "shareholder value" should be replaced by the "stakeholder society" idea. Management would be entrusted then with the internalization of the welfare of all stakeholders in the firm and this could be monitored by boards with shared control among stakeholders.

However, to take such a stance would be hasty. First of all, in trying to implement the stakeholder society, managers will lose focus and will be

able to rationalize any action on the supposed benefits for some of the stakeholders. The outcome most likely will be a higher autonomy for the manager with more freedom to pursue private benefits of control. Second, the sharing of control may result in a loss of decisiveness (Tirole 1999). In practice, managers would consider the welfare of stakeholders that have power, forming with them an alliance of insiders that would tend to expropriate other stakeholders. At the same time managers would try to influence regulation to promote ideas of a stakeholder society to gain more autonomy.

Furthermore, even taking for granted that competition is the main driving force toward efficiency, it does not follow that CG does not matter. Indeed, different systems of CG have different impacts on the degree of competition in the economy. In relation- or bank-based systems external control is weak and webs of cross participations may weaken product market competition. Furthermore, access to market finance is more difficult for new entrants, stifling competition additionally. Finally, in those systems the capacity of coalitions of insiders to influence and capture politicians and bureaucrats is large.

In fact, a hypothesis is that CG systems are explained basically with political economy considerations. In the United States, according to Roe (1994), managers influence policies to encourage dispersion of ownership in order to gain autonomy. We could think similarly (Hellwig, Chapter 3) that in continental Europe insiders or control families influence policies in order to protect their position. The inverse relationship between investor protection and ownership concentration (La Porta et al. 1999) may be the outcome of the work of different insiders in control in different countries rather than a consequence of exogenous legal systems.

Be that as it may, if the final test is the degree of competition in an economy, then market-based systems with arm's-length finance stand to end up ahead. This is consistent with the evidence presented for developed economies, in particular in relation to sectors with high R&D intensity, and with the flourishing venture capital, which is crucial in the financing of new technologies in market-based systems. These positive aspects should weigh more than potential concerns about short-termism of institutional investors and detected problems with the takeover mechanism.

There are many issues and puzzles that new research should illuminate. Among them are the role of boards of directors, the degree of activism of institutional investors and their potential short-term bias, the political economy of CG, and the effects of competition when faced with different types of managerial failure.

References

Aghion, P., M. Dewatripont, and P. Rey. (1998). "Agency Costs, Firm Behavior and the Nature of Competition." Document de Travail No. 77, Institut d'Economie Industrielle, Toulouse.

Aghion, P., and P. Howitt. (1996). "The Observational Implications of Schumpeterian Growth Theory." In S. Durlauf, J. Helliwell, and B. Raj (Eds.), *Long-Run Economic Growth. Studies in Empirical Economics. Empirical Economics*, vol. 21. Heidelberg: Physica, pp. 13–25.

Alchian, A. (1950). "Uncertainty, Evolution, and Economic Theory." *Journal of Political Economy*, 58: 211–21.

Allen, F. (1993). "Stock Markets and Resource Allocation." In C. Mayer and X. Vives (Eds.), *Capital Markets and Financial Intermediation*. Cambridge: Cambridge University Press.

Aoki, M., and H. Patrick. (1994). *The Japanese Main Bank System: Its Relevance for Developing and Transforming Economies*. New York: Oxford University Press.

Berle, A., Jr., and G. Means. (1932). *The Modern Corporation and Private Property*. Chicago: Commerce Clearing House.

Bhagat, S., and B. Black. (1998). "The Uncertain Relationship between Board Composition and Firm Performance." In K. Hopt, M. Roe, and E. Wymersch (Eds.), *Corporate Governance: The State of the Art and Emerging Research*. New York: Oxford University Press.

Blundell, R., F. Griffith, and J. Van Reenen. (1995). "Dynamic Count Data Models of Technological Innovation." *Economic Journal*, 105: 333–44.

Bolton, P., and E.-L. von Thadden. (1988). "Blocks, Liquidity, and Corporate Control." *Journal of Finance*, 53: 1–25,

Burkart, M., D. Gromb, and F. Panunzi. (1997). "Large Shareholders, Monitoring, and the Value of the Firm." *Quarterly Journal of Economics*, 112: 693–728.

Caves, R., and D. Barton. (1990). *Efficiency in U.S. Manufacturing Industries*. Cambridge, Mass.: MIT Press.

Dewatripont, M., and J. Tirole. (1994). "A Theory of Debt and Equity: Diversity of Securities and Manager–Shareholder Congruence." *Quarterly Journal of Economics*, 109: 1027–54.

Diamond, D. (1989). "Reputation Acquisition in Debt Markets." *Journal of Political Economy*, 97: 828–62.

Diamond, D., and R. Verrecchia. (1982). "Optimal Managerial Contracts and Equilibrium Security Prices." *Journal of Finance*, 37: 275–87.

Edwards, J., and K. Fischer. (1994). *Banks, Finance and Investment in West Germany since 1970*. Cambridge: Cambridge University Press.

Franks, J., and C. Mayer. (1992). "Corporate Control: A Synthesis of the International Evidence." IFA Working Paper No. 165–92, London Business School, London.

"German Capital Markets, Corporate Control and the Obstacles to Hostile

Takeovers: Lessons from Three Case Studies." Working Paper, London Business School, London.

"Ownership, Control and the Performance of German Corporations." Working Paper, London Business School, London.

Friedman, M. (1953). *Essays in Positive Economics*. Chicago: University of Chicago Press.

Gerschenkron, A. (1962). *Economic Backwardness in Historical Perspective*. Cambridge Mass.: Harvard University Press.

Gompers, P., and A. Metrick. (1998). "Institutional Investors and Equity Prices." NBER Working Paper No. W6723.

Graham, D., D. Kaplan, and D. Sibley. (1983). "Efficiency and Competition in the Airline Industry." *Bell Journal of Economics*, 14: 118–38.

Grossman, S., and O. Hart. (1980). "Takeover Bids, the Free-Rider Problem, and the Theory of the Corporation." *Bell Journal of Economics*, 11: 42–62.

(1988). "One Share–One Vote and the Market for Corporate Control." *Journal of Financial Economics*, 20: 175–202.

Hall, B., and J. Liebman. (1998). "Are CEOs Really Paid Like Bureaucrats? *Quarterly Journal of Economics*, 113: 653–91.

Hart, O. (1983). "The Market Mechanism as an Incentive Scheme." *Bell Journal of Economics*, 14: 366–82.

(1995). *Firms, Contracts, and Financial Structure*. London: Oxford University Press.

Haubrich, J. (1994). "Risk Aversion, Performance Pay, and the Principal-Agent Problem." *Journal of Political Economy*, 102: 258–76.

Hayashi, F. (1997). "The Main Bank System and Corporate Investment: An Empirical Reassessment." NBER Working Paper 6172, Cambridge, Mass.

Hermalin, B. E. (1992). "The Effects of Competition on Executive Behavior." *Rand Journal of Economics*, 23(3): 350–65.

(1994). "Heterogeneity in Organizational Form: Why Otherwise Identical Firms Choose Different Incentives for Their Managers." *Rand Journal of Economics*, 25: 518–37.

Hirshleifer, D., and A. Thakor. (1998). "Corporate Control through Board Dismissals and Takeovers." *Journal of Economics and Management Strategy*, 7: 489–520.

Holmstrom, B., and J. Tirole. (1993). "Market Liquidity and Performance Monitoring." *Journal of Political Economy*, 101: 678–709.

Hoshi, T., A. Kashyap, and D. Scharfstein. (1990). "Bank Monitoring and Investment: Evidence from the Changing Structure of Japanese Corporate Banking Relationship." In R. G. Hubbard (Ed.), *Asymmetric Information: Corporate Finance and Investment*. Chicago: University of Chicago Press.

(1991). "Corporate Structure, Liquidity and Investment: Evidence from Japanese Industrial Groups." *Quarterly Journal of Economics*, 106: 33–60.

(1993). "The Choice between Public and Private Debt: An Analysis of Post-Deregulation Corporate Financing in Japan." NBER Working Paper No. 4421.

Jensen, M. (1986). "Agency Costs of Free Cash Flow, Corporate Finance and Takeovers." *American Economic Review*, 76: 323–29.

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

Jensen, M., and K. Murphy. (1990). "Performance Pay and Top-Management Incentives." *Journal of Political Economy*, 98: 225–63.

Jensen, M., and R. Ruback. (1983). "The Market for Corporate Control: The Scientific Evidence." *Journal of Financial Economics*, 11: 5–50.

Kang, J.-K., and R. Stulz. (1997). "Why Is There a Home Bias? An Analysis of Foreign Portfolio Equity Ownership in Japan." *Journal of Financial-Economics*, 46: 3–28.

Kaplan, S. (1994a). "Top Executive Rewards and Firm Performance: A Comparison of Japan and the United States." *Journal of Political Economy*, 102: 510–46.

(1994b). "Top Executive Rewards and Firm Performance in Germany." *Journal of Law, Economics and Organization*, 10: 142–59.

Katz, L., and K. Murphy. (1992). "Changes in Relative Wages, 1963–1987: Supply and Demand Factors." *Quarterly Journal of Economics*, 107: 35–78.

Kay, J. (1996). *The Business of Economics*. Part III. Oxford: Oxford University Press.

King, R., and R. Levine. (1993a). "Financial Intermediation and Economic Development." In C. Mayer and X. Vives (Eds.), *Capital Markets and Financial Intermediation*. Cambridge: Cambridge University Press.

(1993b). "Finance and Growth: Schumpeter Might Be Right." *Quarterly Journal of Economics*, 108: 717–37.

(1993c). "Finance, Entrepreneurship and Growth: Theory and Evidence." *Journal of Monetary Economics*, 32: 513–42.

La Porta, R., F. López-de-Silanes, A. Shleifer, and R. W. Vishny. (1997). "Legal Determinants of External Finance." *Journal of Finance*, 52(3): 1131–50.

La Porta, R., F. López-de-Silanes, and A. Shleifer. (1998). "Law and Finance." *Journal of Political Economy*, 106: 1113–55.

(1999). "Corporate Ownership around the World." *Journal of Finance*, 54: 471–517.

Machlup, F. (1967). "Theories of the Firm. Marginalist, Behavioral, Managerial." *American Economic Review*, 57: 1–33.

Meyer, M., and J. Vickers. (1985). "Performance Comparisons and Dynamic Incentives." *Journal of Political Economy*, 105: 547–81.

Morck, R., A. Shleifer, and R. Vishny. (1988). "Characteristics of Targets of Hostile and Friendly Takeovers." In A. Auerbach (Ed.), *Corporate Takeovers: Causes and Consequences*. Chicago: University of Chicago Press.

(1989). "Alternative Mechanisms of Corporate Control." *American Economic Review*, 79: 842–52.

(1990). "Do Managerial Objectives Drive Bad Acquisitions?" *Journal of Finance*, 45: 31–48.

Myers, S. (1977). "Determinants of Corporate Borrowing." *Journal of Financial Economics*, 5: 147–75.

Myers, S., and N. Majluf. (1984). "Corporate Financing and Investment Decisions When Firms Have Information That Investors Do Not Have." *Journal of Financial Economics*, 13: 187–221.

Nickell, S. (1996). "Competition and Corporate Governance." *Journal of Political Economy*, 104: 724–46.

Nickell, S., D. Nicolitsas, and N. Dryden. (1997). "What Makes Firms Perform Well?" *European Economic Review*, 41: 783–96.

OECD (1995). "Corporate Governance Environments in OECD Countries." February 1.

Porter, M. (1990). *The Competitive Advantage of Nations*. London: Macmillan.

Prowse, S. (1995). "Corporate Governance in an International Perspective: A Survey of Corporate Control Mechanism Among Large Firms in the U.S., U.K., Japan and Germany." *Financial Markets, Institutions and Instruments*, 4: 1–63.

Rajan, R. (1992). "Insiders and Outsiders: The Choice between Relationship and Arm's-Length Debt." *Journal of Finance*, 47: 1367–400.

Rajan, R., and L. Zingales. (1998). "Financial Dependence and Growth." *American Economic Review*, 88: 559–86.

Rajan, R., H. Servaes, and L. Zingales. (1999). "The Cost of Diversity: The Diversification Discount and Inefficient Investment." Mimeo.

Ravenscraft, D., and F. Scherer. (1987). *Mergers, Selloffs and Economic Efficiency*. Washington, D.C.: Brookings Institution.

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

Schaferstein, D. (1988). "Product Market Competition and Managerial Slack." *Rand Journal of Economics*, 19: 147–55.

Schmidt, K. (1997). "Managerial Incentives and Product Market Competition." *Review of Economic Studies*, 64: 91–213.

Shleifer, A., and R. Vishny. (1986). "Large Shareholders and Corporate Control." *Journal of Political Economy*, 94: 461–88.

(1997a). "A Survey of Corporate Governance." *Journal of Finance*, 52: 737–83.

(1997). "Large Shareholders and Corporate Control." *Journal of Political Economy*, 94: 461–88.

Short, H. (1994). "Ownership, Control, Financial Structure and the Performance of Firms." *Journal of Economic Surveys*, 8: 203–49.

Stigler, G. (1958). "The Economies of Scale." *Journal of Law and Economics*, 1: 54–71.

Tirole, J. (1999). "Corporate Governance." Mimeo.

Weinstein, D., and Y. Yafeh. (1998). "On the Costs of a Bank-Centered Financial System: Evidence from the Changing Main Bank Relations in Japan." *Journal of Finance*, 53: 635–72.

Wenger, E., and C. Kaserer. (1998). "The German System of Corporate Governance – A Model Which Should Not Be Imitated." In S. Black and M.

Moersch (Eds.), *Competition and Convergence in Financial Markets – The German and Anglo-American Models*. Amsterdam: North-Holland Elsevier Science, pp. 41–78.

Willig, R. (1987). "Corporate Governance and Market Structure." In Razin and Sadka (Eds.), *Economic Policy in Theory and Practice*. London: Macmillan.