Recent Developments in German Corporate Governance

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Abstract

This paper provides an overview of the German corporate governance system. We review the governance role of large shareholders, creditors, the product market and the supervisory board. We also discuss the importance of mergers and acquisitions, the market in block trades, and the lack of a hostile takeover market. Given that Germany is often referred to as a bank-based economy, we pay particular attention to the role of the universal banks (*Hausbanken*). We show that the German system is characterised by a market for partial corporate control, large shareholders and bank/creditor monitoring, a two-tier (management and supervisory) board with co-determination between shareholders and employees on the supervisory board, a disciplinary product-market, and corporate governance regulation largely based on EU directives but with deep roots in the German codes and legal doctrine. Another important feature of the German system is its corporate governance efficiency criterion which is focused on the maximisation of stakeholder value rather than shareholder value. However, the German corporate governance system has experienced many important changes over the last decade. First, the relationship between ownership or control concentration and profitability has changed over time. Second, the pay-for-performance relation is influenced by large shareholder control: in firms with controlling blockholders and when a universal bank is simultaneously an equity- and debtholder, the pay-for-performance relation is lower than in widely-held firms or blockholder-controlled firms. Third, since 1995 several major regulatory initiatives (including voluntary codes) have increased transparency and accountability.

JEL codes: G32, G34, G38

Keywords: Corporate governance, ownership structure, co-determination, mergers and acquisitions, board of directors

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1. Introduction

When it comes to corporate governance, German companies typically show a number of distinctive features. These include a two-tier (management and supervisory) board with co-determination between shareholders and employees on the supervisory board, creditor monitoring arising from long-term lending relationships, concentrated ownership structures with substantial cross-holdings and banks among the pivotal shareholders. Another important aspect of the German corporate governance system is the efficiency criterion that companies are to uphold. Whereas in Germany the definition of corporate governance explicitly mentions stakeholder value maximization, the Anglo-American system mostly focuses on generating a fair return for the shareholders. Finally, there are certain idiosyncrasies of the German corporate culture that must be taken into account, such as e.g. its consensus-oriented egalitarian approach (Soziale Marktwirtschaft).

The above description of German corporate governance may no longer be accurate because the relevance of some of its traditional cornerstones are questioned, given recent regulatory initiatives (e.g. the Restructuring and Takeover Acts) and economic events (e.g. the successful takeover of Mannesmann by Vodafone and the introduction of shareholder-value principles in listed companies). The aim of this paper is to give an up-todate overview of the German corporate governance regime while taking into account of the economic policy implications of the current governance debate. We describe the main institutional features and summarise the empirical findings on the various governance mechanisms. The picture that emerges deviates somewhat from what is known as "the stereotypical view of German finance", (Jenkinson and Ljungqvist 2001: 397). Some of the traditional features of the governance system are less prevalent (like e.g. the monitoring role of large banks and shareholders), and new trends have been developing (especially in the legal framework). The German system of corporate governance has been experiencing a process of transformation. Whether or not this process will lead to a convergence towards a market-oriented system in the long term remains to be seen, although it is doubtful that a complete converge ever occurs completely in light of the "off-hands approach" to corporate governance that is currently predominant in Germany (Gehrig 2003). In any case, for the moment the difference with the Anglo-American governance system are still substantial (Hackethal et al. 2003; Terberger 2003).

The paper is organized as follows. Section 2 deals with internal mechanisms. We first discuss the patterns of ownership and control, paying special attention to the mechanisms which cause deviations from the one-share-one-vote principle. Next we address other internal mechanisms, namely the board of directors and managerial remuneration. Section 3 deals with external mechanisms, i.e. creditor (in particular bank) monitoring, the market for corporate control (both the hostile takeover market and the market for partial

control) and product-market competition. The recent regulatory evolution is presented in Section 4. Section 5 concludes.¹

2. Internal corporate governance mechanisms

2.1 Patterns of ownership and control

The potential agency problems in large joint-stock corporations depend on whether the one-share-one-vote principle is upheld or not and on the existing ownership and control concentration. When diffuse ownership coincides with weak shareholder voting power, as in most Anglo-American companies, serious agency conflicts may arise between the management and the shareholders (Berle and Means 1932). Monitoring the management may be prohibitively expensive for small shareholders as the monitor bears all the costs from his control efforts but benefits only in direct proportion to his shareholding (Grossman and Hart 1980, 1988; Demsetz 1983). As a consequence, only a large share stake generates sufficient incentives to monitor a company. However, strong ownership and voting power come induces low liquidity and the risk of expropriation of minority shareholders (Shleifer and Vishny 1997; La Porta et al. 1998).

Table 1 provides a summary of recent evidence on ownership and control of German firms. This evidence shows that in most German firms ownership and control are concentrated. Edwards and Nibler (2000) and Franks and Mayer (2001) report that more than half of the listed German firms in their samples have an owner holding more than 50 per cent of the equity. Furthermore, Edwards and Weichenrieder (1999) show that the actual proportion of voting rights exercised by the largest shareholder of listed German firms at the annual general meetings gives them a comfortable majority (54.84%). Control concentration is also very high when measured by using an ultimate control criterion which tracks control throughout chains of direct stakes (Gorton and Schmid 2000a, 2000b) and by the Cubbin and Leech (1983) index (as applied by Köke (2001)). Ultimate control concentration is even higher in unlisted firms.

[INSERT TABLE 1 ABOUT HERE]

Becht and Boehmer (2001, 2003) show that not only is there a high concentration of voting power in listed companies (82% of them have a large blockholder ultimately controlling more than 25% of the voting rights), but the largest shareholder rarely faces other large minority shareholders (only 20% of these

¹ We have made an effort to review all the relevant literature. Although we have included some references to the legal framework, our approach is essentially based on economics. Also, we have limited our research to the recent evolution of the German corporate governance system (since the early 1990s).

² Van der Elst (2002) reports a slightly smaller figure of 48.5%. The difference may be due to the fact that he collects ultimate voting blocks rather than direct stakes. For a methodology to determine ultimate ownership: see Renneboog (2000) and Köke and Renneboog (2005).

³ See also Edwards and Nibler (2000) and Köke (2004). Incidentally, shareholdings are also *geographically* concentrated: "The four core *Länder* of North-Rhine Westphalia, Bavaria, Baden-Württemberg and Hesse accounted for almost 90% of the market capitalization of the (…) companies in both 1997 and 2001. (…) In terms of cities, München, Hamburg and Frankfurt were decidedly in the lead", (Wöjcik 2002: 889).

companies have more than two registered blockholders) as the average size of the second largest block (7.4%) is small.⁴ As many important decisions, such as modifications to the firm's charter, mergers and acquisitions, and changes in the firm's capital usually require a super-majority of 75 per cent of the votes, a shareholder with more than 25 per cent of the votes has a blocking minority. Becht and Boehmer (2003: 10) study the frequency of voting blocks by size and conclude that "voting blocks are clustered at 25, 50, and 75 per cent. [This] suggest[s] that block sizes are carefully chosen and control is an important issue for blockholders". Table 2 shows the main legal forms of business organization in Germany. Some German companies do not even have "shares that are legal evidence of ownership" (Edwards and Nibler 2000: 241). This is the case for the Gesellschaft mit beschränkter Haftung (GmbH), a private company with limited liability that was the legal form of 15 per cent of the German firms in 1994 (Van der Elst 2002). According to Köke (2001), the average size of the largest shareholder in these companies is 89 per cent and only 4 per cent of GmbHs have dispersed ownership. As for those legal forms that allow the issue of shares and can therefore be listed, about 0.1 per cent of the German companies in 1994 were public companies with limited liability (AGs) and 3.2 per cent where partnerships with shares (Kommanditgesellschaft auf Aktien, KGaA), a legal form with at least one fully liable general partner (Komplementär) and a number of limited partners (Kommanditisten) whose liability is confined to their contribution.

In practice, however, a number of large German companies do not fit into this pattern of concentrated ownership and control. One reason for this is that the one-share-one-vote principle (Grossman and Hart 1988, Harris and Raviv 1988) is not necessarily upheld. There are German firms where the *concentration of voting power is lower than that of ownership*. In this case, the deviation from the one-share-one-vote principle is caused by the use of voting caps designed to prevent large shareholders from exercising control. Voting caps may protect small shareholders against expropriation by large shareholders, but then again they can also entrench the management. Some examples of German firms that, until recently, had such voting caps in place are BASF (5%), Bayer (5%), Deutsche Bank (5%), Linde (10%), Mannesmann (5%), Phoenix (10%), Schering (3.51%), and Volkswagen (20%). In the past, voting caps have been used in some cases to fend off a hostile raider. For example, Franks and Mayer (1998) show that in each of the three hostile takeover battles in Germany since WWII – this excludes the more recent hostile bid of Vodafone for Mannesmann – voting rights restrictions were used. As a consequence, the voting power of several large share stakes was reduced from for instance 30% to 5%. In the cases of Feldmühle Nobel and Continental, the use of voting caps contributed to the failure of the takeover bid (see below). However, such limitations of the voting rights are now prohibited (see section 4).

[INSERT TABLE 2 ABOUT HERE]

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⁴ See also Edwards and Fischer (1994) and Edwards and Nibler (2000).

⁵ These examples are taken from Faccio and Lang (2002). See also Gorton and Schmid (2000a) for examples from the 1970s and the 1980s.

It is also possible to have *dispersed ownership with concentrated voting power*. Although such a situation combines the benefits of control –increased monitoring– with those of dispersed ownership –risk diversification–, there is also a danger that concentrated control will be exercised to extract private benefits from minority shareholders (Bebchuk et al., 2000, Johnson et al. 2000). The corporate law regimes in most Continental European countries include a number of mechanisms that enable controlling shareholders to generate returns on investment exceeding financial returns as they are able to extract private benefits of control (La Porta et al., 1999). The mechanisms we consider are: (i) ownership pyramids, (ii) proxy votes, (iii) voting pacts, and (iv) dual class shares.

The most widely-used mechanism to obtain a substantial control stake with a limited investment is ownership pyramids or cascades (Gorton and Schmid 2000a, Faccio and Lang 2002). They enable shareholders to maintain control throughout multiple tiers of ownership while sharing the cash flow rights with other (minority) shareholders at each intermediate ownership tier. Thus, ownership pyramids reduce the liquidity constraints that large shareholders face while allowing them to retain substantial voting power. For instance, if shareholder X owns 51 per cent of the voting equity of firm Y which in turn owns 51 per cent of the voting equity of firm Z, there is an uninterrupted control chain which gives shareholder X absolute majority control at each tier. Still, the cash flow rights of shareholder X in firm Z amount to only 26 per cent. Franks and Mayer (2001) and Köke (2001) show that German corporations are often controlled via such pyramids. However, their samples and definitions differ and so do some of their conclusions. Franks and Mayer (2001) find 33 pyramids in a sample of 38 firms (87%), of which 10 seem to be purely motivated by control because they involve a significant violation of the one-share-one-vote principle. Banks and families prevail at the top of these structures (with an average of 2.2 layers), which were defined on the basis of the presence of "at least one large shareholder holding more than 10 per cent of the shares indirectly through another company". Köke (2001) reports that 45 per cent of firms in a large sample of about 1500 firms have ownership pyramid structures (the threshold defining the chains or tiers is 50%). Following this criterion and using the Cubbin and Leech (1983) index to define ultimate control, almost 1 out of 2 firms in the sample have a non-financial firm at the ultimate (second or third) level of the pyramid.⁶

The second mechanism which yields control with only limited cash flow rights is the use of *proxy votes*. In the US and the UK, the management normally solicit proxy votes for their support when making proposals

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⁶ Interestingly, the GmbH is the most frequently occurring legal form in the Köke sample (around 82% of the firms). Many of these GmbHs are part of groups of companies dominated by an AG: the so-called *Konzerns*. "The general characteristic of a *Konzern* is that at least one legally independent company is under centralized control exerted by the parent company. The law distinguishes between three *Konzern* categories: (1) integration, where the dominating company holds 100% of the integrated dependent company's shares; (2) contractual groups of companies (*Vertragskonzern*), where dominating and dependent companies enter into a contract of domination (*Beherrschungsvertrag*), in most cases in connection with a profit transfer agreement (*Gewinn-abführungsvertrag*); and (3) groups of companies based on actual dependence (*Faktischer Konzern*), where the relation between dominating and dependent companies is not subject to one of the types of contracts mentioned above. The *faktische Konzern* is the clearly predominating category, and the *GmbH* is the most common legal form of business organization for dependent companies" (Prigger 1998: 952-953).

to be tabled at the annual general meeting. In Germany, banks are the main exercisers of proxy votes because, as most shares are in the form of unregistered bearer shares, shareholders normally deposit them with their banks, and banks are allowed to cast the votes of these shares (conditional upon the bank announcing how it will vote on specific resolutions at the general meeting and upon not receiving alternative instructions by the depositors). For example, in the above-mentioned failed hostile bid for Feldmühle Nobel by the Flick brothers, voting restrictions were imposed thanks to a resolution supported by Deutsche Bank that eventually passed with 55 per cent of the shares voted. However, Deutsche Bank only held a direct share stake of about 8 per cent; the rest were proxy votes (Franks and Mayer 1998, 2001). Edwards and Nibler (2000) provide further evidence on banks proxy votes for a sample of 156 listed and non-listed German companies in 1992. Their data show that banks typically control more voting rights via proxy votes than via their own stakes. Moreover, they note that banks 'proxy votes only affect the governance of AGs and KGaAs but not that of GmbHs. All in all, proxy votes seem to provide effective voting power to German banks (especially to the three largest universal banks: Deutsche Bank, Dresdner Bank and Commerzbank) mainly in large listed companies (Prigge 1998).

The third mechanism to separate ownership and control is the use of *voting pacts*. Voting pacts enable shareholders to exert a much higher degree of control as a group than the members of the pact co could individually. As pointed out by Franks and Mayer (2001), for example, in many German corporations a (hypothetical) coalition formed by the two or three largest shareholders could easily gain control. However, Jenkinson and Ljungqvist (2001) state that in corporate governance regimes like the German one in which multiple large shareholders exist, "[control] [b]attles often involve a protracted, and clandestine, shuffling of stakes between rival coalitions and the revising of pooling agreements [(voting agreements)]. Even large blockholders can find themselves, apparently without warning, as members of the suppressed minorities."

The fourth mechanism is *a dual shares class regime* under which one class (B-shares) has fewer voting rights than the other one (A-shares). In a case study, Schmid and Wahrenburg (2003) show that the premium of voting over non-voting shares in Volkswagen hovered between 30 per cent (1999) and 76 per cent (2000). These benefits may explain why approximately one out of five German firms have dual class shares outstanding (Faccio and Lang 2002). However, the issuing of multiple voting shares (which was not allowed to exceed 50 per cent of the total stock capital) was outlawed in Germany as of May 1998 and the grandfather clause was phased out on 1 June 2003 (Beinert 2000). In addition, German firms can issue preference shares (*Vorzugsaktien*). This is risk-bearing capital without votes, but with special dividend

⁷ Gorton and Schmid (2000a) present analogous results for the years 1975 and 1986.

⁸ Edwards and Fischer (1994) argue that banks have traditionally supported voting restrictions in Germany because their access to proxy votes made them more powerful in the general meetings as the voting restrictions did not apply to proxy votes.

⁹ Edwards and Nibler (2000), however, argue that it is unlikely to happen if these large shareholders are banks.

rights. In any case, Goergen and Renneboog (2003) demonstrate that the issuance of non-voting shares is very effective to forestall changes in control. ¹⁰

2.2 Monitoring by blockholders

In the previous section, we have shown that most German companies have large controlling blockholders. The key question is: do blockholders enhance firm value? Value is expected to be created by the increased monitoring of the management by the large blockholders. There is an extensive literature investigating whether blockholders take corporate governance actions when increased monitoring is necessary (e.g. in the case of poor corporate performance or financial distress). In addition, the incentives to correct managerial failure depend not only on the concentration of ownership or control, but also on its nature as specific classes of shareholders may value control differently (see next section).¹¹

It should be noted, however, that concentrated ownership may also generate substantial costs. First, Demsetz and Lehn (1985), Admati et al. (1994) and Manjon (2004) claim that control by a large shareholder may result in reduced risk sharing. Second, as shown above, ownership concentration may reduce the market liquidity of all the shares (Bolton and Thadden 1998; Becht 1999). Third, in highly leveraged companies a large blockholder may push management to take excessive risks – especially if the company is performing poorly and the bankruptcy costs are high. In this case, risk increasing investment projects may lead to the expropriation of debtholder wealth (Jensen and Meckling 1976; Coffee 1991). Fourth, Burkart et al. (1997) and Pagano and Röell (1998) point out that even when tight control by shareholders is efficient ex post, ex ante it may constitute an expropriation threat that reduces managerial incentives to exert effort and to undertake value maximizing strategies (the so-called 'over-monitoring' effect). Fifth, although blockholdings are meant to mitigate the agency costs resulting from excessive managerial discretion, they can induce their own types of agency costs as the private benefits usually come at the expense of other shareholders or stakeholders. These private benefits can, for example, be in the form of the squeeze-out of minority shareholders at a price below the value of their shares in a tender offer and the diversion of resources from security holders to entities controlled by a blockholder (Johnson et al. 2000).

[INSERT TABLE 3]

In fact, in the empirical literature there is little evidence on the benefits of having large blockholders (Short 1994; Gugler 2001). Table 3 summarises the studies that look specifically at the role of large shareholders in

¹⁰ A special case of a multiple voting share is the so-called "golden share", which gives one or more shareholders (e.g. the government) a veto right in certain clearly defined situations. The Italian and Spanish governments, for example, hold golden shares in firms privatised during the early 1990s (e.g. Telecom Italia and Repsol). However, the *Treuhand* (the privatisation agency) does not seem to have employed them in the privatisation of Eastern German firms (Dyck 1997, Hau 1998).

¹¹ See, amongst others, Shleifer and Vishny (1986), Renneboog (2000) and Franks, Mayer and Renneboog (2001).

German firms and shows that the evidence is also inconclusive. In a pioneering study on listed companies, Thonet and Poensgen (1979) conclude that management-controlled firms outperform those controlled by outsiders in terms of the return on equity (ROE), whereas Weigand (1999) and Edwards (1999) show that firms with high control concentration outperform more dispersed firms in terms of the return on assets (ROA). However, Edwards and Weichenrieder (1999), using a sample of quoted companies, and Lehmann and Weigand (2000), using a sample of both quoted and unquoted companies, find a significant negative relation between control concentration, and the market-to-book ratio and the ROA. In contrast, Kaplan (1994b), Goergen (1998) and Franks and Mayer (2001) find no significant impact of control on corporate performance and on board turnover in listed firms.

In an international comparative study, Gedajlovic and Shapiro (1998) find inclusive results using the ROA as a measure of performance. They find a non-linear relationship between ROA and control (which is negative at low levels of control but positive at high levels) and a positive impact on ROA from a reduction in strong managerial control (entrenchment). Similarly, Köke and Renneboog (2005) conclude that the relation between strong ultimate blockholders and productivity growth is very limited. Strong blockholders reduce the negative effect of weak product market competition, but only in profitable large firms controlled by banks, insurance firms and the government. Finally, Cable (1985) and Gorton and Schmid (2000a, 2000b) – focusing on bank control – seem to be the only studies reporting a consistently positive control-performance relationship. In contrast, Edwards and Nibler (2000) find such a positive relation only for individuals holding a minority stake and for foreign firms (see also Edwards and Weichenrieder (1999)).

[INSERT TABLE 4]

Some studies focus on the monitoring effects of banks as large shareholders (Emmons and Schmid 1998). Table 4 summarises some of them. Cable (1985), Gorton and Schmid (2000a, 2000b), Lehmann and Weigand (2000) and Köke and Renneboog (2005), for example, find that banks as large shareholders improve corporate profitability. However, Edwards and Nibler (2000) report this effect only for the "3 big banks". Interestingly, Elston (2004) finds that bank-controlled firms (or banks strongly influenced by other banks through e.g. board representation) also seem to have higher survival rates. Weigand (1999) concludes that, over the long run, firms controlled by universal banks outperform management-controlled firms. Conversely, Agarwal and Elston (2001) and Chirinko and Elston (1998) do no find statistically significant differences between the profitability of bank- and non-bank controlled firms. In fact, firms whose ultimate owner is a bank or another financial institution appear to have lower productivity growth (Januszewski et al. 2002).¹³

¹² For example, Köke (2001) argues that in 10 per cent of his sample, given that the cash flow rights of the largest shareholders amount to only 25 per cent or less of their control rights, the ultimate shareholder "could hinder efficient monitoring".

¹³ Moreover, "acquisitions do not increase bidders' firm value more when financial institutions have partial control over the bidder group, but do decrease firm value when they have full control. [Therefore], there is little empirical support

An important caveat that applies to most of these studies is the implicit assumption that it is control or ownership that influences corporate performance and not vice-versa (Demsetz and Lehn 1985; Himmelberg et al. 1999). Goergen (1998), who reviews the studies that explicitly address the direction of causality, shows that this conclusion may be premature and there may be a need for a reversal of the direction of causality between firm value and ownership or control in line with Kole (1996). However, most German studies claim that the characteristics of the German governance system make ownership and control exogenous.¹⁴

It is apparent that control is valuable in Germany; controlling shareholders are likely to derive private benefits of control from large share stakes. ¹⁵ Nenova (2003) and Dyck and Zingales (2001), for example, find that private benefits of control are significant for German firms. In particular, Edwards and Weichenrieder (2001) find that the largest shareholder is able to extract private benefits of control when his control is uncontested, whereas the presence of a second large shareholder redirects the focus of the firm towards the creation of firm value. A similar idea is put forward by Gugler and Yurtoglu (2003) in the context of dividend payout policies: an increase in dividends reduces the funds at the disposal of the large shareholder and increases the market value of the firm, whereas a decrease in dividends implies potentially more severe rent extraction from and expropriation of small shareholders. These authors find that the negative price reaction to dividend decreases is much more severe in firms with one controlling shareholder than in firms with several large blockholders. Edwards and Weichenrieder (1999), however, introduce an interesting caveat. They find that an increase in the largest shareholder's control rights effectively harms minority shareholders, but they claim that these negative effects may be somewhat compensated by the benefits obtained from better monitoring of management when the largest shareholder is a non-bank firm or a public-sector body.

2.3 The nature of control

Not only does the degree of control matter, but so does the type of the controlling shareholder (Cubbin and Leech 1983). Some types of shareholders may be better at monitoring poorly performing companies given

for the widespread contention that German banks provide efficient monitoring. [More precisely, b]ank involvement is beneficial if the institution holds the second- or third-largest stake, but not if it holds the largest stake" (Boehmer, 2000: 137, 145). Other evidence on the impact of banks is given by Goergen, Renneboog and Correia da Silva (2005) who examine the flexibility of the dividend policy of German corporations. They find that bank control is associated with a higher likelihood to omit the dividend when the firm suffers a loss. This suggests that bank control mitigates informational asymmetry and reduces agency costs. In contrast, control by other types of shareholders does not influence the dividend decision.

¹⁴ See, among others, Edwards and Nibler (2000), Gorton and Schmid (2000a), Lehmann and Weigand (2000) and Gugler and Weigand (2003).

¹⁵ Zwiebel (1995) argues that private benefits of control can be extracted even if a company has multiple large shareholders. He claims that these benefits may be divisible and that parties can enjoy them accordingly to their relative control. Beyond some threshold, the control by large blockholders will not be challenged as it may be difficult to build up share blocks of a similar size. Unchallenged control may encourage the extraction of private benefits of control at the expense of dispersed small shareholders.

their incentives and/or abilities.¹⁶ Similarly, different types of shareholders may be subject to different types of agency costs (Zwiebel 1995; Pagano and Röell 1998). Empirical evidence on the differences in incentives, abilities and costs in the governance of German firms can be found in e.g. Edwards and Nibler (2000), Gorton and Schmid (2000b), Lehmann and Weigand (2000), Franks and Mayer (2001), Januszewski et al. (2002) and Köke and Renneboog (2005).

[INSERT TABLE 5 ABOUT HERE]

Table 5 compares the average sizes of the stakes held by the different types of shareholders in German firms to that in other European countries (see also La Porta et al. (1999) and Faccio and Lang (2002)). Germany is similar to most other Continental European countries in the sense that the most important type of shareholder consists of holding companies and industrial firms. Other investors are, in order of importance, individuals or families, banks (although, as pointed out in the previous section, proxy votes can make them very powerful in the general meetings) and other institutional shareholders, and public authorities. We now turn to each of these types in more detail.

2.3.1 Industrial and holding companies

Share blocks owned by industrial companies is a prime characteristic of the German corporate governance regime (Prigge 1998). In fact, according to Becht and Boehmer (2003) about 80 per cent of direct equity stakes in firms listed on the official market is owned by other firms (industrial firms, holding companies, investment firms and financial firms). Moreover, Faccio and Lang (2002) show that Germany is the European country with the largest percentage of companies controlled by other firms. This phenomenon is also prominent in the German financial sector.¹⁷

Table 5 shows that German holding companies and industrial companies control an average stake of 21 per cent in other German listed firms, which is largely corroborated by Emmons and Schmid (1998) and Gorton and Schmid (2000b). These large industrial shareholders may obtain substantial private benefits at the expense of other shareholders or stakeholders, and cross-holdings may have an important negative impact on competition (Grossman and Hart 1988; Canoy et al. 2001). There is evidence that German firms controlled by other companies tend to have higher levels of productivity (Januszewski et al. 2002) and are less likely to be acquired if they are public corporations (Köke 2002).

¹⁶ See e.g. Jensen and Meckling (1976): their thesis that different classes of shareholders have different abilities to extract control rents, which is empirically supported for the US by e.g. Demsetz and Lehn (1985), Barclay and Holderness (1989, 1991) and Holderness and Sheehan (1988).

¹⁷ This kind of relationships has also been observed in other European countries and seems to be related to the consolidation trend affecting the financial services industry all over the world (Goldman Sachs 2000, Walter and Smith 2000).

¹⁸ The average of 21 per cent hides the fact that the ownership stakes are high: industrial shareholders hold average share stakes of 40 per cent or more in 52 per cent of the German companies.

2.3.2 Families or individuals

Table 5 also shows that individuals or families are one of the main shareholder categories in Continental Europe. ¹⁹ In particular, Franks and Mayer (2001) have found that large-scale family control is especially pronounced in the largest German firms. This finding was also documented by Edwards and Nibler (2000) and Becht and Boehmer (2001). In 40 and 37 per cent of their samples individuals or families control blocks of on average 57 and 20 per cent (respectively) of the voting rights. In general, however, they are much more commonly found among small and medium-sized non-financial companies (Köke 2001; Faccio and Lang 2002).

2.3.3 Directors

A particular category of individuals controlling share stakes is that of the directors, who are insiders and therefore possess superior information on the firms' prospects. However, Table 5 suggests that Continental European managers are not shareholders of the firms they manage. Actually, hardly any information is known about directors' control in Continental Europe for the following reasons: (i) the shareholdings of most directors are below the disclosure thresholds, (ii) although large family blockholders frequently appoint their representatives (which can be family members) to the board, the origin of board representation does not need to be disclosed publicly, and (iii) the use of intermediate investment companies further obscures control stakes by directors and their families. Whatever the reasons, we have found only two German studies presenting data on this particular category of owner. First, Gorton and Schmid (2000b) show that the management owns at least 50 per cent of the control rights in 8 per cent of the firms in their 1992 sample. Moreover, 15 per cent of the firms have a member of the management team as the largest shareholder. Second, Köke (2004) reports ultimate control measures for a sample of listed and unlisted firms for the years 1987-1994. The average stake of the (executive and non-executive) directors and their families is 22.5 per cent for the quoted firms and 12 per cent for unquoted firms. These figures suggest that in a nonnegligible number of German companies there is no separation between ownership and control because "managers own" and "owners manage".

2.3.4 Banks and other institutional shareholders

As shown in Table 5, bank shareholdings in Germany – as well as other Continental European – companies are generally small.²⁰ Only 5.8 per cent of the large voting stakes of 5 per cent and more are held (directly as well as indirectly) by banks, resulting in an average of 1.2 per cent of the votes. One reason for this may be the avoidance of potential conflicts of interest (Canoy et al. 2001, Goergen and Renneboog 2001). However,

¹⁹ The higher importance of family control in Austria and Italy can be explained by the fact that the samples for the two countries consist of both listed and unlisted companies (see Table 5). Still, even after excluding the unlisted Italian firms, a majority of the listed Italian companies is family-controlled.

²⁰ It is interesting to note that the German data analysed by Gorton and Schmid (2000) from the 1970s and 1980s suggest that bank shareholdings were not that small in the past.

from what we have said above, it is clear that the influence of banks is understated if one only considers their direct and indirect stakes and ignores their proxy votes.

As for the other types of institutional shareholders, insurance companies (particularly Allianz) also seem to be important (Vitols 2005).²¹ In sharp contrast with the UK and the US, however, other institutional investors (notably investment funds) do not hold significant stakes in German companies (O'Sullivan 2000, Davis and Steil 2001).²² Empirical evidence from the firms listed on the German official market (*Amtlicher Handel*) shows that whereas 20 insurance companies hold shares representing around 17 per cent of the market capitalization, the rest of the institutional investors (excluding banks) barely reach 0.5 per cent (Wöjcik 2002). In general, the lack of institutional blockholders (apart from banks) in Germany as well as of most Continental European countries suggests that, in contrast to the Anglo-American countries, little shareholder activism is to be expected from these institutions.²³

2.3.5 Public authorities

Despite the large-scale privatisation programmes that occurred in Europe over the last decades, in some listed European firms the state is still one of the largest shareholders.²⁴ In this respect, one has to take into account the privatisation of East German firms during the early 1990s (Dyck 1997; Hau 1998). Even when controlling for this specific privatisation process, the importance of public authorities as shareholders remains considerable, especially in large (GmbH and unlisted AG) firms (Köke 2001; Faccio and Lang 2002). As an illustration, in 1997 the value of their holdings in the firms listed on the official market or *Amtlicher Handel* was about 21 per cent of the total market capitalization. In 2001 the public investments represented only 14 per cent of the market capitalization (Wöjcik 2002).²⁵ In terms of the number of firms in which the government was the largest shareholder, figures range from 6 per cent (Franks and Mayer 2001; Emmons and Schmid 1998) to 8 per cent (Edwards and Nibler 2000; Gorton and Schmid 2000b).

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²¹ Given the close links between insurance firms and banks in Germany, the importance of the former further reinforces the role of banks as controlling shareholders (Goldman Sachs 2000, Canoy et al. 2001).

²² Pension funds are largely lacking as institutional investors; the reason may be that "[t]he German pension system currently does not involve public funds but rather leaves pension contributions under control of either the government or the employer" (Boehmer, 2000: 121). The 2001 reform of the pension system ("Law Concerning the Certification of Private Pension Contracts", *Zertifizierung von Altersvorsorgeverträgen*) does not seem to have altered this situation (Vitols 2005).

⁽Vitols 2005). ²³ Köke (2001) shows that institutional investors have a strong preference for listed firms. See also Deeg (1998) and Vitols (1998) on the role of German banks in small and medium-sized firms.

²⁴ Gorton and Schmid (2000a) show the decline in the participation of German and foreign governments as (largest) ultimate owners of German firms between the 1970's and the 1980's.

²⁵ Becht and Boehmer (2003), in contrast, report that the government holds only 2.35 per cent of the votes on the official market during 1996-1998.

2.4 Other internal corporate governance mechanisms

2.4.1 Supervisory boards

To the opposite of most western economies, Germany has a two-tier board with a management board (*Vorstand*) and a supervisory board (*Aufsichtsrat*).²⁶ The supervisory board represents the shareholders and employees. In large firms with more than 2000 employees, the 1976 Codetermination Act has created a system of quasi-parity co-determination. Employee representatives make up half of the supervisory board but the chairman who is a shareholder representative has a casting vote in case of a stale-mate. Bankers are frequently elected to the supervisory board (even as chairmen). In small companies with more than 500 but less than 2000 employees, one third of the supervisory board consists of employee representatives. Finally, full-parity co-determination by the shareholders and employees is limited to the steel and coal sector only (which are subject to the 1951 Montan Codetermination Act). The only companies that are exempt from having a supervisory board with co-determination are those who can appeal to the constitutional freedoms of faith and free press (e.g. the publishing company Springer). The directors of German firms are usually appointed for a term covering the legal maximum of 5 years, although reappointment at the end of the term is possible.²⁷

There is little evidence that the co-determination system leads to superior corporate governance (Franks and Mayer 2001). Baums (2000: 8) compares the fiduciary duties (duty of care and loyalty) in German and UK corporate law and concludes that "the range of fiduciary duties in the English law system seems wider and more developed than in its German counterpart". Moreover, firms with workers' councils have a lower employee departure rate (by 2.4%), pay significantly higher wages (Jirjahn and Klodt 1999) and have a lower wage differential between skilled and unskilled labourers (Hübler and Meyer 2000). All in all, there is evidence that workers' councils and employee representatives on the supervisory board unilaterally favour the interests of the incumbent workforce (Frick and Lehmann 2002).

2.4.2 Management board turnover in the wake of poor performance

The disciplining of top management (and in particular of the CEO) has received considerable empirical attention.²⁸ For Germany, Kaplan (1994a) presents evidence that management board turnover is closely related to poor stock performance and earnings losses, but not to sales and earnings growth. In contrast, the turnover of the chairman of the supervisory board is more likely to happen when the firm's net income falls. In addition, poor stock performance also causes supervisory board dismissals.

²⁶ The Netherlands and the Scandinavian countries also have a two-tier system with a *Raad van Bestuur* (management board) and a *Raad van Commissarissen* (supervisory board). In France, corporations have the choice between a one-tier board and a two-tier system; but more than 95% of the listed companies has opted for a unitary board.

²⁷ For a detailed discussion on co-determination, see von Werder (2005).

The reason is that such disciplining is one of the few observable corporate governance actions by the board of directors. See e.g. Murphy (1999) for an overview of this literature.

Three additional results are worth mentioning. First, the evidence is consistent with the view that the German corporate governance regime is based on a long-term perspective of the firm (Porter 1992). Second, the sensitivity of executive turnover to firm performance in Germany is comparable to that in Japan and the US (Kaplan 1994b; Kaplan and Minton 1994). Third, neither large shareholders nor bank control seem to protect managers from the possibility of being dismissed when their companies perform poorly. These results call into question the view that in bank-based regimes, such as the German one, managers may be entrenched at the expense of minority shareholders (Coffee 1991; Roe 1993).

However, the results in the Kaplan studies are not entirely supported by the Franks and Mayer (2001) study. The latter documents that supervisory board turnover depends on corporate performance but only when there is a change in control. Supervisory turnover of firms which are incurring losses is not statistically different from that of firms generating profits, although it is significantly higher when new blockholders acquire stakes in the poorly performing firms. The level of management board turnover provides a similar picture. Board turnover is higher for loss-incurring firms than for those who generate profits, but it is only statistically significant in the subsample of firms with stable shareholdings. These results suggest that block sales are not disciplinary in nature.

2.4.3 Managerial remuneration

Perhaps the simplest economic device to align managers' actions with the interests of shareholders (or more generally, stakeholders) is a compensation contract that specifies the tasks and rewards of the executive directors for each outcome of corporate performance. However, an important limitation to the use of contracts as an internal governance mechanism is that they are necessarily incomplete (Tirole 1999, 2001). In addition, managerial effort is unobservable such that a number of moral hazard problems may arise. The fact that managers are underperforming may remain undetected for some time whereas, in contrast, good managers may be paid less than they deserve (Holmstrom 1979; Grossman and Hart 1983). Fortunately, the optimal compensation scheme may be relatively straightforward to implement because, as shown by Holmstrom and Milgrom (1987), under certain conditions it simply boils down to a linear function of aggregate measures of firm performance (output, profits, etc.).

[INSERT TABLE 6 ABOUT HERE]

Table 6 compares CEO remuneration in Germany to the rest of Europe and the US. German CEOs are among the lowest paid in Europe.³⁰ German CEOs earn on average a total remuneration of only \$454,979 as compared to e.g. \$696,697 for Belgian CEOs. The pay package of German CEOs looks meagre when

²⁹ Supportive evidence of the Holmstrom-Milgrom model can be found in Kraft and Niederprüm (1999).

³⁰ Conyon and Schwalbach (1999, 2000a) show that when differences in tax rates are taken into account the variation across Europe is even larger.

compared to their US counterparts. In terms of the importance of the basic compensation in the total pay package (47%), German CEOs are no different from their European counterparts, but are substantially different when compared to US CEOs (28%). In particular, German CEOs appear to have the highest total cash pay in Europe but have the lowest non-cash remuneration. This may explain why the total remuneration package of German executives is somewhat lower than that of other European executives (Conyon and Schwalbach 1999, 2000a). In the mean time, variable payment is increasingly adopted by large German firms (Tuschke and Sanders 2003).

The influence of remuneration policies on the behaviour of German managers has recently been a matter of further systematic research. Elston and Goldberg (2003) investigate the monetary compensation of the members of the management and supervisory boards of German firms and confirm the results of Schmid (1997). First, although the size effect (positively) dominates the compensation equation, there exists a positive sensitivity of managerial pay to company performance in Germany. This relation is confirmed by Conyon and Schwalbach (2000b). Second, the Elston and Goldberg (2003) study shows that managers and directors of widely-held firms receive a substantially higher monetary compensation than those of firms with large blockholders. Third, firms with monitoring house banks (which own an equity stake, are major providers of loan capital and frequently have board representation) generally pay managers and directors comparatively less than widely-held firms. Fourthly, Tuschke and Sanders (2003) show that the relationship between the likelihood of adopting stock-based incentives and control concentration in listed German firms has an inverted-U shape with a maximum in the first quartile of control concentration.

3. External corporate governance mechanisms

3.1 Creditor monitoring

An important characteristic of some corporate governance regimes (in particular the German one) relates to the lending relationships (Deeg 1998; Vitols 1998, 2005).³¹ Lending relationships give banks considerable power, which is frequently strengthened in Germany by bank representation on the supervisory board of the firm. Membership of the supervisory board is an important source of privileged and valuable information (Schmidt 2003). However, the ultimate reason why bank influence is particularly strong in Germany is that historically the banks owning shares in listed firms are frequently also the main bank, *Hausbank*, of these firms and provide long-term loans to long-term clients (Edwards and Fischer 1994).³²

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³¹ Rajan and Zingales (2003) state that relationship-based financing performs better when markets and firms are smaller, when legal protection is weaker, when there is little transparency, and when innovation is mostly incremental rather than revolutionary.

³² This may create a conflict of interests since each type of the *Hausbank*'s claims (debt versus equity) may require a different optimal decision process in the wake of financial distress. When there is a danger of bankruptcy and the bank faces a refinancing demand by the firm, its creditor claims may encourage the bank to make the firm file for liquidation whereas the equity claims may lead the bank to revolve its loans. Such conflicts of interest may even be exacerbated by

Shleifer and Vishny (1997) argue that large creditors fulfil a role similar to large shareholders because these creditors have large investments in the firm and therefore a strong incentive to monitor management. Lehmann and Neuberger (2001) and Edwards and Fischer (1994), for example, document that German banks intervene in case their corporate client runs into financial distress. High gearing can also be considered as a bonding mechanism for the management (Aghion and Bolton 1992; Berkovitch et al. 1997) such that high executive turnover is positively related to high gearing. Denis and Denis (1995) infer creditor monitoring from the fact that high leverage combined with managerial control improves shareholder returns. In contrast, Edwards and Nibler (2000: 260) suggest that "German banks do not play a role in the governance of large listed firms which is distinct from their position as one of several types of large shareholders".

What is clear is that large creditors, especially in bank-based economies such as Germany, typically have a variety of control rights and therefore sufficient power to monitor. Consequently, bank monitoring may act as a substitute to alternative corporate governance devices. A disciplinary change in control is then expected to be less profitable and hence less likely to occur given the bank's monitoring. Köke (2004) confirms that non-market monitoring devices play a larger role in Germany because hostile control transactions are rare and because other constituencies such as large creditors typically have considerable power. Also, Köke and Renneboog (2005) provide empirical evidence that German firms exposed to tight creditor control operating in competitive markets experience higher productivity growth, especially if these firms are performing poorly or are in financial distress. However, Agarwal and Elston (2001) are not convinced about the firms benefit from increased access to capital, as their interest payments to debt ratio is also significantly higher. This suggests that German banks engage in rent-seeking activities.

Jenkinson and Ljungvist (2001: 430-431) "identify another important role of banks, namely their role in assisting companies pursuing a strategy of hostile stakebuilding. [...] [B]anks play a pivotal role in building, brokering and concealing stakes. In contrast, it is striking how few examples [they] find of banks actively *defending* target companies from a hostile stakebuilder. Such behaviour may, of course, be compatible with the view that banks actively monitor German companies [...] However, it is important to recognise that this role is performed not by the companies' *house banks* [...], but by the banks assisting the predator".

3.2 The market for corporate control

The role of hostile takeovers is controversial. On the one hand, hostile takeovers are considered to be a device to keep managerial autonomy under check and to impose discipline by enabling the acquirer to reallocate the target's resources more profitably (Grossman and Hart 1980; Burkart 1999). On the other hand, there is little evidence that, in practice, the market for corporate control assumes these tasks. While poor performance only slightly affects the probability of a takeover, the main determining factor is size (see

e.g. Morck et al. (1988) for the US and Franks and Mayer (1996) for the UK). In contrast, Franks et al. (2001) show that poorly performing UK companies are frequently drastically restructured via mergers and acquisitions which lead to the replacement of most of the directors.

Still, the role of the market for corporate control may be rather indirect. First, it is possible that the mere threat of a takeover raises efficiency ex ante (Shleifer and Vishny 1986; Scharfstein 1988). Second, the fact that the creation of anti-takeover devices generally coincides with a reduction in share value can be interpreted as evidence that shareholders fear that managers may take advantage of the increased lack of control by not maximizing shareholder value. Alternatively, the fall in the share price may also reflect the reduction in the probability of the shareholders receiving a takeover premium (Karpoff and Malatesta 1989; Ryngaert 1988). Third, in a survey paper on the economics of mergers and acquisitions, Burkart (1999) concludes that although managers shielded from a takeover threat do not behave like empire-builders they tend to become sluggish. All in all, it seems that the existence of an active market for corporate control is material.

Yet a recent study of the European domestic and cross-border mergers and acquisitions market shows that the market for corporate control in Germany is very limited (Goergen and Renneboog 2003, Martynova and Renneboog 2006). The main reason is that, as shown in previous sections, the vast majority of firms have a large controlling shareholder. In addition, pyramiding (with multiple layers of financial holdings sandwiched between the ultimate investor and the target firm) and cross-shareholdings³³ hinder takeover attempts (Prigge 1998; Jenkinson and Ljungqvist 2001; see, however, Köke (2004)). Another reason is that the legal and regulatory corporate governance framework in Germany has been lagging behind that of other countries in terms of disclosure, transparency and shareholder protection (see McCahery and Renneboog 2003; and section 4). Finally, a number of takeover codes and legislations have created further barriers to takeover activity.³⁴ These are summarised in Table 7.

[INSERT TABLE 7 ABOUT HERE]

The following comparative figures highlight the almost complete absence of disciplining by the market of corporate control in Germany. Whereas during the period 1984-1989 there was an annual average of 40 hostile bids per annum in the UK (Jenkinson and Mayer (1994)), only three hostile takeovers (Feldmühle Nobel in 1988-89, Hoesch in 1990-91 and Continental in 1991-92) have occurred in Germany since WWII (Franks and Mayer 1998). Hence, one can conclude that there is no active market for corporate control in

banks) exist such that banks' decision may be influenced by the objectives of the network/conglomerate.

³³ If the mutual equity stakes exceed 25%, restrictions will be applied on the votes cast at the annual meeting (see Beinert 2000).

³⁴ For a discussion of the recently proposed takeover legislation by the European Commission, see McCahery and Renneboog (2003) and Berglöf and Burkart (2003) and Goergen, Martynova and Renneboog (2005).

Germany. This conclusion is supported by Franks and Mayer (1990) and Köke (2004), although Jenkinson and Ljunqvist (2001) show that there exists a market for partial control stakes which is frequently hostile.

3.3 Block trades and the market for partial control stakes

In the USA, transfers of control by means of block sales are on average accompanied by positive abnormal stock performance (Holderness and Sheehan 1988). In fact, Barclay and Holderness (1989) show that the price reaction is positive regardless of the price paid for the share block. The main reason for the positive market reaction is that changes in control may improve corporate governance, especially when the firm is performing poorly and is in need of a substantial reorganization (Barclay and Holderness 1991). When performance is poor, shareholders without a distinct interest in monitoring are expected to sell their shares, while those with strong monitoring abilities may increase their stakes in order to reinforce their position as (major) shareholders. Consequently, under such circumstances, block transactions giving the purchaser control over the firm may trigger a more favourable market reaction than those transactions that do not confer control to the purchaser. Holderness and Sheehan (1988) provide evidence on this conjecture for the case of the US. They also find that the market reaction is more favourable to block transfers that are accompanied by a tender offer on all shares outstanding. In addition, the market reacts more positively to block transactions in those firms that subsequently experience a full acquisition (Barclay and Holderness 1992).

Jenkinson and Ljungqvist (2001) provide some empirical evidence on the existence of a market for large share stakes in Germany. They find that 64 German companies (out of all the listed firms in 1991) are potentially vulnerable to a hostile attack (given their control structure and lack of takeover defences). Moreover, they identify 17 cases of hostile stakebuilding among the 2511 changes in control that occurred over the period of 1988 to 1996 and involved German firms as targets. Franks and Mayer (2001) also find evidence of turnover of share stakes over the period of 1988 to 1991, with new shareholders emerging in 22 per cent of the companies and old shareholders disappearing in 13 per cent of the companies. Finally, for the period of 1980 to 1995, Boehmer (2000) reports 715 purchases of at least 50 per cent of the votes outstanding by 127 acquiring firms (through direct or indirect shareholdings or other contractual arrangements) in the corporations listed on the Frankfurt official market. Part of such purchases can be considered as hostile and be motivated by a disciplining effect.

These transactions are accompanied by significantly positive cumulative abnormal returns (CARs) earned by the target firms' shareholders (Boehmer 2000). However, the bid premium paid to the selling shareholders is small compared with the US and UK and non-selling shareholders do no obtain abnormal returns (Franks and Mayer 2001). Poorly performing GmbHs, with high leverage and a non-financial owner, are among the most common targets. These acquisitions are usually done for reasons of horizontal or vertical integration. Conversely, AGs with strong ultimate owners are less likely to be sold, even if performance is poor, when the owners are individuals or families, or financial institutions. For these public

AG companies, moreover, the impact of control concentration on the probability of being acquired shows an inverted U-shape form (Köke 2002). In a follow-up study, Köke (2004) qualifies this finding: ownership dispersion as well as tight shareholder control increase the probability of a change in the ultimate owner of the firm provided that control is not concentrated in the hands of directors and provided that creditor control is weak. Similarly, Goergen and Renneboog (2003) find that, for a sample of initially family-controlled German firms that have recently gone public, size, the presence of the founder (or her family) among the shareholders, and the issue of non-voting shares decrease the probability of a transfer of control whereas growth and the level of risk of the firm increase the probability.

However, it is less clear whether this market for share blocks is really acting as a substitute for a market for corporate control. Köke (2002) shows that, typically, poorly performing firms are more likely to be acquired. However, Franks and Mayer (2001) find no evidence of high board turnover in targets that were performing poorly and thus argue that these block purchases are not disciplinary in nature. Conversely, Jenkinson and Ljungqvist (2001) find some evidence of post-contest management turnover in 7 of the 17 cases of stake building analysed and a certain enhancement in the performance of the target companies. Still, they stress that the bidder seems to be motivated by strategic investments (overcapacity, market power, etc.) rather than disciplining "wayward managers". Similarly, Köke (2004) reports management turnover, assets divestitures (only in listed firms) and layoffs (ibidem) following control changes, but no significant changes in performance. More importantly, he shows that both control changes and tight shareholder control determine CEO turnover, but the new shareholders only exert a disciplining effect when past corporate performance has been poor. Goergen and Renneboog (2003) show that the probability of being (partially) taken over by a bidder who has concentrated control increases if past performance was good whereas the probability of being taken over by a widely-held bidder decreases. Finally, Boehmer (2000) concludes that, especially when the bidder is a non-financial minority blockholder, changes in control tend to increase the value of the acquiring firm.

3.4 Product market competition

Ever since Adam Smith's celebrated book, economists have argued that product market competition provides incentives for the efficient organization of production. A number of theoretical models have addressed this issue (see Aghion and Howitt 1997 and Allen and Gale 2000 for a review) and supportive empirical evidence also exists (see e.g. Nickell et al. 1992 and Nickell 1996). In particular, intense competition in the product market may reduce managerial slack and, under certain conditions, the basic insight that competition improves management performance holds. Ultimately, however, the result is ambiguous, "indicating that there is no definitive theoretical relationship between the level of competition and executive behavior" (Hermalin 1992: 361).

Empirical evidence suggests that both product market competition and the level of corporate governance boost firm performance. Unfortunately, this evidence is scarce (Klette 1999). In a pioneering study, Nickell

et al. (1997) analyse the productivity growth of UK manufacturing firms and find that the degree of market competition and shareholder control are associated with high productivity growth. Moreover, they conclude that competition (and debt) may be a substitutive mechanism to internal control. Following the same econometric methodology, two recent studies – Januszewski et al. (2002) and Köke and Renneboog (2005) – provide evidence on German firms.

First, Januszewski et al. (2002) present evidence of a positive (negative) effect of product market competition on productivity growth (the productivity level). Their results also show that control concentration has a positive effect on productivity growth and that this effect is even larger in firms facing intense product market competition, i.e. competition and tight control are somehow complements. In contrast, financial control has a negative impact on productivity growth. Second, Köke and Renneboog (2005) analyse two samples of firms: one from a market-oriented system of corporate governance (the UK) and the other from a bank-based (Germany) system. This allows them to compare the differences in the impact of alternative governance devices. Notably, whereas in poorly performing and distressed German firms bank-debt concentration is associated with high productivity, in the UK this effect is only observed for firms with strong outside blockholders. In both countries, however, market competition enhances productivity growth.

4. The recent evolution of corporate governance regulations

The importance of all of the above corporate governance mechanisms as well as their interactions should be studied within a country's specific regulatory context. In a series of articles, La Porta et al. (1998, 1999, 2000) show that common law systems tend to offer better protection both against the expropriation of shareholders by the management and the violation of the rights of minority shareholders by large shareholders than civil law systems. Likewise, creditor protection is strongest in common law countries and worst in French civil law countries. Other studies show analogous correlations. For example, the level of shareholder protection relates inversely to the size of the premium over the market price paid for a majority voting block (Zingales 1994). Furthermore, there is a direct connection between strong shareholder protection and the volume of IPOs. Lombardo and Pagano (1999) find that better legal institutions influence equity rates of return and the demand for equity finance by companies. They also show that the imposition of legal limits on transactions with companies related through ownership cascades can preserve the income rights of minority shareholders and lead to a reduction in managerial benefits. Finally, Beck et al. (2000) and La Porta et al. (2000) find that firms operating in jurisdictions with strong shareholder protection have a higher growth potential, as measured by Tobin's Q.

In general, these studies document the comparative advantage of countries that protect investors' interests and a positive effect of better corporate governance protection on financial market development (Levine 1999; Beck et al. 2002). Consequently, appropriate corporate governance rules (e.g. mandatory bid rule in the case of takeovers) and self-regulation (e.g. corporate governance codes of best practice) should be priced by the markets. Consistent with this tenet, Drobetz, Schillhofer and Zimmermann (2002) relate the protection of shareholder rights to the long-run performance of a cross-section of German firms. They construct an index based on five categories of corporate governance rules and provide evidence that better shareholder protection leads to higher firm valuations. This is an important result because, over the last decade, the impact of several regulatory changes on a number of corporate governance mechanisms has been apparent in Germany (Noack and Zetsche 2005). This section looks at these changes. We first discuss the legal reforms of the financial markets. We then review the introduction of codes of best practice. Third, we comment on legal developments related to the stock markets.

4.1 Financial market laws

Since 1990, important new laws have been passed in order to promote the financial markets (*Finanzmarktförderungsgesetze*). The ultimate aim was to increase transparency and create a level playing field in the market for corporate control. Next we briefly review the main elements of these regulations that may affect corporate governance.

4.1.1 The Securities Trading Act (1994)

Prior to 1995, little was known about the shareholder structure of German firms as the Stock Corporation Act stipulated that shareholders only had to report their stakes if they exceeded the thresholds of 25 and 50 per cent, respectively. The Securities Trading Act, which became effective on 1 January 1995, states that stakes above the thresholds of 5, 10, 25, 50 and 75 per cent of the voting rights (be it from above or below) need disclosed to the Financial Supervisory Authority (Bundesanstalt Finanzdienstleistungsaufsicht) which then makes this information public. This act applies to all companies with headquarters in Germany and traded on an EU stock exchange (and not just a German one). However, disclosure requirements beyond those stipulated in the Securities Trading Act can be imposed by the stock exchanges. These requirements differ by market segment: the General Standard and the Prime Standard segments (for the recent changes in stock exchange structure: see below). In addition, this act labels insider trading as a criminal offence (Schmid and Wahrenburg 2003).

4.1.2 The revised Restructuring Act (1995)

The Act allows for tax-efficient restructuring and ensures that restructuring is not delayed as a result of law suits by minority shareholders. Beinert (2000) states that corporate restructuring (mergers, break-ups and spin-offs, transfers of assets and changes in legal status) can take place at book value (without revaluation). Consequently, capital gains taxation on asset revaluations (write-ups) can be avoided. A requirement for a

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³⁵ However, some argue that the conclusions that can be drawn from these studies are limited because the direction of causality between the legal system and financial structure may run in the opposite direction, viz. financial structure prompts transformations taking place in the legal regime (Bolton and von Thadden 1998; Bebchuk and Roe 2000).

corporate restructuring is the fiat by a qualified majority of at least 75 per cent of the voting capital represented at the annual general meeting. However, the Stock Corporation Act generally allows (minority) shareholders to challenge such restructuring in court even though it has been approved by a supermajority. Such court actions may delay the restructuring for many years. The Restructuring Act supersedes the Stock Corporation Act: the shareholders who feel disadvantaged can still sue the firm for damages but cannot stall the restructuring anymore.

4.1.3 The Antitrust Act (1998)

This act came into force in January 1999 and tests whether business combinations lead to the extraction of monopoly rents on the market for goods and services. The act defines a business combination in the wide sense: a business combination does not just cover mergers and acquisitions, but also acquisitions of share stakes of 25 per cent and above. This definition makes block trades above the 25 per cent limit subject to the scrutiny of the competition authority.

4.1.4 The Third Act on the Promotion of Financial Markets (1998)

This Third Act (*Drittes Finanzmarktförderungsgesetz*) bans the introduction of voting restrictions, although grants a grandfather clause for existing restrictions (which was phased out on 1 June 2000). The Third Act also bans the issue of multiple voting rights and the grandfather clause which was created for existing multiple votes was phased out on 1 June 2003. It should be noted that German firms are still allowed to issue non-voting shares, but only for a maximum of 50 per cent of the total equity issued. In addition, this law legalized share buy-backs and facilitated the introduction of stock options.

4.1.5 The Act on the Control and Transparency of corporations (1998)

Another milestone of 1998 was the Law for the Reinforcement of Control and Transparency (*KonTraG*), which implemented changes that affected the laws regulating the activity of corporations, stock exchanges, and accounting practices. The main intention of the law was to improve the effectiveness of supervisory boards and to strengthen their monitoring role of top management. The *KonTraG* has led to a certain shift of power in favour of the supervisory board, thus limiting the powers of the management board. This law has also prohibited deviations from one-share-one-vote. Finally, the law imposes some restrictions on the bank ownership (proxy votes) and regulates risk management.

4.1.6 The Raising of Equity Relief Act (1998)

Another significant development in 1998 was the obligation for stock corporations to adopt international accounting standards (IAS or US-GAAP) for the preparation of consolidated accounts (*Konzernabschluss*). The Raising of Equity Relief Act (*Kapitalaufnahmeerleich terungsgesetz*) also reduced to 5 per cent (from 10 per cent, as it was before) the minimum share capital requirement enabling minority shareholders to launch a minority claim to sue the management for damages on the firm's behalf for detrimental managerial decisions.

4.1.7 The Takeover Code (1995, revised 1998) and the Takeover Act (2002)

The Takeover Code was introduced as a (voluntary) code of conduct for firms involved in a merger or acquisition. The code called for mandatory takeover bids as soon as a party had acquired control (50% of the votes or 75% of the votes present at the latest shareholders' meeting). Still, the code had a limited impact because it was not followed by several of the largest German firms and there were numerous violations of the code by its signatories. As a consequence of the failed code of conduct, a new takeover law became effective on 1 January 2002 (the Takeover Act).

An important element of this law is that a mandatory tender offer needs to be made as soon as an investor acquires 30 per cent of the voting rights.³⁶ This mandatory bid is likely to have an impact on the large block trades (even hostile ones) which were common prior to 2002 (Jenkinson and Ljungqvist 2001, Köke 2000 and 2004). On the one hand, the takeover law invokes the principle that the target management should take a neutral stance in a takeover attempt. On the other hand, paragraph 33 of the Act obliges the management to take any actions in the best interest of the corporation, such as anti-takeover measures. The defensive measures that are allowed are: actions that can dilute the share stake of the bidding investor (a new equity issue to friendly parties while excluding pre-emption rights, share repurchases), a pac-man defence (counter-bid on the bidder's shares), selling the crown jewels, and soliciting bids from white knights. All the measures, apart from the last one, need the approval of the supervisory board. However, shareholders representing 75 per cent of the votes at least can give the management full discretion to set up any anti-takeover action (for a renewable period of 18 months).

Another important change in takeover law regards squeeze out rules. Whereas, in the past, minority shareholders could stall a merger or acquisition by fighting a squeeze-out in the courts, the Takeover Act states that the shares of the residual minority shareholders can be transferred to a shareholder holding at least 95 per cent of the equity. In this case, the minority shareholders who are 'squeezed out' will no longer be able to stall the takeover process, but can ask for a cash compensation in the courts if their rights are violated. Finally, paragraph 33 of the Takeover Act also renders golden parachutes offered by the bidder to the target's management/directors illegal. This rule will prevent the payment of huge amounts of severance pay, such as those to Klaus Esser and the other directors of Mannesmann in the takeover battle by Vodafone.

4.1.8 Capital gains tax (2002)

The motivation for this tax reform was not only to abolish equity interlocks and stimulate the market for corporate control, but also to give German banks the incentive to reduce their equity holdings in the

³⁶ The Takeover Act does not allow restricted tender offers (in case a shareholder has acquired at least 30%) but admits conditional tender offers. A restricted offer is an offer applying to e.g. 40 per cent of the shares. A conditional offer is a bid for X per cent of the shares which will be purchased provided that the bidder gets at least Y per cent of the shares.

corporate sector. Since 1 January 2002, capital gains tax has no longer been incurred on divestitures of equity stakes. Prior to that date, many corporations and financial institutions retained their equity positions in German companies rather than sell them because the resulting capital gains would have been taxed at the full corporate tax rate. Consequently, this change in tax law may enlarge the market for large voting blocks (Becht and Boehmer 2003).

4.1.9 Fourth Financial Market Promotion Act (2002)

The Fourth Finance Market Promotion Act (*Finanzmarktförderungsgesetz*) was passed just after the incidents that took place on the new market segments of the German stock exchanges (see below). This probably explains why this act seeks primarily to improve investor protection and why it covers, directly or indirectly, so many different aspects of the German stock markets. In particular, the act introduces provisions on market manipulation and disclosure of director's dealings. For example, it makes easier to file claims against those agents providing information that could alter the stock prices. As for the Stock Exchanges, the act allows more flexibility regarding the organisation of both trade and the market segments. Also, the act imposes shareholders control with the aim of precluding access to the markets from the organised crime and money laundering.

4.2 Codes of best practice

In 2000, a Government Panel chaired by Professor Baums urged the federal government to begin drafting a "Transparency and Disclosure Act" (TransPuG) in which further proposals of the Panel are implemented.³⁷ This should include the legal foundation for the "comply or explain" principle, measures to strengthen supervisory boards (through broader disclosure duties for the management board and tighter confidentiality requirements for supervisory board members), the use of electronic media for company publications, and deregulation. Related to the functioning of the management and supervisory board, the Panel recommended tightening the fiduciary duties by extending the civil liability of management and supervisory board members from its current standard of "willful intent" to also include "gross negligence" in connection with the release of false information to the capital market. Furthermore, the number of external supervisory board positions that a supervisory board member may hold should be limited to five in order to strengthen the independence of supervisory board members. A supervisory board member should not hold office in or represent other companies that are in competition with his or her company. The Panel also recommended to improve the transparency standards, such as for management stock option plans and for the shareholdings of members of the management and supervisory boards, as well as increase the duties of the management board to provide information to stockholders. In addition, the independence of auditors ought to be strengthened. The Panel is similarly in favour of eliminating the requirement that shares be deposited as a prerequisite for voting at the shareholders' meeting. Finally, an important improvement is the strengthening

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³⁷ Bericht der Regierungskommission Corporate Governance (10 July 2001). The report from the Panel became the basis for the *Transparenz- und Publizitätsgesetz* (TransPuG) of 2002. Thus, the work of the Panel inspired two pieces of legislation: one mandatory (the TransPuG law) and one voluntary (The Cromme Code).

of minority rights of § 147 AktG. Holdings of 1 per cent of the capital stock or stock with an exchange or market value of Euro 100,000 should be sufficient to commence a law suit against the company if there are facts substantiating suspected dishonesty or other gross violations of the law or the articles of association by members of the management and supervisory boards (von Werder and Talaulicar 2005).

The Cromme Code (26 February 2002, amended on 21 May 2003) partially follows the proposals from the Government Panel relating to corporate governance principles.³⁸ Still, the main contribution of this code is a structured summary of the regulatory changes in terms of disclosure and transparency, the duties of the management and supervisory board, remuneration contracts, the formation of committees, etc. The code recommends that firms should allow remote access for shareholders to the general meetings using modern communication media (e.g. the internet) (von Werder and Grundei 2003).³⁹ In terms of accounting standards, the historical accounting conventions of the German *Handelsgesetzbuch* (HGB) demand less disclosure than e.g. the US GAAP-rules of the Federal Accounting Standards Board. However, over the past few years, many German firms have voluntarily adopted the GAAP-rules of the IASB (International Accounting Standards Board).⁴⁰ Since 2005, EU-listed companies are obliged to report their consolidated financial statements according to the IASB standards.

The most controversial aspect of the Gromme Code is its requirement of the disclosure of management and supervisory board members' remuneration on an individual basis and subdivided according to fixed, performance-related, and long-term incentives components. It is controversial because the Commercial Code and Stock Exchange Admission Regulation only require that companies publish the total, aggregate remuneration paid to its management board and to the supervisory board. The Gromme Code also provides that the consolidated financial statements must contain specific information on company share option programs and similar security-based incentive schemes. It also makes the disclosure of all directors' shareholdings mandatory.⁴¹

4.3 Stock exchange developments

During the price run-up of the 1990s, many new stock exchanges or new market segments were created in order to float small and medium-sized firms, predominantly from the high-tech, internet and telecoms sectors. The Euro New Markets included the *Nieuwe Markt* in Amsterdam, the *Nouveau Marché* in Paris,

³⁸ The amendments consisted in improving and clarifying the Code's recommendations in terms of managerial remuneration and its disclosure.

³⁹ This proposal can also to be found in the "Law Governing Registered Shares and the Simplification of Voting" of 2001 (*Namensaktie und Stimmrechtsausübung*, NaStraG).

⁴⁰ See e.g. Tuschke and Sanders (2003). Examples of German firms using IASB standards are Addidas-Salomon, Bayer, Deutsche Bank, Dresdner Bank, Henkel, Hochtief and Wella (see http://www.iascorg.uk/ for further examples).

⁴¹ Recent empirical evidence on the compliance of the Gromme Code among companies listed in the Frankfurt Stock Exchange (von Werder, Talaulicar, and Kolat, 2004 and 2005) shows that there is generally a high degree of acceptance of its recommendations, particularly those related to transparency and the protection of shareholders rights. However, those recommendations related to compensation schemes, boards' characteristics, and accounting requirements are (or will be) followed by less than 10 per cent of the companies.

the *Nuovo Mercado* in Milan and the EuroNM in Brussels. In 1997, Germany set up the *Neuer Mark*. Listing requirements for the *Neuer Markt* included a 20 per cent free float, a six-month lock-in period for 100 per cent of the shares held by the existing shareholders immediately after the IPO, and acceptance of the Takeover Code. Also, firms listed on the *Neuer Markt* had to issue a prospectus, follow IAS or US-GAAP accounting rules, and report their quarterly and annually financial results (as specified in the Rules and Regulations Neuer Markt, FWB 9).

However, although the *Neuer Markt* experienced a remarkable growth until 2000, blatant violations of insider trading legislation, of share stake lock-in agreements and share price manipulations by several firms forced it to close down in 2002/3 (Goergen, Khurshed, McCahery and Renneboog 2004). The different market segments – *Amtlicher Handel* (the official, most liquid market), the *Geregelter Markt* (second-tier market) and the *Neuer Markt* – were restructured on 1 January 2003 to form the General Standard and Prime Standard market segments. Small and mid-sized companies, which meet minimum listing requirements (from the former *Amtlicher Handel* and the *Geregelter Markt*) and do not target international investors, are listed on the General Standard market segment. Companies that adopted the international accounting standards (IFRS or US GAAP) and disclosure rules prior to 2005 were listed on the Prime Standard segment. The *Neuer Markt* firms were also included in the latter.

5. Conclusion

This paper provides an overview of the German corporate governance system. We review the governance role of large shareholders, creditors, the product market and the supervisory board. We also discuss the importance of mergers and acquisitions, the market in block trades, and the lack of a hostile takeover market. Given that Germany is often referred to as a bank-based economy, we pay particular attention to the role of the universal banks (*Hausbanken*). We show that the German system is characterised by a market for partial corporate control, large shareholders and bank/creditor monitoring, a two-tier (management and supervisory) board with co-determination between shareholders and employees on the supervisory board, a disciplinary product-market, and corporate governance regulation largely based on EU directives but with deep roots in the German codes and legal doctrine. Another important feature of the German system is its corporate governance efficiency criterion which is focused on the maximisation of stakeholder value rather than shareholder value. However, the German corporate governance system has experienced many important changes over the last decade.

First, the relationship between ownership or control concentration and profitability has changed over time. Whereas, in the 1970s and 1980s there was a positive relation between control and performance, this relationship vanished or even turned negative in the 1990s. There is also no clear answer to the question whether German banks play a positive monitoring role. However, their positive contribution is less ambiguous in financially distressed or poorly performing companies, which can be attributed to the banks' importance as creditors. It has been argued that non-market monitoring devices play a larger role because

hostile control transactions are rare and because other constituencies such as large creditors can typically exert considerable power. The long-term lending relationships yield banks considerable influence, which is frequently strengthened by bank representation on the supervisory board of the firm.

Second, German CEOs appear to have the highest total cash pay in Europe and the lowest non-cash remuneration (although variable payment is increasingly adopted). Although there is a positive sensitivity of managerial pay to performance in Germany, the size effect dominates the compensation equation. Importantly, the pay-for-performance relation is influenced by large shareholder control: in firms with controlling blockholders, the CEO receives a lower total compensation and the pay-for-performance relation is no longer statistically significant. When a universal bank is simultaneously an equity- and debtholder, the pay-for-performance relation is lower than in widely-held firms or blockholder-controlled firms.

Third, since 1995 several regulatory initiatives (including voluntary codes) have increased transparency and accountability. The rules on insider trading and anti-trust have been strengthened. The Takeover Act obliges management to take the interest of the company at heart. Also, the revised Restructuring Act no longer allows minority shareholders to stall corporate restructuring for many years via ongoing legal actions. Moreover, voting restrictions and multiple voting shares are no longer permitted. More importantly, the Takeover Act imposes that a shareholder who acquires at least 30 per cent of the equity is required to make a tender offer for the remaining shares.

Some argue that these recent changes indicate a certain trend towards a market-oriented system. However, as Hacketal et al. (2003: 671) point out, "the fundamental structure of German corporate governance" has remained unaltered. Moreover, "[s]some new rules and regulations have lacked enforcement, others left loopholes, and other just did not set the right incentives" (Terberger (2003: 715). This paper provides supportive evidence on these caveats. Although there has been some degree of convergence in terms of e.g. transparency (accounting rules of the IAS), stock markets (the Neuer Markt set up in 1997 with more than 300 IPOs subsequently incorporated in the main market), and voting structures (abolishment of multiple-voting shares and voting restrictions), the fundamental differences with respect to a market-based system are still significant. Among the most apparent, we can mention a level playing field on M&A and ownership disclosure requirements.

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⁴² This regulatory trend seems to be still at work: only recently the German government passed new laws "on the Improvement of Investor Protection" (*Anlegerschutzverbesserungsgesetz*, AnSVG) and "on Company's Integrity and on the Modernization of the Stock Corporations" (*Unternehmensintegrität und Modernisierung des Aktiengesetzes*, UMAG).

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Table 1. Ownership and control in Germany

Study	Sample Year	Data source	No. of companies and sample definition	Block type	Largest block (mean %)	2 nd largest block (mean %)
Gorton and Schmid (2000b)	1989-93	Saling Aktienführer, ed. by Verlag Hoppenstedt & Co., Darmstadt (various issues)	186 (1993 sample) firms from the largest 250 corporations that traded at the end of 1993 in at least one of the two-tier market segments: Amtlicher Handel or Geregelter Markt	Control rights	-	-
Franks and Mayer (2001)	1990	Hoppenstedt Stockguide and Commerzbank	171 quoted industrial and commercial companies (subset of the population of 477 quoted industrial and commercial companies in Germany in 1990)	Direct stake	-	-
Edwards and Weichenrieder (1999)	1992	Registers (Handelsregister) of annual general meetings	102 listed companies extracted from the 158 largest non-financial firms in 1992	Direct stake	- Owned: 46.30 - % at the general meetings: 54.84	- Owned: 8.34 - % at the general meetings: 10.11
Edwards and Nibler (2000)	1992	Registers (Handelsregister) of annual general meetings	156 of the 200 largest non-financial firms in 1992	Direct stake	- Listed: 47.0 - Unlisted: 80.0	- Listed: 9.0 - Unlisted: 13.0
Lehmann and Weigand (2000)	1991-96	Commerzbank, Wer gehört zu wem?, Bayerische Hypotheken- und Wechselbank, Wegweiser durch deutsche Aktiengesellschaften, and Hoppendstedt's Börsenführer	361 firms from the mining and manufacturing sectors	Direct stake	- Listed: 73.40 - Unlisted: 97.87	-
La Porta et al. (1999)	1996	Hoppenstedt Aktienführer	20 largest listed	Direct stake	-	-
Bech and Boehmer (2001, 2003)	1996	BAWe (Hoppenstedt KSD)	430 population of listed companies on official market	Voting block	58.9	7.4
Faccio and Lang (2002)	1996	Commerzbank, Financial Times and Worldscope	690 publicly traded (financial and non-financial) corporations	Cash flow (CFR) and control rights CR)	- CFR.: 48.54 - CR: 54.50	-
Köke (2001)	1998	Hoppenstedt KSD	1519 manufacturing firms in the legal form of Kapitalgesellschaft	Ultimate control and direct stake	- GmbH: 89.44 - Non-listed AG: 83.23 - Listed AG: 57.66	-
Van der Elst (2002)	1999	Hoppenstedt Aktienführer BAWe	542 listed companies on official and regulated markets	Block official market; stake regulated market	46.1	8.2

Source: Adapted from Becht and Boehmer (2003).

Table 2. Main legal forms of business organization in Germany

	Aktiengesellschaft (AG)	Kommanditgesellschaft (KG)	Gesellschaft mit beschränkter Haftung (GmbH)
Description	Public company with limited liability	Partnership partly limited by shares	Private company with limited liability
% of total firms in Germany Issue of shares	0.1	3.2	14.4
Issue of shares representing ownership?	Yes	Yes	No
Listing?	Yes	Yes	No
Supervisory Board (Aufsichtsrat)	Yes	No boards are required by law	Yes, if more than 500 employees
Codetermination (Mitbestimmung)	- Full-parity codetermination: Coal, steel and mining firms with more than 1000 employees Quasi-parity codetermination: Firms with more than 2000 employees not subject to full-parity codetermination One-third codetermination: Firms not family-owned with less than 500 employees registered before 10 August 1994 and firms not family-owned with 500 to 2000 employees not subject to full-parity codetermination.		 Full-parity codetermination: Like AG. Quasi-parity codetermination: Like AG. One-third codetermination: Firms not family-owned with 500 to 2000 employees not subject to full-parity codetermination.

Source: Prigger (1998) and Gorton and Schmid (2000b).

Study	Main result*	Sample and period	Dependent Variable	Main explanatory variables**	
Thonet and Poensgen (1979)	-	About 300 listed firms extracted from the universe of manufacturing firms for the years 1961-1970	ROE	Dummy, size, market share	
Cable (1985)	+	48 firms extracted from the largest one hundred in 1970	1968-1972 average ratio of after tax profits to capital assets	Bank Owenership, firm size and growth, public ownership, ratio of bank borrowing to total corporate debt	
Gorton and Schmid (2000a)	+	Four cross-sections of AGs extracted from: i) the list of the top 100 AGs of the year 1974; ii) all nonfinancial firms listed in Saling Aktienführer 1976; iii) the list of the largest manufacturing firms published in 1986 by the Frankfurter Allgemeine Zeitung; iv) all nonfinancial firms listed in Saling Aktienführer 1987	MTB (log), ROE	Bank Owenership, codetermination, voting restrictions	
Gedajlovic and Shapiro (1998)	-	1030 medium to large-sized publicly traded in five countries (Cadada, France, Germany, the UK and US) and 11 industrial sectors extracted from Worlscope-Disclosure 1991. Data from 1986 to 1991.	ROA	Firm size and growth, diversification and geographic scope	
Edwards and Weichenrieder (1999)	-	102 listed companies extracted from the 158 largest non-financial firms in 1992	MTB	Debt ratios, idiosyncratic risk, firm size, industry dummies	
Goergen (1998)	ns	62 German firms that went public between 1981 and 1988 and were family controlled before their flotation	cash flow over book value of debt and equity, cash flow over market value of equity and book value of debt, CARs	Ownership concentration by type of shareholder, performance from previous period	
Edwards and Nibler (2000)	ns	103 listed companies extracted from the 158 largest non-financial firms in 1992	MTB	Ownership concentration by type of shareholder, debt ratios, voting rights by banks (incl. proxy votes), idiosyncratic risk, size, dummy of worker representation on supervisory board, industry dummies	
Gorton and Schmid (2000b)	+	Unbalanced sample (1987-1992) from the largest 250 stock corporations that traded at the end of 1993 in at least one of the two-tier market segments: amtlicher Handel or geregelter Markt	MTB (log)	Bank Owenershipfirm size (lagged), dummy for equal representation in the board, industry dummies	
Lehmann and Weigand (2000)	-	361 firms from the mining and manufacturing sectors,	ROA, ROE	Bank Owenershipboard representation, firm size and growth, capital intensity, capital structure, market concentration	
Franks and Mayer (2001)	ns	75 listed firms, 1990-1994	Board Turnover	Earnings loss	

Table 3. Large shareholders monitoring in Germany

* Note: "+" means positive effect of ownership-concentration on performance (or related variables), "-" means negative effect and "ns" means no significant effect. Obviously, in many cases the results were not that simple. By and large we have tried to report the interpretation made by the authors of the study.

** Note: All studies include an ownership concentration measure.

Januszewski et al. (2002)	+	491 manufacturing firms operating in the period 1986-1994	Productivity Growth	Market competition, control dummy, dummies for type of shareholders, cross-shareholdings
Köke and Renneboog (2005)	+	1074 non-financial firms covering the years 1986-1996	Productivity Growth	Market competition, control dummy, dummies for type of shareholders, debt, financial distress

Table 4. Bank monitoring in Germany

* Note: "+" means positive effect of ownership-concentration / bank-presence on performance (or related variables), "-" means negative effect and "ns" means no significant effect. Obviously, in many cases the results were not that simple. By and large we have tried to report the interpretation made by the authors of the study.

** Note: All studies include a bank's ownership measure (OC) among the explanatory variables.

Study	Main result*	Sample and period	Dependent Variable	Main explanatory variables**
Cable (1985)	+	48 firms extracted from the largest one hundred in 1970	1968-1972 average ratio of after tax profits to capital assets	OC, firm size and growth, public ownership, ratio of bank borrowing to total corporate debt
Gorton and Schmid (2000a)	+	Four cross-sections of AGs extracted from: i) the list of the top 100 AGs of the year 1974; ii) all nonfinancial firms listed in Saling Aktienführer 1976; iii) the list of the largest manufacturing firms published in 1986 by the Frankfurter Allgemeine Zeitung.; iv) all nonfinancial firms listed in Saling Aktienführer 1987	MTB (log), ROE	OC, codetermination, voting restrictions
Edwards and Nibler (2000)	ns	103 listed companies extracted from the 158 largest non-financial firms in 1992	MTB	OC by type of shareholder, debt ratios, voting rights controlled by banks (incl. proxy votes), idiosyncratic risk, size, dummy of worker representation on supervisory board, industry dummies
Gorton and Schmid (2000b)	+	Unbalanced sample (1987-1992) from the largest 250 stock corporations that traded at the end of 1993 in at least one of the two-tier market segments: amtlicher Handel or geregelter Markt	MTB (log)	OC (lagged), firm size (lagged), dummy for equal representation in the board, industry dummies
Lehmann and Weigand (2000)	+	361 firms from the mining and manufacturing sectors,	ROA, ROE	OC, board representation, firm size and growth, capital intensity, capital structure, market concentration
Agarwal and Elston (2001)	ns	100 large listed and unlisted stock held firms for the 1970-1986 period	Operating income over sales, growth and interest payments over debt	Debt, growth of sales, sales, capital stock to sales
Januszewski et al. (2002)	+	491 manufacturing firms operating in the period 1986-1994	Productivity Growth	OC, market competition, control dummy, dummies for type of shareholders, cross-shareholdings
Köke and Renneboog (2005)	-	1074 non-financial firms covering the years 1986-1996	Productivity Growth	OC, market competition, control dummy, dummies for type of shareholders, debt, financial distress

Table 5: Average cumulative percentage of voting blocks held by different classes of shareholders in Europe

Note ¹: The Austrian and Italian samples refer to both listed and non-listed companies; for other countries only listed companies are taken. Of the listed Italian companies about 25% are directly and indirectly controlled by state holdings and these are classified in the table under "Holding and industrial companies".

	Sample	Individuals families	or	Banks	Insurance co's	Investment funds	Holding/ industrial co's	State	Directors
Austria ¹	600	38.6		5.6	0.0	0.0	33.9	11.7	0.0
Belgium	155	15.6		0.4	1.0	3.8	37.5	0.3	0.0
France	402	15.5		16.0	3.5	0.0	34.5	1.0	0.0
Germany	402	7.4		1.2	0.2	0.0	21.0	0.7	0.0
Italy ¹		68.6		7.2	0.0	0.0	24.2	0.0	0.0
Netherlands	137	10.8		7.2	2.4	16.1	10.9	1.3	0.0
Spain	394	21.8		6.6	8.8	0.0	32.6	0.0	0.0
UK	248	2.4		1.1	4.7	11.0	5.9	0.0	11.3

Source: Renneboog (2000) and Barca and Becht (2001). The table gives the average cumulative percentage of share blocks (above 5%) held by different types of shareholders. Both direct and indirect shareholdings are considered except for the Netherlands and the UK, where only direct shareholdings are considered. The figures reported are for the year 1996, except for Belgium (1994) and the UK (1993).

Table 6: CEO Remuneration in Germany, the rest of Europe and the US in 2001/02

Pay Components

(As a percentage of total remuneration)

		(115 a perce	mage or total re	illulici atlo	·11 <i>)</i>
	Total Remuneration (\$)	Basic Compensation	Variable Pay	Benefits	Perquisites
Belgium	696,697	46	24	28	2
France	519,060	46	26	21	7
Germany	454,979	47	36	12	5
Italy	600,319	43	33	20	4
Netherlands	600,854	47	36	13	4
Spain	429,725	51	36	10	3
Sweden	413,860	46	25	27	2
UK	668,526	43	30	21	6
USA	1,932,580	28	61	6	5

Source: Towers Perrin, "Worldwide total remuneration (2001-2002)".

Table 7: Legal barriers to takeover activity

	Effect	Comments
Taxation.	Prior to 2002, capital gains resulting from sales of equity stakes by corporations and financial institutions were taxed at the corporate tax rate.	This taxation imposed a substantial cost on transfers of control (see also section 4).
Court actions by dissenting shareholders.	Prior to 2002, (minority) shareholders disagreeing with decisions taken at the annual general meeting could block these decisions, even though they had been approved by a qualified majority of 75% of the votes, for long periods of time.	Qualified majorities of 75% of the voting capital are needed for: amendments to the articles of association, removal of shareholder representatives form the supervisory board, control agreements and profit transfer agreements, mergers or acquisitions, granting the management full discretion to take anti-takeover measures (for a period of 18 months) and to cancel the preemptive rights with which shareholders are endowed when the firm does a seasoned equity offering.
Board entrenchment.	- Only the supervisory board can remove the members of the management board who are usually appointed for a term covering the legal maximum of 5 years Representatives of shareholders and employees in the supervisory board have contracts for up to 5 years (with the option of renewing them).	 A new large (controlling) shareholder cannot remove the management board instantaneously (unless their contract comes to expiration). A new controlling shareholder may not be able to obtain immediate control over the supervisory board.
Proxy voting.	Banks have to ask permission and state how they intend to vote on specific proposals, but this was not common practice prior to KonTraG of 1998 (see section 4).	Shareholders depositing their shares with their bank frequently grant permission to the bank to exercise their votes.
Registered shares.	Most shares in German firms are bearer shares, but some firms have issued registered shares (vinkulierte Namensaktien). Such shares can only be transferred with the approval of the directors.	Firms with registered shares belong mainly in the insurance industry.
Voting restrictions, multiple votes and non-voting shares.	- The Third Act on the Promotion of Financial Markets (<i>Drittes Finanzmarktförderungsgesetz</i>) of 1998 put a stop to the introduction of voting restrictions. The Act also banned the issue of multiple voting rights.	The grandfather clause for existing voting restrictions ended on 1 June 2000. The grandfather clause for existing shares with multiple votes ended on 1 June 2003. However, German firms are allowed to issue non-voting shares (only for a maximum of 50% of the total equity issued).