

Transparency of Ownership and Control in Germany

Marco Becht / Ekkehart Boehmer

Arbeitspapier Nr. 69

Transparency of Ownership and Control in Germany

Marco Becht* and Ekkehart Boehmer**

February 5, 1999

Abstract

We first analyze legal provisions relating to corporate transparency in Germany. We show that despite the new securities trading law (WpHG) of 1995, the practical efficacy of disclosure regulation is very low. On the one hand, the formation of business groups involving less regulated legal forms as intermediate layers can substantially reduce transparency. On the other hand, the implementation of the law is not practical and not very effective. We illustrate these arguments using several examples of WpHG filings.

To illustrate the importance of transparency, we show next that German capital markets are dominated by few large firms accounting for most of the market's capitalization and trading volume. Moreover, the concentration of control is very high. First, 85% of all officially listed AGs have a dominant shareholder (controlling more than 25% of the voting rights). Second, few large blockholders control several deciding voting blocks in listed corporations, while the majority controls only one block.

This study is available from <http://www.ecgn.ulb.ac.be/> or <http://www.wiwi.hu-berlin.de/~boehmer> and is part of current activities of the European Corporate Governance Network. A previous version of the paper was included in a Preliminary Report on ownership, voting power and disclosure the Network submitted to the European Commission (ECGN 1997). The ECGN project received financial support from the Directorate General for Industry of European Commission (DGIII), Fondazione Eni Enrico Mattei and the Politecnico di Milano. Boehmer is grateful for financial support from the Deutsche Forschungsgemeinschaft (DFG). We appreciate helpful comments from Stefan Sperlich, Christian Wulff, participants at the 1997 and 1998 ECGN Conferences, the 1997 Bankenworkshop in Münster, and the finance workshops at Tilburg University and the University of Amsterdam. We would also like to thank Holger Schfer of the Bundesaufsichtsamt für den Wertpapierhandel Frankfurt a. M., Bureau van Dijk, Veba AG, and RWE AG for generously providing us with data.

* ECARE and Solvay Business School, Université Libre de Bruxelles, Av. Franklin D. Roosevelt 21, B - 1050 Brussels, Tel.: +32 (2) 650-4466, Fax: +32 (2) 650-4475, e-mail: mbecht@ulb.ac.be

** Institut für Bank-, Börsen- und Versicherungswesen, Humboldt-Universität zu Berlin, Spandauer Straße 1, D - 10178 Berlin, Tel. +49 (30) 2093-5761, Fax +49 (30) 2093-5666, e-mail: boehmer@wiwi.hu-berlin.de.

TABLE OF CONTENTS

1	INTRODUCTION	1
2	LEGAL AND INSTITUTIONAL BACKGROUND IN GERMANY	5
2.1	COMPANY TYPES	5
2.2	COMPANY GROUPS: DEFINITION AND PUBLICLY AVAILABLE INFORMATION	6
2.2.1	PUBLICLY ACCESSIBLE OWNERSHIP INFORMATION IN ANNUAL ACCOUNTS	8
2.2.2	PUBLICLY ACCESSIBLE OWNERSHIP INFORMATION UNRELATED TO ANNUAL ACCOUNTS	9
2.2.3	ACCESSIBILITY AND AVAILABILITY OF OWNERSHIP DATA	10
2.3	REGULATION OF SHARE CORPORATIONS (AKTIENGESELLSCHAFTEN)	12
2.3.1	SHAREHOLDER MEETINGS AND BOARD STRUCTURE	13
2.3.2	PROXY RULES	14
2.3.3	SHARE TYPES	14
2.3.4	OWNERSHIP VERSUS CONTROL OF <i>AKTIENGESELLSCHAFTEN</i>	15
2.4	STOCK EXCHANGES	16
2.4.1	SPECIAL REQUIREMENTS FOR LISTED AGs	17
2.5	REGULATION OF BANKS AND INSURANCE COMPANIES	20
2.6	REGULATION OF INVESTMENT COMPANIES	21
3	ESTIMATING THE RELATIVE IMPORTANCE OF LEGAL FORMS	22
3.1	THE NUMBER OF FIRMS IN GERMANY	22
3.2	THE NUMBER OF BANKS AND INSURANCE COMPANIES IN GERMANY	23
4	THE GERMAN TRANSPOSITION OF THE EU TRANSPARENCY DIRECTIVE	23
4.1	BACKGROUND	23
4.2	THE MECHANICS OF THE NOTIFICATION PROCESS	24
4.3	WHO HAS TO REPORT VOTING STAKES?	26
4.4	TRANSPARENCY AND THE WPHG	27
4.4.1	BANKS' PROXY VOTES ARE NOT REPORTED	27
4.4.2	VOTES OF INVESTMENT COMPANIES ARE NOT ATTRIBUTED TO ANY PARTY	28

4.4.3	VOTES ARE NOT ALWAYS ATTRIBUTED TO THEIR DE FACTO OWNERS	28
4.5	DATA	29
4.6	NOTIFICATION PROBLEMS	30
4.6.1	EXAMPLE OF AN ORIGINAL NOTIFICATION	30
4.6.2	WHAT IS LOST FROM NOT KNOWING THE ATTRIBUTION REASON	32
4.6.3	A LARGE NUMBER OF NOTIFICATIONS IS NOT ALWAYS INFORMATIVE	33
4.6.4	OBSCURITY OF FAMILY CONTROL	34
4.6.5	REPORTED VOTES VS. EXERCISED VOTES	35
4.6.6	HIDDEN GROUP STRUCTURES	36
5	SUMMARY STATISTICS	37
5.1	SUMMARY STATISTICS FOR INDIVIDUAL COMPANIES	37
5.2	SUMMARY STATISTICS FOR BLOCKHOLDERS	38
6	SUMMARY AND CONCLUSIONS	39
7	REFERENCES	41

TABLE OF FIGURES

FIGURE 1. THE MECHANICS OF THE NOTIFICATION AND PUBLICATION PROCESS	82
FIGURE 2. OWNERSHIP STRUCTURE OF DEPFA AG	83
FIGURE 3. VOTING BLOCKS BY RANK OF STAKES FOR 430 OFFICIALLY LISTED <i>AKTIENGESELLSCHAFTEN</i>	84
FIGURE 4. PERCENTILE PLOT OF THE LARGEST VOTING BLOCK IN 430 OFFICIALLY LISTED <i>AKTIENGESELLSCHAFTEN</i>	85
FIGURE 5. HISTOGRAM OF THE LARGEST VOTING BLOCK IN 430 OFFICIALLY LISTED <i>AKTIENGESELLSCHAFTEN</i>	86
FIGURE 6. DISTRIBUTION OF BLOCKS IN 430 OFFICIALLY LISTED <i>AKTIENGESELLSCHAFTEN</i> BY BLOCKHOLDER TYPE	87

TABLE OF TABLES

TABLE 1: IMPORTANT LEGAL FORMS OF PRIVATE COMPANIES	42
TABLE 2: DEFINITION OF CONTROL OVER A COMPANY	44
TABLE 3: OWNERSHIP INFORMATION THAT MUST BE PROVIDED WITH THE ANNUAL FINANCIAL STATEMENTS	46
TABLE 4: LEGAL REQUIREMENTS ON PUBLISHING OWNERSHIP INFORMATION	48
TABLE 5: ACCESSIBILITY AND AVAILABILITY OF OWNERSHIP DATA	51
TABLE 6: SHAREHOLDERS' MEETINGS AND BOARDS OF <i>AKTIENGESELLSCHAFTEN</i>	52
TABLE 7: PROXY RULES.....	53
TABLE 8: IMPORTANT TYPES OF LIMITED-LIABILITY EQUITY SECURITIES	54
TABLE 9: LEGAL DEVICES TO LEVERAGE CONTROL RELATIVE TO OWNERSHIP IN LISTED AGS.....	55
TABLE 10: DESCRIPTIVE STATISTICS ON LISTED AGS IN 1995.....	56
TABLE 11: DESCRIPTIVE STATISTICS ON SHARE TRADING AND OWNERSHIP IN 1995.....	57
TABLE 12: NUMBER OF COMPANIES BY INDUSTRY AND SALES IN 1990.....	58
TABLE 13: TAXABLE VALUE (EINHEITSWERT) OF COMMERCIAL COMPANIES IN 1989 BY LEGAL FORM.....	59
TABLE 14: SALES TAXED WITH VALUE-ADDED TAX BY LEGAL FORM AND SALES IN 1992	60
TABLE 15: FINANCIAL INSTITUTIONS IN 1995.....	61
TABLE 16: INSURANCE COMPANIES IN 1994	62
TABLE 17. REPORTED VOTING STAKES IN RWE AG AS REPORTED BY BAWE.....	63
TABLE 18. REPORTED VOTING STAKES IN AACHENER UND MÜNCHENER VERSICHERUNG AG	64
TABLE 19. REPORTED VOTING STAKES IN AGIV AG: SOURCE OF ATTRIBUTED VOTES IS AMBIGUOUS	65
TABLE 20. REPORTED VOTING STAKES IN RHENAG AG: PARENT COMPANY IS AMBIGUOUS	66
TABLE 21. REPORTED VOTING STAKES IN MARKT- UND KÜHLHALLEN AG: NUMBER OF BLOCKS.....	67
TABLE 22. NOTIFIED VOTING STAKES IN MONACHIA AG: NUMBER OF BLOCKS.....	68
TABLE 23. NUMBER OF ENTRIES PER NOTIFIED COMPANY	69
TABLE 24. COMPANIES WITH THE LARGEST NUMBER OF NOTIFICATIONS	70
TABLE 25. REPORTED VOTING STAKES IN TARKETT AG: NUMBER OF ENTRIES PER VOTING BLOCK VS. INFORMATION CONTENT	71

TABLE 26. REPORTED VOTING STAKES IN HERLITZ AG: INFORMAL FAMILY POOLS ARE NOT REPORTED	72
TABLE 27. REPORTED VOTING STAKES IN VEBA AG.....	73
TABLE 28. EXERCISED VOTES AT VEBA AG’S ANNUAL GENERAL MEETING, 23 MAY 1996.....	74
TABLE 29. REPORTED VOTING STAKES IN DEPFA AG: NO GROUP STRUCTURE REPORTED	75
TABLE 30. CONCENTRATION OF VOTING BLOCKS OF 430 OFFICIALLY LISTED <i>AKTIENGESELLSCHAFTEN</i>	77
TABLE 31. NUMBER OF BLOCKS IN 430 OFFICIALLY LISTED <i>AKTIENGESELLSCHAFTEN</i>	78
TABLE 32. SHAREHOLDERS CONTROLLING VOTES IN 4 OR MORE OFFICIALLY LISTED <i>AKTIENGESELLSCHAFTEN</i>	79
TABLE 33. NUMBER OF BLOCKHOLDERS AND THE NUMBER OF THEIR HOLDINGS IN 430 OFFICIALLY LISTED <i>AKTIENGESELLSCHAFTEN</i>	80
TABLE 34. CONTROL OF VOTING BLOCKS BY BLOCKHOLDER TYPE OF SHAREHOLDER IN 430 OFFICIALLY LISTED <i>AKTIENGESELLSCHAFTEN</i>	81

1 Introduction¹

The purpose of this report is to provide an exploratory description and analysis of the transparency of ownership and control structures in Germany. In addition to a comprehensive legal survey, we present descriptive statistics on the concentration of voting rights. This is an original contribution because such data became first available in December 1996. The quantitative analysis draws on the German transposition of the EU Transparency Directive (88/627/EEC). Hence, our statistical analysis also puts the effectiveness of this piece of legislation to the test. The paper is based on the German contribution to a project that has sought to explore these issues for a number of European countries.²

The concept of immediate disclosure and rigorous transparency is largely a novelty for German financial markets. Since it is a precondition for functioning public equity markets, it has been advanced by recent German legislation (WpHG and KonTraG, discussed in detail below) in the context of EU initiatives to harmonize and promote the financial markets of member countries. The German Federal Securities Supervisory Office, *the Bundesaufsichtsamt für den Wertpapierhandel* (BAWe), was established under the German Securities Trading Act (Wertpapierhandelsgesetz, WpHG) in 1995. The underlying legislation was passed on 26 July 1994 (*Zweites Finanzmarktförderungsgesetz*). Before these changes, publication requirements were largely limited to financial statements.

Enhancing the transparency of ownership and control structures is one of the declared goals of the BAWe: „Transparency is an essential element for the proper functioning of a financial market. It is not only interesting to know who holds the voting rights in a listed company but also constitutes an important prerequisite for achieving transparent securities markets. The timely publication of significant purchases and sales facilitates investor decisions and limits the possible misuse of inside knowledge“ (<http://www.bawe.de>, 1997). This view is not unique to the EU or the BAWe. Recently the OECD has put forward similar recommendations as guidelines for its member countries (OECD Internal Documents SG/CG (98) 6 and SG/CG (98) 9).

From a cash-flow point of view, transparency is important because it is valuable for investors to know what cash-flow rights they are acquiring when they purchase a particular stock. An investor who buys the shares of Allianz Holding AG is not merely purchasing cash-flow rights

¹ Sections 2 and 3 of this report and the associated tables are taken from Boehmer (1999a).

² See European Corporate Governance Network (1997) and <http://www.ecgn.org>.

in an insurance company. The investor is purchasing a portfolio that includes insurance companies, reinsurance companies, banks, and non-financial companies in Germany and abroad. Many of these companies hold equity portfolios themselves. Therefore, to value his investment appropriately, an investor depends on information about companies contributing to the financial success of the firm he is investing in.

From the control perspective, transparency is important because it is also valuable to investors to know who is making the important long-term decisions in the company he invests in. Is the company controlled by a coalition of small shareholders? Is the company controlled by a family? Is the company controlled by its managers? Is it possible for an outsider to launch a hostile takeover bid? Investors should have the right to know who their business partners are and who is taking care of their money. Without knowing their identity, it is impossible for investors to assess whether the firm will be managed in their interest or whether it will adhere to other goals like the maximization of its value to debtors, the government, other stakeholders, and so forth. Transparency of the separation of ownership and control allows investors to assess the motivation of those who control the company. Investors are not indifferent to the information that a company is run by managers that have no cash flow stakes, a bank that controls the company using proxy votes, or by a large owner with a substantial cash flow stake.

From the insider trading perspective, it is important to note that „insiders” are not just those working inside a company. Anybody can be an insider as long as he or she has access to material price-relevant information that has not yet been revealed to other market participants. Transparency is an important safeguard against insider trading. Those who potentially have access to such information can be identified and supervised.

The transparency of the board composition, the remuneration of the management, and the professional history of management and board members are also of interest to the investor. Interlocking directorates are yet another device that can be used to separate ownership from control. I only touch upon these broader aspects of transparency in the current study. The link between ownership, control, disclosure, transparency, and board composition will be the subject of future research.

Fairness, in its widest sense, is yet another motivation for effective disclosure and transparency. Large investors like banks, insurance companies, non-financial companies, and wealthy individuals may have the means to obtain the information they require making investment decisions and exerting control. The Deutsche Bundesbank maintains company information

databases that are accessible to banks. The motivation is to contribute to the stability of the financial system. Wealthy individuals can count on the services of specialized credit-rating agencies that, like detective agencies, will collect the information they require in making decisions. Ordinary investors do not have such means at their disposition, yet are necessary to channel private funds into corporations. Transparency can help to insure that they get a chance to make equity investments on the same terms as the powerful and the wealthy, thereby providing liquidity to capital markets. Transparency also helps to ensure that small shareholders are not exploited or, at least, that they have a chance to learn about it as quickly as possible.

Potential costs to transparency certainly exist, but their consequences are often not well defined. First, Perotti and von Thadden (1998) show that transparency increases the variability of profits and output. Therefore, creditor-controlled firms will discourage transparency to increase the value of the firm's debt. On the other hand, increasing variability is not detrimental to diversified shareholders. Second, it is frequently argued that transparency may hurt a firm's competitive position in the product market. For example, § 313 III HGB states that, among other items, information on the ownership of firms need not be disclosed if it would constitute a disadvantage to the parent company. Since modern economic theory and financial evidence offer no clue as to why disclosing ownership could be detrimental to the parent, the intentions of such provisions and arguments derived from them remain nebulous. Especially in the case of publicly traded subsidiaries the benefit to (minority) shareholders of knowing who controls their investment should be weighted against initiatives to the contrary.

From a European perspective, transparency is an important requirement for creating a truly integrated capital and product market. For listed companies, transparency can help to ensure the equal and fair treatment of all investors, no matter in which EU country they reside. For all companies, transparency is important in the fight against money laundering, organized crime, and free-riding that undermines the common tax base, and is reassuring for suppliers and customers. Most Germans know who owns and controls important non-listed companies like Quelle and Bertelsmann. Non-German EU citizens and companies probably do not know, but should be given easy access to this information.³

If ownership and control of German companies were to be transparent, what information would have to be disclosed? To compute the ultimate ownership of cash-flow rights it would be

³ See Becht (1997) where the European perspective is developed further.

necessary to know the complete cash-flow perimeter of a listed company. This includes all cash-flow links (percentages of capital at par value) of all companies that are linked, directly or indirectly, with the listed company, both in the ownership and portfolio dimension. Allianz Holding AG would have to disclose its significant shareholders (larger than, say, 0.25%) and the holdings of all companies in its portfolio, the holdings of those companies, and so forth, where it exercises voting rights. The marginal cost of emanating such information would be close to zero if electronic devices were used. We will show below that under current legislation and reporting practice it is impossible to obtain meaningful information on the cash-flow perimeter.

The control perimeter is more difficult to measure than the cash-flow perimeter. Control is hard to define because in Germany it is not always proportional to voting power. When ownership is dispersed, voting 30% of the votes at an annual general meeting (AGM) can represent a majority. Since control is so hard to define, the transparency of control structures is a particularly difficult subject. The disclosure and transparency of the control structure for listed companies, when control is measured by voting power, is one of the focal points of this study.

In Germany there are numerous legal devices that can be used to separate ownership, voting power and control. These include voting pacts (formal and informal), control and cash flow contracts, proxy voting, voting right restrictions, and pyramiding. We will show that it is very hard to connect the cash-flow perimeter with the control perimeter and obtain the information that would be necessary to compute, even approximately, quantitative measures of the separation between ownership and control. For example, Adams (1994) documents that cross-holdings of shares between different companies are pervasive in Germany. Especially in this case, the cash flow rights can be obtained from annual reports. It is very difficult, however, to determine which firm or which individuals ultimately are the most powerful in the organization and therefore responsible for decision making.

In Section 2, we first analyze legal disclosure requirements for all important legal forms in Germany. This discussion provides a general description of the environment in which German firms operate. After defining various legal forms and groups, we discuss the information content of annual reports and other company publications. Here we put a special emphasis on ownership and control information that can be extracted from publicly available documents and on how difficult it is to obtain. Next, we describe the special regulation affecting AGs, stock exchanges, banks, investment companies, and insurance companies. In Section 3, we present descriptive statistics on the relative importance of the respective legal forms in Germany. Here we also provide basic information on the

distribution of legal forms across size classes and industries. Section 4 is devoted exclusively to the German implementation of the Transparency Directive. We first discuss the mechanics of the resulting control reporting system and then focus on the shortcomings of the current practice. We document several obstacles to true transparency. We find that some are due to the way the German security law was designed, while others are due to the way the competent authority (the BAWe) implemented the law. To document these shortcomings we provide several examples. In Section 5, we use the data generated by the new securities law (the WpHG) and present descriptive statistics on distribution of voting blocks in German AGs that are listed on (at least) one of the official markets. This section illustrates the high concentration of ownership and control in Germany and the implicit importance of its transparency. Section 6 concludes the paper.

2 Legal and institutional background in Germany⁴

In this section, we focus on the legal and institutional background in Germany. To assess the transparency of German ownership and control structures, it is necessary to understand disclosure rules and differences across legal forms. Disclosure and transparency are of greatest importance for the development of equity markets. Since they are the only legal forms that can be listed, we put the emphasis on *Aktiengesellschaften*. Other legal forms also play an important role, because they are frequently part of the same group as listed AGs. Listed companies may own and control non-listed companies and vice versa. As we will argue below, group structures that involve listed and non-listed companies pose the biggest challenge for disclosure and transparency because they simultaneously involve firms with strict disclosure rules and firms with lax disclosure rules. Overall, transparency is difficult to ensure in these cases.

2.1 Company types

German commercial laws define several ways to organize firms with limited or unlimited liability for owners. Table 1 lists the basic characteristics of the most important legal forms of German firms. The most relevant legal distinction is between AGs and GmbHs (*Kapitalgesellschaften*), which provide limited liability to owners, and other legal forms. All limited-liability firms are heavily regulated, while other forms have considerable freedom in designing company statutes and contractual relations between owners and other stakeholders. We try to describe the extent of this freedom by a subjective assessment of the degree of imperativeness

of the legal rules (last column). It should be noted that some „low imperativeness“ forms are of substantial importance in Germany, most notably *Vereine* (unions) and *Stiftungen* (foundations). *Vereine* (unions) sometimes appear as organizational form of large enterprises (for example, the largest German automobile association (ADAC) is organized as a *Verein*, and so are all soccer clubs).⁵ *Stiftungen* often appear as dominant stakeholders or sole owners of the largest companies.⁶ Other forms like the GbR or the *stille Gesellschaft* play only minor roles among larger firms.

2.2 Company groups: Definition and publicly available information

Ownership, even in business groups, is relatively easy to define and to measure. In contrast, it is far more difficult to measure „control,“ especially in business groups. To assess the transparency of control structures in Germany we need a definition of control that is (i) measurable and (ii) publicly observable.

Germany has no legal or otherwise official definition of a holding company or a group. Groups usually must, however, prepare consolidated annual reports and play a role concerning several types of regulation. Table 2 provides summaries of various legal definitions of control in German law, while Table 3 lists ownership-related information that must be published in the annual accounts. In the following discussion, we relate the control definitions of different legal codes to the publication requirements associated with them.

With the exception of the banking code, each row in Table 2 corresponds to control information that is, at least theoretically, public information. Generally speaking, control is most easily defined in terms of a blocking majority of voting rights or contractual arrangements delegating the decision power over the resources of a firm. Thus, in basic terms, we should consider companies that are ultimately majority controlled by a common parent as belonging to the same group. This is the basic idea behind the definition of groups in Germany's commercial code (HGB). The relevant part of the code governs how incorporated firms (AGs, KGaAs, and GmbHs) have to consolidate subsidiaries, whether fully or partially owned, into their annual financial report. With respect to effective disclosure, this regulation has two effects. First, after identifying all parent companies, one could construct a tree containing all major stakes held by this company. Second, § 285 XIV requires that all incorporated firms state which company includes them in its consolidated

⁴ All legal references are based on the most recent available versions as of June 1997. Most legal references are made in the tables and, for brevity, are generally not repeated in the body of the paper.

⁵ Currently, the larger clubs contemplate following the British model and convert to corporations.

⁶ Herrman (1997) analyzes the financial performance of companies led by *Stiftungen*.

accounts. Consequently, the HGB definition allows identifying groups as long as incorporated firms are involved. It does not provide sufficient information on group structures if the group hierarchy includes different legal forms.

The group definitions of the corporate code (AktG) serve as a basis for various legal requirements concerning AGs. Most notably, if a company owns more than 20% of the shares of an AG, it has to report this holding to that corporation, which in turn must publish this information in its annual financial report. The shortcoming in terms of effective disclosure is, again, that only shares held by incorporated firms in the same are affected by this regulation.

The *PublizitaetsG* governs most unlimited-liability companies that exceed moderate size criteria (see Table 2). Its primary intention is to require all but the smallest firms to publish their annual reports in a format similar to incorporated firms, except that § 285 XIV is not extended to these firms (there is no requirement to publish the parent company). Another notable deviation is stated in § 5 II, which exempts most unincorporated legal forms (OHG, GmbH & Co KG, KG, and GbR) from annually publishing their stakes in other firms.

The WpHG, the German transposition of the EU Transparency Directive (discussed in detail below), yields the most comprehensive control information, albeit only for the few incorporated firms that have their shares listed on an official German market.

Control information of potentially similar richness is prompted by the German antitrust code (GWB) for a similarly small set of firms. Once a firm has to file a change in ownership or voting blocks crossing 25% or 50% (which could be caused by a stake sale, a formal voting arrangement, appointing at least 50% of the managing or supervisory board, or other means), it must provide very detailed information on its ownership structure.⁷ The reason is the GWB's requirement that each acquiror of such a stake must disclose the complete group structure to the BKartA (the federal antitrust office). This information is published monthly for approved stake purchases. The regulation, however, affects only firms that (i) are sufficiently large (bidder and target jointly exceed DM 500 Mio. in sales),⁸ (ii) succeed in purchasing a stake prompting the filing requirement, and

⁷ §3 V GWB.

⁸ §3 I GWB.

(iii) do not wish to exert sufficient effort to disguise their group structure.⁹ Finally, the KWG defines financial and banking groups without directly requiring public disclosures.

2.2.1 Publicly accessible ownership information in annual accounts

Table 3 provides a detailed account of ownership information that firms of different legal forms must provide with or in their annual reports. While public disclosure of annual reports is mandatory for all larger firms (see endnote 1 in Table 3), the control information included in these reports varies greatly across legal forms. With the exception of GmbHs, no firm must reveal the identity of owners who are individuals in its annual report. In contrast, if a company owns more than 25% in an AG, KGaA, or an eG, the latter must include this information in its annual report. In addition, AGs, GmbHs, KGaAs, eGs, and large *Vereine* must include their own stakes in other firms, if they exceed 20%.¹⁰ Overall, the most stringent publication requirements are associated with incorporated firms, while other legal forms are often not required to provide such information annually.

The loose disclosure regulation of some legal forms has a propagation effect. Consider, for example, the notification of a 25% stake in an AG to that corporation required by § 20 AktG. While that article stipulates that stakes held by firms belonging to a group must be cumulated, it seems plausible that this notification could substantially understate the true stake size of a group if that group includes layer(s) of unincorporated firms; no regulator or investor can generally associate the group structure above with that below, because the intermediate layer is not required to publish ownership information.

To conclude, the publication requirements in Table 3 may provide comprehensive ownership information for some firms, but are certainly not sufficient to construct a systematic picture of control structures in Germany. Although the filings based on the WpHG provide a substantially deeper picture of ownership of officially listed AGs (with the shortcomings discussed below), the additional publication requirements discussed above also affect the quality of these filings.

To see that these requirements are the weak link in the chain, consider the following example. Let us presume that the parent company of a group controlling votes in a listed AG does

⁹ Several conversations with BKartA officials indicate quite a few instances where acquirors attempted to avoid filing requirements by engaging in various attempts to hide the size of the stake purchased (for example, by distributing the new stake over several individuals or firms) or the ultimate owner of the acquiror.

¹⁰ Stakes do not have to be reported if their effect on the firm's financial status is deemed minor or if disclosure would harm the

not wish to make the true degree of control public. The parent company should limit the votes held directly to the degree it wishes to disclose them. Since votes held by subsidiaries that cannot be traced back to the parent company are suitable to be overlooked, all other necessary votes should be held by these subsidiaries. Then the group should structure itself such that one (or more) layers consist of unincorporated firms. The more such layers are part of the group, the less probable it is that the true group structure is publicly known, and the less likely are WpHG filings providing true transparency, because votes controlled by unincorporated subsidiaries or their daughter firms can hardly be linked to the parent.

2.2.2 Publicly accessible ownership information unrelated to annual accounts

In this section, we discuss publication requirements regarding founders, company statutes, and owners, as well as restrictions on share transfers and repurchases of own shares. Especially company statutes and related contractual arrangements provide valuable control information, because German companies frequently enter contracts where one company fully foregoes claims on profits or decision power in favor of another company. For AGs and KGaAs these contracts are tightly regulated and must be filed with the company register, making them publicly accessible.¹¹ Similar contracts involving other legal forms are not directly regulated, providing potential loopholes as far as transparency is concerned.

Table 4 lists the publication requirements for each of the legal forms introduced above. It should be noted that we use the term 'publication' in the sense of information being publicly accessible, which does not generally imply that it can be obtained easily, quickly, or from a single, centralized source. Issues relating to the availability of information are discussed in section 2.2.3.

All incorporated firms, cooperatives, and unions must file company statutes. All legal forms except eGs that have physical founders must file the identity of these individuals. The GbR is a less common form of organization, because it is hardly regulated and prone to fraudulent activities. The '*stille Gesellschaft*' is not a stand-alone entity, but rather an extremely flexible way to become a stakeholder in any other legal form. The German word '*stille*' describes the purpose of this legal form well. Via a suitable contractual agreement, a quiet partner can obtain equity-like claims, debt-like claims, or a mixture of both. This contract does not have to be disclosed to the extent it is not covered by laws like §§ 297-318 AktG (governing contracts delegating control or cash flow rights that involve incorporated firms).

A different picture emerges for information about current company owners (as opposed to founders). All companies (except the ones not filing their founders) but AGs must keep the company register up to date with respect to owners. In the context of the transparency of groups, this implies that an unlisted AG where each shareholder owns less than 20% is the easiest way to disguise group structures: as soon as such an AG is used as an intermediate group layer, it becomes virtually impossible to link group levels below the AG to group levels above. Owners smaller than 20% do not have to be included in the AG's annual report and none of the owners must publicize its stake in that AG. This is actually an example for a situation where not even WpHG (transparency directive) filings may be effective. Assuming that this AG owned a majority of another listed AG and some ultimate parent had majority control over three 19% shareholders in the unlisted AG, the WpHG would require the parent to disclose its majority control over the listed AG. However, since there is no way to identify the owners of the unlisted AG, the parent may refrain from reporting appropriately without fear of sanctions.

AGs do have to file participation lists for each annual general meeting (AGM). This list provides the identity of each individual or organization exercising votes. In practice, it does not substantially help identifying the AG's ownership structure, because proxy votes delegated to banks, individuals, or organizations cannot be traced back to their real owners. This is true even if the real owner has given explicit instructions on how to vote the shares (see endnote 3 in Table 4).

If they are not already implied by the nature of the legal form (for example, in the case of unlimited-liability firms), company statutes may generally impose restrictions on the transfer of ownership. For example, AGs are free to create registered shares and require company approval for transfers. While industrial companies rarely use such restrictions, most insurance companies organized as AGs employ them, even when they are listed on a stock exchange. Finally, with the stated reason of creditor protection, if share repurchases are allowed, they are tightly regulated.

2.2.3 Accessibility and availability of ownership data

All companies that are required to make their annual reports public must file them with the responsible company register. The company register then has to publish the filings in the official newspaper of the federal government (*Bundesanzeiger*) and, in addition, in another newspaper.¹² Several filings, however, are exempt from newspaper publishing. For example, participation lists of

¹¹ §91 - 318 AktG.

¹² §10 HGB.

AGMs and the identity of limited partners of a KG must be reported to the register (and are publicly accessible there), but need not be published elsewhere. The reasons that the publication requirement does not imply that 'publicly accessible' information is easily, quickly, or systematically available to the public is summarized in Table 5 and discussed in the following.

2.2.3.1 *Company registers*

Company registers are decentralized and operated by local courts¹³ and firms must file their documents to each local court where they operate a business. Several obstacles exist to actually obtaining this publicly accessible information.

- First, to obtain filings of a particular company, one must approach a potentially very distant court where the company of interest operates a business.
- Second, the typical register stores all information on paper and is confined to a few rooms in the local court building. This has the consequence that generally only the most recent filings are on site, while older documents are deposited in some archive without public access. Court employees will then take requests to transport the filings to the court for inspection. Since most courts are significantly understaffed, this may require a couple of days or weeks.
- Third, filings are sorted by company, but not by the type of document. Thus, to obtain, say, the items on the agenda of an AGM for a period of 10 years, one often has to search manually through thousands of pages.
- Fourth, and perhaps most serious, most companies simply violate the law by not furnishing mandatory filings. Hansen (1996, p. 56) estimates that two thirds of German companies break the law in this way. He argues that because of understaffing, courts are not able to sanction or even recognize these violations. While the largest firms most likely experience sufficient public scrutiny to fear adverse publicity if they do not file, this may not be a credible threat for smaller firms. In particular, for smaller holding companies on some intermediate group level simply not filing required documents might represent a blunt alternative to more elaborate disguises of control structures. The maximum penalty for such a violation is a modest DM 10,000.¹⁴

In short, company registers theoretically provide valuable information about control structures. In practice, if the required filings have actually been made, it is very difficult and time consuming to obtain such information.

2.2.3.2 *Bundesanzeiger*

The *Bundesanzeiger* is an official newspaper of the federal government serving various purposes. It includes partial company register filings and/or references to other papers where related firm data has been published. The relevant part of the *Bundesanzeiger* is available on CD-ROM

¹³ §25 I FGG.

¹⁴ §4 HGB.

from 1991 onwards. Since the relevant *Bundesanzeiger* section obtains its content from the company registers, it cannot be more informative than the registers. While the CD-ROMs make a search substantially faster compared to the registers, they are of limited use. First, each CD contains one calendar quarter of filings. For example, to determine the owners of a GmbH one must potentially search dozens of CDs. An index CD is available, but personal experience proves it incomplete and of a cumbersome structure that substantially reduces search efficiency. Second, owners of GmbHs that last changed ownership before 1991 cannot be identified electronically and the relevant filing would have to be searched by going through paper copies page by page. In short, the *Bundesanzeiger* has been designed for official announcements and not for easy access to information.

2.2.3.3 Federal securities office (BAWe)

The BAWe publishes share-price relevant announcements (required by insider trading regulation) continuously and information on voting stakes in listed firms annually. In its recent annual report (BAWe 1997), it announces further steps to provide voting information more promptly. A first step in this direction has been taken by improving BAWe (1996) and by publishing bi-monthly cross-sections on the Internet.

2.2.3.4 Federal antitrust office (BKartA)

The BKartA publishes all filings related to successful and approved stake purchases and takeovers in its bi-monthly newsletter. It generally follows an information-friendly approach in providing access to data on completed transactions.

2.2.3.5 Federal banking and insurance supervision

Both offices publish only aggregate information and are not allowed to provide details on individual-firm filings.

2.3 Regulation of share corporations (Aktiengesellschaften)

Since AGs are the only legal form that may list on a stock exchange, we discuss their features in more detail below.

2.3.1 Shareholder meetings and board structure

The AG has three governing bodies: the AGM (*Hauptversammlung*), a supervisory board (*Aufsichtsrat*), and a managing board (*Vorstand*). In the AGM, shareholders generally decide by simple majority, although the law or statutes may require different voting rules.¹⁵ The supervisory board must have at least three members¹⁶ and includes worker representatives for all but the smallest AGs.¹⁷ The supervisory board elects the managing board that must have at least one member.¹⁸ No supervisory-board member may be on the managing board or in a position of similar executive power.¹⁹

Table 6 describes selected features of AGMs and boards for German AGs. To call an irregular AGM, at least 5% of capital is necessary, although company statutes may specify a smaller percentage. In Germany, no individual compensation package of board members must be published. Aggregates are included in the annual reports. Similarly, executive trading in their firm's shares could be traced by the BAWe (after 1995), but is not made public. Both potentially beneficial disclosure requirements would be in conflict with Germany's strong legal protection of personal data.

Very revealing with respect to transparency are several suits advanced by Ekkehard Wenger for disclosure of stakes in other firms and hidden reserves.²⁰ For example, in *Wenger vs. Siemens AG* (see endnote 6 in Table 6) the court compared a shareholder's request for disclosure of stakes held by the firm to the information provided to the general public as intended by the EU Transparency Directive. It ruled that shareholders should have at least the information that is soon available to the public. Observers expect similar rulings on related issues in the future (see Schneider 1995). The fact that a court ruling is necessary to reassure this basic right of shareholders illustrates well the German tradition of preserving the incumbents' power by emanating as little information about the firm's activities as possible.

¹⁵ § 33 AktG.

¹⁶ § 5 I AktG.

¹⁷ § 6 AktG.

¹⁸ § 6 II AktG, except for insurance companies, where the managing board must have at least two members (§ 4 VAG).

¹⁹ § 05 AktG.

²⁰ Ekkehart Wenger is a tenured professor of business administration at the University of Würzburg and a well-known shareholder activist.

Finally, the corporate code also provides for legal suits by shareholders against executives. §§ 93 and 116 AktG define the fiduciary duty of the members of both boards and make executives personally liable for damages they have caused to the company by violating these duties.

2.3.2 Proxy rules

§ 135 AktG governs how shareholders can name proxy agents as their representatives at the AGM (summarized in Table 7). Any organization, bank, or other agent of the shareholder may cast the proxy vote. The shareholder has the option to reveal his name, regardless of whether he provides explicit instructions how to vote his shares or not. Typically, shareholders remain anonymous, deposit their shares with banks, and grant general power of attorney to that bank with respect to all shares in their portfolio.

2.3.3 Share types

Information on different share types is presented in Table 8. AGs must issue common stock (*Stammaktien*) with one vote per share.²¹ In addition, up to 50% of total capital can be preferred stock (*Vorzugsaktien*), where each share receives a cumulative, preferential dividend.²² The preference can be defined, for example, in terms of seniority to the dividend claim of common stock or in terms of a larger dividend. Given the preference, these shares may be issued without the right to vote. Strictly speaking, however, these shares do have a (dormant) vote; § 140 II requires that each preferred share has a vote if the preferred dividend is not paid for two years in a row. In addition, preferred-share holders may have the right to vote in matters of special interest to them.²³

In addition, firms may issue *Genußscheine* (participation rights), that are very similar to U.S. type preferred stock. These rights have no voting rights attached and may be designed sufficiently debt-like to make dividends tax deductible or equity-like to be included in banks' equity capital. Although *Genußscheine* can be listed on stock exchanges, banks (one prominent exception is family-owned Bertelsmann AG, whose only listed securities are *Genußscheine*) primarily use them. New issues of equity securities generally require a 75% majority at the AGM.

²¹ The only cases where one class of shares has several votes per share are formerly state-owned firms where the state has retained control in this way and firms that used the option to retain such shares under §4 III DMBilG of 1949. While illegal under current law (§2 II), state governments may grant exceptions to the rule if it is in the interest of the economy.

²² §89 AktG.

²³ §41 AktG.

2.3.4 Ownership versus control of *Aktiengesellschaften*

German law allows various devices that detach control rights from cash flow rights. Table 9 summarizes the most important practices and their implications for transparency. First, shares may have limited, but not multiple voting rights. As discussed in the previous section, the AktG explicitly allows nonvoting shares up to the amount of ordinary shares outstanding.²⁴ Non-voting shares are a potentially powerful mechanism to double the relative voting power of ordinary shares, but are primarily used by relatively small, family-owned companies. In addition, those controlling the majority of voting shares and non-voting shares can turn non-voting shares into voting shares. Since the ownership of non-voting share is not usually disclosed, they can represent an important pool of hidden voting power.

In contrast, multiple voting rights per share are generally illegal, but may be authorized by state authorities.²⁵ Company statutes may further impose voting caps that limit the percentage of votes by individual shareholders.²⁶ In practice, multiple voting rights are of little importance and limited to a few formerly state-owned firms. Voting caps are often claimed to reduce the power of large shareholders. It is not clear, however, how appropriately structured informal voting pacts to overcome the caps could be detected. Voting caps have an adverse effect on transparency: large voting power cannot be exercised once it is revealed. Again, the company statutes containing the voting cap information can be difficult to obtain (see the discussion on access to company registers).

Large share blocks in themselves do not leverage voting power relative to the ownership of cash-flow rights. However, the weak protection of minority shareholders effectively allows sizeable transfers to blockholders once a coalition owns at least 75% of the votes. Specifically, a 75% majority may legally make a binding tender offer to minority shareholders below the market price.²⁷ In this sense, a 75% coalition effectively controls 100% of the voting rights. Given the power of blockholders on corporate disclosure policy, its effect on transparency hinges on the blockholders' attitude towards disclosure.²⁸

²⁴ §139 AktG.

²⁵ §2 AktG.

²⁶ §34 I AktG.

²⁷ §04, 320b. Wenger (1996) analyzes such offers to minority shareholders and finds that in 39 of 53 cases the offer is below the market value on the day before, and in 32 cases below the market value three months earlier. For the former 39 cases, the market value exceeds the compensation by 74% on average.

²⁸ Although voting control exceeding 5% must be disclosed to the BAWe, blockholders may use their power to structure their involvement in such a way that true group structures remain undisclosed. See the discussion in section 2.2.1 above.

Probably the most important devices to leverage control are group structures involving cross shareholdings, contractual arrangements, and pyramids. Cross holdings effectively imply (potentially illegal) holdings of own shares and increase the voting power of any existing blockholder. In addition, they promote inefficient ‘voting cartels,’ where involved management teams vote in favor of each other at the respective AGMs. Contractual arrangements delegating control are widely used within German groups. Pyramids with outside equity on various levels may concentrate highly leveraged control at the top layer. To the extent that intermediate group levels do not have to report ownership or stakes held, pyramids substantially reduce transparency.

Finally, supervisory-board composition may have substantial influence on control leverage. First, some shareholders may have a high board representation relative to their shareholdings. This is true especially for banks and other financial institutions. To the extent that represented banks also hold debt, their incentive to provide transparency to other shareholders may be very limited. Second, personal interlocks between companies have the same effect as cross holdings.

2.4 Stock exchanges

Eight regional exchanges operate in Germany and state authorities primarily regulate each. The major market is in Frankfurt and is owned by Deutsche Börse AG, a holding company that in turn is owned primarily by banks, specialists (*Kursmakler*), and brokers (*Freimakler*). The other seven regional exchanges operate in Berlin, Bremen, Düsseldorf, Hamburg, Hannover, München, and Stuttgart. Each exchange operates three market segments: *amtlicher Handel* (official market), *geregelter Markt* (regulated market), and *Freiverkehr* (OTC). Since 1997, Frankfurt additionally operates *Neuer Markt* (new market) to accommodate young growth firms.

Table 10 lists the number of firms, their aggregate market capitalization, and the number of IPOs between 1977 and 1995 on each market segment. In terms of market capitalization, the official markets have about 42 times the size of the regulated markets, and about 66 times the size of the OTC markets. Put differently, its capitalization of DM 795 billion amounts to 96% of total capitalization. Shares in the OTC markets are dominated by foreign firms, which account for 87% of all OTC firms.

Among the major segments, several trading systems exist. First, approximately the largest 100 firms are traded continuously on IBIS, a computerized trading system. Second, round lots in most officially listed firms can be traded with variable prices. Third, all other orders are filled at the *Kassakurs*, a price set daily to maximize transaction volume based on the order book.

Table 11 provides some basic descriptive statistics on share trading and ownership in Germany for exchange-listed shares. First, both trading and market capitalization is highly concentrated: the 5% most actively traded AGs account for 83% of all trading (in terms of DM volume), and the 5% largest AGs account for 67% of total market capitalization. The most important types of shareholders are companies, owning about 42% of all shares. Banks, insurance, and investment companies together own 30%, foreign owners 9%, the government 4%, and private households 15%. Only little above 5% of the population hold stock, and taken together stock accounts for only 5% of total assets held by private households.

2.4.1 Special requirements for listed AGs

2.4.1.1 Recent legislation

On May 1, 1998, a new legislation relating to several aspects of interest for this study became effective.²⁹ The Law for Control and Transparency in the Corporate Sector (*Gesetz zur Kontrolle und Transparenz im Unternehmensbereich*, KonTraG) explicitly aims at reducing the divergence to the one share – one vote paradigm. It changes previous legislation governing the supervisory board, the voting behavior at AGMs, and share ownership by banks. Its main features relevant to this study are discussed below.

Regarding the supervisory board, it limits the number of mandates held by a single person to ten (chairmanship is counted as two mandates) and increases the annual minimum number of board meetings from two to four for exchange-listed corporations. More related to the discussion of transparency is the novel requirement that corporations publish the number of board meetings and how many mandates board members hold in total in their annual report. Finally, 5% of share capital or a par value of DM 1 million is sufficient to initiate damage claims against board members (formerly 10%).

Regarding voting rights at AGMs, the legislation outlaws multiple voting rights and voting caps. Existing mechanisms must be phased out over a period of five years and two years, respectively. Moreover, the AGM can terminate multiple voting rights by a simple majority of book capital (paying an unspecified amount as compensation). All exchange-listed corporations must publish ownership exceeding 5% (formerly 25%) of the equity capital of „large corporations” in their annual report.

²⁹ BGBl. I, S 786.

Finally, the procedure for proxy voting by banks is somewhat modified. First, banks are held to point out alternative proxy agents to depositors of shares. Second, banks have to reveal board membership and equity ownership in the affected corporation when soliciting proxy votes. Third, banks must no longer exercise proxy votes when they own more than 5% of the firm's equity themselves, unless they receive specific voting instructions. While this provision seems counter-intuitive from an agency perspective, it is intended to reduce control leverage. Its practical consequences will be marginal, since this requirement primarily changes the layout of the forms used to solicit proxy votes. Finally, independently of their organizational form, all banks have to publish all board memberships held by employees and all equity stakes exceeding 5%.

In sum, the new provisions by the KonTraG provide minor changes towards more transparency and less control leverage to banks. To what extent these provisions change real voting behavior and reporting practice remains to be seen. In this study, we do not consider the new provisions because they do not affect the sample. In addition to the KonTraG, some other provisions exist that specify particular requirements for listed securities. In the following paragraphs, we describe the rules for listing equity shares on each of the market segments.

2.4.1.2 Amtlicher Handel (*official market*)

The issuer, together with a credit institution that has a seat on a German exchange, can apply for listing.³⁰ For their own listing, credit institutions do not need another institution to accompany its listing. It is mandatory to publish a prospectus³¹ and an interim financial report during the fiscal year.³² For an initial listing, the expected market value of the listed shares must generally exceed DM 2.5 Mio. and at least 25% of the issue must be widely held, but the exchange may admit smaller issues or a lower percentage widely held if it anticipates a sufficiently deep market.³³ It is further required that the issuer have existed for at least three years, unless the issue is expected to be in the interest of the issuer and the public.³⁴

The prospectus must contain detailed information on the securities to be listed and its contents are comparable to SEC form S-1. In addition to basic information on the issuer and price, size, and cost of the issue, it must contain all potential restrictions on transfers and the procedure for

³⁰ §6 II BtG.

³¹ §6 III BtG.

³² §44b I BtG.

³³ §, 9 BtZulV.

³⁴ § BtZulV.

future seasoned issues of the same security.³⁵ The issuer must also publish the nature and result of potential tender offers or exchange offers pertaining to the security during the year before listing.³⁶ With respect to control over the issuer, the prospectus must contain a listing of all shareholders owning 5% or more of capital or votes, all shares held by management and board, and other persons or companies that have a controlling influence on the issuing firm.³⁷ Interim financial reports must contain basic information on the issuer, sales, and profits following the requirements for regular annual reports.³⁸

2.4.1.3 Geregelter Markt (*regulated market*)

The issuer, together with a credit institution that has a seat on a German exchange, can apply for listing.³⁹ For their own listing, credit institutions do not need another institution to accompany its listing. The issuer has to publish a financial report at the time of the listing (as opposed to a more detailed prospectus),⁴⁰ but no additional reports during the fiscal year. On the other hand, in the case of a first public offering the issuer must publish a prospectus.⁴¹ It must contain basic information on issue and issuer and is less comprehensive than that required for official listings. It nevertheless contains the items listed in the previous sections, except for shares held by management and board.⁴²

2.4.1.4 Other market segments

Listing requirements for all other market segments (*Freiverkehr* and *Neuer Markt*) are set up by the exchanges and not governed by law. The only legal requirement is a prospectus (as described in section 2.4.1.2) in the case of initial public offerings.⁴³

³⁵ § 5 I BföZulV.

³⁶ § 6 BföZulV.

³⁷ § 9 II, 28 II BföZulV.

³⁸ § 4 I BföZulV.

³⁹ § 1 II BföG.

⁴⁰ § 3 I BföG.

⁴¹ § VerkProspG.

⁴² § 7 VerkProspG and § 2, 4, 5, 6, 7, 8, 10 VerkProspVO.

⁴³ § VerkProspG.

2.5 Regulation of banks and insurance companies

For regulatory purposes, German banking law distinguishes between three major types of banks: credit institutions, financial institutions, and financial holdings. § 1 KWG defines activities that are considered banking activities and labels a company a credit institution (*Kreditinstitut*), if it performs banking functions such as taking deposits, extending loans, and securities brokerage. If a company is not a credit institution, but its main business is, for example, to purchase stakes in other firms, factoring, leasing, credit cards, securities trading, or other investment banking activities, it is labeled a financial institution (*Finanzinstitut*). Finally, a financial holding (*Finanzholding*) is a financial institution whose subsidiaries are primarily financial or credit institutions, where at least one subsidiary is a credit institution. Only credit institutions, and by implication financial holdings, are regulated by the supervisory authorities (*Deutsche Bundesbank* and *Bundesaufsichtsamt für das Kreditwesen*). For the sake of brevity, in the following we will use „bank” as a synonym for both credit institutions and financial holdings.

Banks can be organized in any legal form except as sole proprietorships.⁴⁴ Private insurance companies may be organized as *Aktiengesellschaften* or as *Versicherungsverein auf Gegenseitigkeit* (mutual companies).⁴⁵ The supervisory authorities must license all banks and insurance companies.

The ownership of stakes in non-banking and non-insurance firms is not heavily restricted. There is no general limit on stakes held by insurance companies (except for very rigorous restrictions on the assets of life insurers). Banks may not hold more than 15% of their own equity as long-term investments in any unrelated firm, and not more than 60% of their capital for all such investments together.⁴⁶

Both banks and insurance companies face extensive ownership-disclosure requirements for their owners and for stakes in other firms. All such filings go to the respective supervisory authorities and are confidential.⁴⁷ Public disclosure requirements are governed by the rules on the

⁴⁴ §2a KWG. Additional restrictions apply to real estate banks, which may only be organized as AG or KGaA (§ HypBankG), and (private) real estate savings banks, which may only be organized as AG (§ BausparkG).

⁴⁵ § I VAG.

⁴⁶ §2 V KWG.

⁴⁷ In an apparent tribute to the authors of the EU Transparency Directive, §7a II VAG specifies that owners of stakes in insurance companies (mandatory reporting of 10%-stakes) must calculate their stake according to 88/627/EEC, Art. 7 (1). Ownership reporting is for regulatory purposes only and is not publicly disclosed. The same applies to the code defining the calculation of stakes in banks (§ IX KWG).

respective legal form. Only mutual insurance companies, which are a variant of the *Verein* (union), face stricter requirements with respect to their financial reporting, compared to other unions.⁴⁸

2.6 Regulation of investment companies

The most important type of investment company is the *Kapitalanlagegesellschaft* (KAG), a special type of credit institution and as such subject to banking regulation.⁴⁹ KAGs may set up public funds and special funds. The latter faces less rigorous publication requirements, but may have at most 10 investors whose certificates cannot be transferred without consent of the KAG. Admissible legal forms are the AG and the GmbH.⁵⁰ AGs must issue registered shares and their transfer is subject to the approval of the management board.⁵¹ In contrast to U.S.-type fund-management companies, KAGs must separate their own assets from investor's assets (investors receive certificates and not shares of common stock). Every six months KAGs have to publish a detailed list of the assets of each of their funds.

Another type of investment company is the *Unternehmensbeteiligungsgesellschaft* (UBG). The investment of KAGs in non-listed shares is restricted to 10% of each fund, or up to 30% as „stille Beteiligung” if the fund's stated purpose is to invest in such firms.⁵² In contrast, UBGs exclusively invest in such „quiet stakes” and unlisted securities. UBGs are not considered credit institutions and are supervised by regional (state) authorities. The mandatory legal form is the AG with a minimum capital of DM 2 Mio. Within 10 years of incorporation, 70% of the equity must be officially listed and offered to the public.⁵³ The major distinction to KAGs is that UBGs do not manage funds that issue certificates to investors, but rather hold investments as their own assets.

Until they go public, UBGs do not have to disclose a list of their investments. At the time of the IPO, a company report must identify all stakes held via securities, but not those held via quiet stakes.⁵⁴ In contrast to stakes held by KAGs, those held by UBGs remain mostly anonymous. In

⁴⁸ § 6 VAG subjects mutuals to most of the commercial code, HGB; §§ 41 - 341o govern issues specific to insurance companies in general.

⁴⁹ § KAGG. One difference to banks is the minimum capital of DM 5 Mio. (§ II KAGG), as opposed to ECU 5 Mio for credit institutions.

⁵⁰ § III KAGG.

⁵¹ § V KAGG, GmbH statutes can deviate from this rule.

⁵² § II, § 5b I-III KAGG.

⁵³ § I, §, 10 I UBGG.

⁵⁴ § 1 and 12 I, II UBGG.

their annual reports, only the number of stakes held and changes during the year have to be presented.⁵⁵

3 Estimating the relative importance of legal forms

Table 12 to Table 14 provide descriptive statistics on the number of firms in the various industries by legal form. While no complete survey of companies exists, both the *Bundesbank* and the German Statistical Office periodically publish summary information on companies reporting to them. The *Bundesbank* obtains balance sheets from all firms issuing bills of exchange, the statistical office from all firms filing tax returns. Both consider individual-firm annual reports as opposed to consolidated accounts.

3.1 The number of firms in Germany

Table 12 shows the number of manufacturing and trading companies grouped by industry, sales, and a crude categorization of legal form. The latter is split into incorporated firms, not incorporated firms, and sole proprietorships. The table reveals that incorporated firms cover the largest and the smallest firms, in terms of sales, in most industries. It is often alleged that most of the smallest limited liability firms are GmbHs, while most of the largest companies are AGs. Unlimited liability firms cover the medium size class in most industries.

The data from the Statistical Office is summarized in Table 13 and Table 14. The former presents a rough estimate of the relative aggregate taxable value of each legal form (the basis for property taxes), the latter of taxable sales additionally grouped by actual sales. The taxable value estimated in Table 13 is highly correlated with total asset value and represents a measure available for most firms. The most important legal forms are the AG and the GmbH, each representing almost one third of economy-wide value. The average AG is about 120 times larger than the average GmbH. Of similar importance are the unlimited-liability forms OHG and KG together. Their average size is about twice that of GmbHs.

Table 14 contains related information, but is in terms of those sales on which value-added tax is based. It shows that for AGs, 98% of taxable sales come from firms where regular sales exceed DM 100 Mio. In contrast, the corresponding figure is 42.5% for GmbHs, 43.4% for OHGs, and 50% for KGs.

⁵⁵ §2 II UBGG.

To conclude, the most important limited-liability forms in Germany are the AG and the GmbH, and the most important unlimited-liability forms are the OHG and the KG. All remaining legal forms, including sole proprietorships, have relatively little economic importance taken together.

3.2 The number of banks and insurance companies in Germany

Table 15 shows the number of banks and their aggregate assets. The most important types of banks, in terms of total assets, are private credit banks. They account for about 24% of total bank assets in Germany, closely followed by state savings banks (20%) and state banks (18%). Similar information on insurance companies is listed in Table 16, showing aggregate gross premia across different insurance types. Data on banks and insurance firms separated by legal form is not available.

4 The German transposition of the EU Transparency Directive

4.1 Background⁵⁶

In Germany, the Transparency Directive (88/627/EEC) was transposed as part of a security trading law (*Wertpapierhandelsgesetz*, WpHG, BGBL July 30, 1994, I S. 1749ff) that contains a series of measures that are intended to strengthen Germany's financial markets.⁵⁷ In addition to transposing the Transparency Directive, the WpHG provides the legal basis for creating a securities trading commission (*Bundesaufsichtsamt für den Wertpapierhandel*, BAWe). The BAWe formally addresses regulations and penalties relating to insider trading, the real-time publication of price-relevant information (*ad-hoc Publizität*), and the rules for operating securities houses.

The WpHG was passed on July 26, 1994 and some sections became effective on August 1, 1994. The Transparency Directive was supposed to have been transposed by January 1, 1991.⁵⁸ The sections that transposed the directive became effective on January 1, 1995. The BAWe, the „competent authority“ referred to in the Transparency Directive, started its operations on the same day.

⁵⁶ Further information on the Transparency Directive, also known as the „Large Holdings Directive“ or „Anti-Raider Directive“ can be found in Becht (1997).

⁵⁷ The complete title of the law is „Gesetz über den Wertpapierhandel und zur Änderung börsenrechtlicher und wertpapierrechtlicher Vorschriften“ and is part of the second law to promote the German financial markets („Zweites Finanzmarktförderungsgesetz“).

⁵⁸ 88/627/EEC, Art. 17 I.

The transposition of the directive marks a distinct change in the definition of „markets“ and the attitude towards listed corporations by German politicians, industrialists, and the financial community. For example, before July 30, 1994 there was no effective legislative difference in the disclosure requirements of listed and non-listed corporations. Although German law makes a number of provisions for the disclosure of ownership information and German cartel and business group law imposes disclosure requirements for control, the issues of ownership and control have traditionally been regarded as private, sensitive, and not for the eyes of the general public. Even in the current discussion, ownership and control information is rarely regarded as share-price relevant. Many owners of listed and non-listed firms prefer to remain anonymous and their mentality is captured more accurately by the French name for *Aktiengesellschaft - Société Anonyme*. The debate surrounding the passage of the WpHG reflects this clash of cultures and may be one of the main reasons why Germany was so late in transposing the Transparency Directive. As we shall document in this section, much of the old mentality survives. The current regulation is a good start insufficient to make control over corporate Germany transparent.

The BAWe is executing the law and bound by its content, the associated annotations and, eventually, the decisions of the courts. We stress this fact because the BAWe does not have the power to enhance transparency beyond the limits imposed by the German transposition of the Transparency Directive and the official implementation guidelines. Its statute and powers are much more limited than those of other regulators, for example the U.S. Securities and Exchange Commission (SEC).

Although § 29 II WpHG gives the BAWe the mandate to draft practical guidelines, the freedom of the BAWe in choosing the contents of these guidelines is limited. For example, the law or its annotations do not require business groups holding a block to provide a transparent view of their organization. Hence, the BAWe does not have the power to require blockholders to submit supplemental information such as an organizational chart. However, these are political and administrative legal questions that go beyond the scope of this paper. It remains a fact that transparency in Germany is lacking when compared to other countries, regulators, and markets.

4.2 The mechanics of the notification process

The mechanics of the notification process are simple and closely follow the Transparency Directive. Figure 1 illustrates the notification process. The main features of the transposition and the Directive are:

1. the filings are made and published on paper;

2. the shareholder notifies the company and the company notifies (and pays for notifying) the market;
3. notifications can take up to 16 days to reach the market.

The system is not very practical, too slow, and too expensive. It puts the company under considerable stress to publish the information within 9 calendar days and does not ensure the rapid dissemination of the information. A maximum of 16 days (a maximum of 7 days for the shareholder to notify the company and a maximum for 9 days for publication) can pass between someone crossing the threshold and the moment the information reaches the market. Before reaching the market, the information has passed through many hands and, if it is price relevant, could easily be used for illegal insider trades. Indeed, the shareholder could have crossed other thresholds during the notification period and, by the time the original notification reaches the market, the information could be out of date already. Since this unacceptable delay has been implemented by the transposition of the EU directive, a revision of the law would be required to modify current procedures.

It is not clear where to look for the information either. If the company is listed on a German official market, the company has to publish a notification in a German newspaper that has been awarded the privilege of publishing such notifications by the relevant German stock exchange(s). At the same time, the company has to publish a note in the official newspaper of the Federal Government (*Bundesanzeiger*), indicating in which newspaper(s) the notification is published. The *Bundesanzeiger* has a very low circulation (approximately 15,000) and as one commentator observed „the *Bundesanzeiger* is not usually read for breakfast.“ Additionally, the information may actually have been published in the relevant newspaper before the *Bundesanzeiger* publishes the reference. Most recently, the *Bundesanzeiger* requirement has been scrapped. However, it has not yet been replaced with a more efficient, cumulative pointer to the original notifications.

Since 1997, the BAWe publishes the reference to the notifications that were used to compile its new bi-monthly publications via its internet site (<http://www.bawe.de>). If the BAWe would decide to publish the original notifications that it receives, transparency would be enhanced considerably by providing full information within a potentially much shorter time span. However, in 1996 the BAWe had been allocated only five and a half positions for handling all matters relating to voting-block notifications (for roughly 430 companies on the official market) and the *ad-hoc* notifications (for over 600 companies on the official and second-tier market). Therefore, given the

current resource allocation by the German parliament, it is unlikely that such an improvement is within reach.

Since the number of steps involved is large, the notification process is costly and prone to errors. In comparison to the United States or Canada, where all filings are made via EDGAR (Electronic Data Gathering Analysis and Retrieval) and SEDAR (System for Electronic Document Analysis and Retrieval),⁵⁹ the German notification system appears rather antiquated and in stark contrast to repeated claims that Europe is moving towards an „information society.” It is not in the power of the BAWe to change this situation and the shortcomings of the notification process have their origin in the Transparency Directive, which the German legislation followed very closely. However, the German transposition did not use the possibility of imposing stricter conditions or to provide sufficient resources, which the Directive clearly allows for, to significantly improve the whole process. We did not investigate the German government’s position in the negotiations in Council leading up to the acceptance of the final text of the Transparency Directive. However, Schneider (1995) reports that the German government blocked certain transparency enhancing measures at the proposal stage and/or in Council.

4.3 Who has to report voting stakes?

§ 21 WpHG (notifications of direct shareholdings), § 22 (notifications of shares „attributed“ to a shareholder because he or she controls the way the shares are voted) and § 41 (first time notification since the law came into force) are the legal „triggers“ for the notification process.

- § 21 states that someone crossing 5%, 10%, 25%, 50% or 75% (through purchase, sale or other means) of the votes of a German company listed on an official EU market has to notify according to the mechanisms set out in section 4.2. The requirement does not depend on the share of voting capital controlled but the fraction of the total votes controlled. Voting caps (*Höchststimmrechte*) are not taken into account when computing the percentages (Nottmeier and Schäfer 1997, page 91).
- § 22 is the most complicated piece of the legislation and sets out the rules for „multi-layer“ control of voting shares. It defines which indirectly controlled votes are „attributed“ to a shareholder. Much of this section will concentrate on providing examples of the provisions of § 22 and documenting its limitations. It will be shown that the current version of §22 is inadequate

⁵⁹ The two systems can be accessed via <http://www.sec.gov> and <http://www.sedar.com> respectively.

for providing real transparency on who exerts considerable voting power in German listed companies.

- § 24 states that the parent of a business group that prepares consolidated accounts can make notifications for itself and/or other companies in the business group. The parent's notification must report the name of the subsidiary and all other details that would have to be published had the subsidiary notified itself, but only if the subsidiary has passed a notification threshold individually.
- § 41 is the first-time notification rule that provides the starting stock from which, through tracing changes, future „snapshots“ of the ownership structure of the voting stock can be constructed. It states that, unless a notification according to § 21 has already been made before the first general meeting in 1995, shareholders have to report holdings above 5%. The provisions of § 22 also apply to first-time notifications.

4.4 Transparency and the WpHG

Although the provisions of these articles appear rather straightforward, a number of complications arise. Since the provisions of the WpHG are legally uncharted territories in Germany, the annotations (*Gesetzesbegründung*) to the WpHG are binding and there are few court rulings to date.⁶⁰ Practical issues that arise from the day-to-day implementation of the WpHG are discussed in Nottmeier and Schäfer (1997) and strongly lean on the annotations to the WpHG in Schneider (1995) and Kümpel and Ott (1995). The authors are the responsible for the implementation of the German transposition of the Transparency Directive at the BAWe.⁶¹

4.4.1 Banks' proxy votes are not reported

The German government, in its annotations (*Gesetzesbegründung*) to the WpHG, decided that banks have not to report proxy votes (the well-known and much discussed *Auftragsstimmrecht* mechanism). This decision is justified by the fact that §135 V and §128 II AktG force banks to consult shareholders, make a voting proposal and, unless the shareholder instructs them otherwise,

⁶⁰ The *Gesetzesbegründung* was published in *the Bundestagsdrucksache* 12/6679.

⁶¹ Although their contribution is not legally binding and the authors stress that it reflects their personal views and not those of the BAWe, it is an account of the de facto interpretation and implementation of the WpHG text, legal guidelines issued by the government with the law, the interaction between the provisions of the WpHG, and other legal texts and opinions.

are afterwards bound by their proposal (*Bundestagsdrucksache* 12/6679, page 54). Since the banks must stick with their original proposal, it is argued that the votes should not be attributed to the banks because legally it is not under their discretion to decide how the shares are voted. Although there are no precise figures on how many bank customers actually take advantage of the possibility to instruct their bank, it is alleged that very few customers do. In practice, there is no difference between „free to propose how to vote and not be challenged“ and „free to vote.“ Hence, if the spirit of the Transparency Directive were to be applied rigorously, a notification should be required and the banks would have to notify the shares for which they have received no explicit voting instructions. Alternatively, they could be forced to declare on whose behalf they vote the shares. The limitation this notification exemption imposes on the available voting-power data is discussed in section 4.6.5. Even if the BAWe were to disagree with the treatment of proxy voting by banks prescribed by the government, it has to tolerate the resulting opaqueness.

4.4.2 Votes of investment companies are not attributed to any party

While limited reporting requirements apply to *Kapitalanlagegesellschaften* (investment funds), they affect neither their owners nor the holders of investment certificates.⁶² One would expect that the funds invested by investment companies be either controlled by the owners of the investment company or the investors who deposited the funds with the company. In practice, the voting stock is attributed to neither group. § 10 Ia explicitly exempts votes owned by KAGs from the requirements of § 22 WpHG. Controlling owners of the investment companies do not have to notify because it is alleged that the managers of the investment fund act in the best interest of their clients. Holders of certificates do not have to notify because they do not exert control themselves. Hence, in practice *Kapitalanlagegesellschaften* play the role of making controlling ownership anonymous. To provide equal treatment to all investment companies, the equivalent of *Kapitalanlagegesellschaften* from other member states may soon benefit from this ‘opaqueness

4.4.3 Votes are not always attributed to their de facto owners

When the shareholder of the listed company is not an individual but a company, a voting trust, a family pool, etc., votes controlled by this company should be attributed to its owners. The interpretation of the relevant §21 and §22 allows for too many exceptions and very often, the

⁶² §10 Ia 3 KAGG specifies the limitation to §21 WpHG that voting control less than 10% deriving from a fund controlled by the KAG does not have to be reported. This contrasts to the general 5% minimum for other entities.

notification requirement does not extend beyond the shareholder company. For example, Nottmeier and Schäfer (1997, page 93) argue that shares held by non-listed firms only have to be attributed to their owner if he controls that firm. This judgement is based on the WpHG §22 III where „control“ is clearly defined and therefore Nottmeier and Schäfer argue that other definitions of „control“ found in German or European law are not applicable. This limitation opens the opportunity to hide controlling stakes by dispersing votes over a number of small intermediate holding companies. For example, shares held by unlisted firms with two 50%-owners are never attributed beyond the level of the unlisted firm, because none of the owners is deemed to be „controlling“ in these cases. Thus, if two individuals control 100% of a listed corporation via two unlisted holding companies, of which each individual owns 50%, they jointly have full control over the listed firm but do not have to notify it.

The number of possible combinations between the type of direct shareholders of a listed company on the one hand, and the type of institution (or individual) who controls the shareholding company and the control mechanism (ownership link, power of attorney, proxy voting, control contract) on the other, is very large. Hence, the debate of who has to notify beyond „the first level“ is likely to keep courts and regulators busy. Whether more transparency will result from potential refinements or whether a fundamental redesign of the disclosure procedure is required remains to be seen.

4.5 Data

The analysis below is based on data from BAWe (1996), the first-ever official cross-sectional „snapshot“ of the distribution of voting blocks in Germany on September 30, 1996. It contains the cumulative result of all notifications up to this date according to §§ 21, 22, and 41 WpHG since January 1, 1995. By year-end 1996, 436 firms trade in the official market segments in Germany. All of these firms should have declared any blockholders controlling 5% or more by early 1996. The BAWe (1996) report, however, includes only 402 German companies.⁶³ Therefore, 34 companies or 7.6% of all officially listed firms had not received any notifications or had failed to report them since the WpHG came into force. To obtain a more complete data set, we investigate the missing firms.

First, Deutsche Telekom went public in October 1996 and was not traded in September. Additional 17 firms were included in later versions of the BAWe report, although several of their

⁶³ Actually, the BAWe report contains 404 names, but two companies were included twice, giving 402 companies.

filings had been made before September 1996. For another 11 firms, we find ownership information in *Hoppenstedt's Konzernstruktur-Datenbank* (KSD).⁶⁴ For six firms (Bremer Vulkan, Georg, Arn., Marschollek Lautenschl. und Partner AG, Terrex Handels-AG, Traub AG, and Würzburger Hofbräu AG) we were not able to find any reliable information and excluded them from the analysis below. The final sample includes 430 firms and consists of the original 402 from BAWe (1996), 17 from BAWe (1997), and 11 from KSD. For all firms we crosschecked KSD and BAWe data to eliminate errors and to confirm reported figures. We also discarded all stakes below 5% that are included in BAWe (1996) but not attributed to some other controlling party. These filings are not required by law and are most likely erroneous notifications.

4.6 Notification problems

In this section, we first describe the contents of transparency filings. Then we present some case examples of the shortcomings of the current reporting practice. Each of the latter examples represents issues that deserve attention in future refinements of the legal requirements and the reporting practice if transparency is to be achieved.

4.6.1 Example of an original notification

In December 1996 we asked all 435 officially listed German companies to support this project by furnishing annual reports, company statutes, AGM voting lists, and control notifications for the past two fiscal years, all of which are publicly accessible documents. RWE AG is one of the companies that responded and that has supplied us with copies of the four notifications it received during 1996. The notification by Allianz AG Holding is of particular interest, because it illustrates three important aspects of the German notification process.

⁶⁴ KSD contains mostly ownership information, and not the type of voting power information that is used in this analysis. The eleven firms we found on KSD are the following: Amira Verwaltungs AG, Commerzbank AG, Custodia Holding, Garant Schuh AG, IWKA Industrie-Werke Karlsruhe Augsburg AG, Leica Camera, Mannesmann AG, Merck, MLF Holding AG, Quante AG, Westag & Getalit AG. Out of those, Amira, Custodia, Leica, Merck, Quante, and Westag have substantial blockholdings (greater than 5%) that were not reported to the BAWe by May 1998.

Allianz Aktiengesellschaft Holding, Berlin and Munich, has notified us that, in connection with §41 II and §24 Wertpapierhandelsgesetz, its share of our voting capital as of 1 January 1995 was 8.117%.

In the share of voting capital, the attributable voting rights of §2 I Wertpapierhandelsgesetz were

No. 2 7.661% and

No. 7 0.015%.

Essen, December 12, 1995

RWE Aktiengesellschaft

The Management

Source: Translation of a notification published in the *Börsenzeitung* No. 240 on December 14, 1995

RWE AG was notified by Allianz Aktiengesellschaft Holding about the RWE AG voting block Allianz AG Holding commanded on January 1, 1995. The notification was made at the time of Allianz AG Holding's first annual meeting during 1995 (in October 1995) under the provisions of § 41 WpHG. Unlike in the case of notifications made on the basis of § 21 WpHG, RWE AG had one month (§ 41 III WpHG) and nine days (§ 25 I WpHG) to publish the notification. It was printed in the *Börsenzeitung* No. 240 on December 14, 1995. Allianz Aktiengesellschaft Holding notified as the parent of a business group that publishes a consolidated annual account (§ 24 WpHG). However, if Allianz AG Holding would report on behalf of a subsidiary, the name of the subsidiary would have to be mentioned in the notification. Hence, in this case, we infer that Allianz AG Holding is making the notification on its own behalf or on behalf of affiliated companies that, individually, fall under the notification threshold.

The notification breaks down the „attributed“ shareholding into:

- No. 2: Shares owned by a company (or companies) that is (are) controlled by Allianz AG Holding (7.661%).
- No. 7: Shares that have been deposited with Allianz AG Holding, but the depositor has not left Allianz AG Holding with precise instructions for voting the shares (0.015%).
- The remaining 0.44% of RWE AG voting shares is a residual and we infer that Allianz AG Holding directly owns them.

The BAWe has taken the data from the notifications and tabulated them. The entry for RWE AG is reproduced in Table 17. While it would enhance transparency, the breakdown of the „attribution reason“ is not published.

The column „direct and attributed shares“ reports the total percentage of shares the notifying company controls. The column „attributed“ shows how many of these shares are attributed. The single-vote column refers to situations where a company owns 50% of the voting shares of a company plus one „casting vote“ that gives majority control.

In the examples below, we calculate two additional numbers representing direct stakes and voting blocks in the reporting listed firm. The columns „direct & attributed“ and „attributed“ correspond to the BAWe (1996) publication. To compute the total controlled by reporting shareholders, we cannot simply sum the percentages in the column „direct and attributed“ to avoid double counting of stakes. Therefore, we construct a „direct“ column which may be aggregated to determine total block ownership.⁶⁵ „Direct“ is simply the difference between columns „direct and attributed“ and „attributed.“ „Blocks“ is intended to show the existing individual ultimate voting blocks, but we document below that based on BAWe data alone assigning ultimate blocks is often an ambiguous inference. Small discrepancies between the sum of direct stakes and the sum of assigned blocks can arise when small „attributed“ stakes are added to a direct shareholding but not notified (do not appear in the direct column). Table 18 provides an example of such a case.⁶⁶

4.6.2 What is lost from not knowing the attribution reason

In this section, we illustrate what is lost from not having electronic access to facsimiles of the original notifications (as they are published in the newspapers). If the BAWe were provided with the resources to create an archive with all published notifications, transparency would be enhanced considerably. In each of the following three examples the original notifications would reveal the true control structure, but the data published by the BAWe do not.

The first example is presented in Table 19, which shows the stakes held in AGIV AG. BHF Bank clearly owns and controls a stake of 48.7%. Stock owns a stake of 10.01% directly, and EVS indirectly controls a stake of the same size. The open question is whether this is the stake directly

⁶⁵ The cross-section spreadsheets the BAWe publishes on the internet now also contain a „direct“ column.

⁶⁶ Altogether there are about 50 such cases. In 25 cases the discrepancy between the sum of direct shareholdings and the sum of block shareholdings is less than 5% and can be explained by attributions of stakes that are below the individual notification threshold. In the remaining 25 cases the discrepancy between the sum of direct shareholdings and the sum of block shareholdings was more than 5% (the notification threshold). The stakes were not reported for various reasons. For example: in the case of Dyckerhoff AG there is a discrepancy of 11.6% (family pool) and in the case of Heidelberger Zement AG there is a discrepancy of 9.22% (attribution to a physical person). For Schering AG (7.2%) and Tarkett AG (7.2%), the discrepancy of the sum of direct stakes and block stakes results from an „anonymous“ attribution to Allianz Holding AG. According to Hoppenstedt (1997), Villeroy and Boch AG is actually controlled by a block of 100% in the hands of a family pool. The sum of direct stakes is 35.13% leading to the largest discrepancy of 64.87%.

owned by Stock or the sum of several smaller stakes that individually fall below the 5% threshold. Therefore, additional information is necessary to investigate whether Stock is controlled by EVS.

A similar situation is presented in Table 20, where the ultimate controlling party cannot be identified either. Two firms hold direct stakes in Rhenag AG: RWE Energie AG (54.09%) and Thüga AG. While RWE Energie is likely to be controlled by RWE AG, it is not clear, whether Preussen Elektra AG or Veba AG controls the Thüga stake of 40%. Only checking an additional source of information, the appendix of the annual report of VEBA AG, reveals that it owns 100% of the total capital of Preussen Elektra AG, 56.3% of the capital of Thüga AG and 41.3% of Rhenag AG. Without this additional information, it is not possible to assign the ultimate voting block properly to Veba AG.

In the case of Markt- und Kühnhallen AG, there are two direct stakes (Table 21). One is held by Doblinger Industriebeteiligung KG (41.41%) and another of almost the same size held by BB-Kapitalbeteiligungsgesellschaft mbH (41.40%). While Alfons Doblinger most likely controls Alfons Doblinger Industriebeteiligung KG, it is not clear whether the BB stake is attributed to DIB or constitutes a second block. Indeed, according to Markus (1996), BB-Kapitalbeteiligungsgesellschaft mbH is owned by Bankgesellschaft Berlin AG (50%) and Gothaer Versicherung auf Gegenseitigkeit (50%), and unrelated to Mr. Doblinger.

A more striking example is the case of Monachia AG (Table 22). Again, there are two reported direct stakes. One is held by Allianz Holding AG (45.22%) and a second stake of the same size is held by Hochtief AG (45.22%). Only the fact that no shares are attributed to Allianz AG and Hochtief AG indicates that there are two blocks and not just one block with two attributions. Since the total cannot exceed 100%, it follows that one of these stakes must have been attributed to RWE AG. Again, the fact that RWE controls Hochtief must be obtained from other sources.

4.6.3 A large number of notifications is not always informative

In 56% of all cases, the reported control structure has one or two entries (Table 23). As we show below, more entries per company do not necessarily provide more transparency under the present reporting practice.

Table 24 shows the companies with 8 or more entries, most of which are formal family pools or pools of heirs (*Erbengemeinschaft*). Only for formal pools and individual family members who control more than 5% of the votes, the notification rules apply (illustrated in Table 26 below). The reporting practice of foreign owners of German firms varies substantially. While owners based in

the United States and the United Kingdom generally report the whole intermediate structure right back to the controlling parent, other European companies are much less forthcoming. For example, there are only two reported blockholders of Pirelli Deutschland AG (Deutsche Pirelli Reifen Holding GmbH and Pirelli Tire Holding N. V.). The vast Italian superstructure that could have put Pirelli at the top of Table 24 is missing.

Table 25 shows the reported voting blocks for Tarkett AG, one of the companies with the largest number of entries. It is evident that, given the current reporting practice, the data taken from such a detailed notification is not very helpful in reconstructing the control structures that lead back to the companies that (according to Hoppenstedt 1997) have ultimate control: Goldman Sachs Advisors, L. P. and Standard Chartered Bank.

4.6.4 Obscurity of family control

There are implicit notification exemptions for listed companies controlled by families. No exceptions are made for family pools that are tied by formal contractual arrangements (like the Porsche pool and the Schwarz heirs in Table 24), even when they contain the clause that the pool contract is not always binding. In these cases the names of all pool members must be reported to the BAWe, but only the total voting block of the pool, the name of the head of the pool and the names of the individual members commanding more than 5% of the voting stock are published (Nottmeier and Schäfer 1997, page 94). Whenever no formal pool contract exists, control by families does not become transparent.

Table 26 shows that two members of the Herlitz family reported a voting stake in Herlitz AG. The direct holdings of Dr. Klaus Herlitz are under the 5% threshold but he votes 1.52% of, potentially, another family member's shares. This information contrasts with Hoppenstedt (1997) which reports that 32 family members jointly control more than 50% of the voting stock. The stakes of the non-reporting 30 family member are not considered „attributable“ if they have not entered a formal voting contract or placed their shares in a formal family holding. In the case of Herlitz AG this is obviously not the case and 30 of the 32 family members do not notify. The capital of Herlitz AG consists of 51.3% voting stock and 46.9% nonvoting stock, making it a corporation tightly controlled by a family. Judging from the notification information alone, Herlitz AG would be misclassified as a widely held company.⁶⁷

⁶⁷ There are several additional cases where BAWe (1996) contains the notifications of a few family members, but other sources indicate that a family as a whole owns a much larger portion of the voting stock. For example, five family members have reported to

4.6.5 Reported votes vs. exercised votes

VEBA AG was one of the companies that, in response to our December 1996 survey, provided us with a copy of the attendance list of its annual meeting that took place on 23 May 1996.⁶⁸ Table 27 reports the VEBA AG entry in BAWe (1996). It shows that Allianz AG Holding controls 11.46% and Lambda Vermögensverwaltungsgesellschaft mbH 10.20% of VEBA AG's voting shares. Again, it is not obvious from the publication or the original filings whether the Lambda votes are attributed to Allianz. They could have been attributed from various companies controlled by Allianz each holding less than 5% and Lambda could be an independent company, especially since BAWe data published later (September 15, 1997) reveals that the Allianz stake and the Lambda stake were published on two different dates (*Handelsblatt* June 17, 1995 and April 29, 1996). Additional information is necessary to assign the voting blocks appropriately: the annual report of Allianz AG Holding reveals that it owns (potentially indirectly) 70.5% of the total capital of Lambda Vermögensverwaltungsgesellschaft mbH and 10.3% of the capital of VEBA AG.

The attendance list (summarized in Table 28) and a comparison to the VEBA AG entry in BAWe (1996) reveals a number of interesting facts:

1. With the exception of Bankgesellschaft Berlin AG and a local savings bank, German banks did not vote own equity at the VEBA AG meeting. Although Dresdner Bank AG alone voted 16.6% of the total capital of VEBA AG and 33.3% of the capital that attended the meeting, Dresdner Bank AG did not have to notify VEBA AG because these are proxy votes. What happens when, say, Dresdner Bank AG votes shares Deutsche Bank has deposited for safekeeping (and vice-versa) is unclear.
2. Investment companies (*Kapitalanlagegesellschaften*), most of them belonging to banks, voted capital they have under administration without reporting a link to the controlling financial institution or potentially controlling investor.
3. Less than half of the voting capital attended the annual meeting (49.96%). Since VEBA AG has only issued one class of voting shares, this is equivalent to less than 50% of total capital. The example shows the well documented fact that there is a big difference between the total number of shares an individual or company owns and the voting power of this stake at an annual meeting

control 45.95% of Villeroy und Boch AG, but Hoppenstedt (1997) reports that 100% of the voting stock (plus part of the nonvoting stock) is owned by the family.

⁶⁸ VEBA AG also prepares accounts according to US-GAAP; its 1996 annual report contains S&P and Moody's credit ratings and a pledge to improve its investor relations further. From the format of the annual report and the positive response to our mailing we conclude that VEBA AG is one of the few German corporations that takes an „investor-friendly“ attitude.

with a low attendance rate. Indeed, if shareholder dispersion and attendance rates are inversely correlated, the leverage effect for voting blocks that attend the meeting is high when dispersion is high.

4. Allianz AG Holding has reported to control 11.46% of the VEBA AG capital (see Table 27). This corresponds to DM 279,726,647 of VEBA AG's equity capital. Allianz is „visibly“ represented at the meeting through Allianz Kapitalanlagegesellschaft, voting 0.11% of VEBA's shares. According to Markus (1996), Allianz Kapitalanlagegesellschaft has two owners: Allianz AG Holding (75.1%) and Allianz Lebensversicherungs AG (24.9%). Lambda Vermögensverwaltungsgesellschaft mbH does not appear at the meeting, although it reported to control 10.2% of the voting capital of VEBA AG directly. One explanation we have is that Allianz AG has deposited its shares with a bank (and instructs the bank how to vote) or has it under management by a related investment company.
5. The composition of the supervisory board is consistent with the major voting blocks. On 23 May 1996, the chairman of the supervisory board was Hermann Josef Strenger, chairman of the supervisory board of Bayer AG, Leverkusen (Allianz AG reported to control 5% of Bayer AG). Allianz AG is represented by its CEO Dr. Henning Schulte-Noelle. Dresdner Bank AG is represented by the managing board member Dr. Bernd Voss. Deutsche Bank AG is represented by its then-CEO Hilmar Kopper.

The VEBA example shows that neither the attendance list nor the notifications made based on the WpHG provide clarification about who controls VEBA AG. The BAWe publication legislation reveals the 11.46% interest of Allianz AG. The attendance list is more informative because we can identify *Kapitalanlagegesellschaften* (with 8.9% of the total vote and 17.8% of the effective vote) that attend the meeting even when they own or manage less than 10% of the total share capital, and identify banks' proxy votes. It remains unclear, however, who controls the shares voted by banks. Neither source reveals how Allianz AG exerts its influence.

4.6.6 Hidden group structures

It is often not possible to trace ultimate ownership because holding companies disguise ultimate ownership. Table 29, for example, shows a single reported stake in DEPFA AG. The shareholder, DEPFA Holding Verwaltungsgesellschaft mbH, disguises a whole shareholding superstructure as illustrated in Figure 2. The reason is that this holding company has no majority shareholder and hence DEPFA AG's voting power is not attributed to any of the holding's

shareholders. In such cases, the German transposition of the Transparency Directive provides no transparency at all.

5 Summary Statistics

In this section, we present descriptive statistics on the concentration of voting power in Germany. The structure of the data set and disclosure problems were discussed in the previous section. The dataset contains 430 companies; nearly all German companies listed on the official market. We provide statistics for ultimate voting blocks (the sum of direct and attributed stakes) by company and by blockholder. We do not report statistics for direct stakes because they provide little additional information on the control structure.

5.1 Summary statistics for individual companies

This section investigates the distribution of voting power across the 430 companies in the dataset. There are three main results:

- voting power is highly concentrated,
- in most cases voting power is concentrated in one large block, and
- the blocks are likely to be held for control purposes.

Table 30 presents the empirical distribution and summary statistics for voting blocks. The mean of the largest block (C_1) is 58.9%. When there are other blocks, they do not add much voting power. Adding the second and third largest voting block increases the mean concentration ratio by only 9.8%. At the lower end of the block size distribution, only 17.7% of each company's largest voting block are smaller than 25% (the maximum percentage of voting rights needed to block statute changes). At the top end of the distribution, 21% of the largest voting blocks exceed 90%. Figure 3 corroborates the observation that most firms are dominated by one single shareholder. The average size of the largest blocks (49.9%) exceeds that of the second largest blocks (2.6%) by a factor of about 19. Moreover, only 20% of all listed firms have more than two registered blockholders (Table 31). In sum, these results confirm the general view that control is highly concentrated in Germany.

Figure 4 and Figure 5 show that blocks are used for control purposes. In Figure 4, we plot the size of voting blocks against their cumulative frequency in the sample. The graph reveals that 25% of the sample firms have voting blocks exceeding 85%. Only another 25% of the sample have voting blocks smaller than 25% of the voting rights. More interestingly, the voting blocks are

clustered at 25%, 50%, and 75%. The same conclusion is illustrated in Figure 5, presenting a histogram of voting block sizes. These „steps“ correspond to the blocking minority (that can be used to block statute changes), a simple majority, and a supermajority. Since the supermajority can be set higher than 75% in the company statute, voting blocks of less than 25% could also represent a blocking majority. The figures suggest that block sizes are carefully chosen and control is an important issue for blockholders.

5.2 Summary statistics for blockholders

This section investigates the distribution of voting power over blockholders. The dataset contains 755 voting blocks held by 514 blockholders. We obtain four main results:

- Deutsche Bank and Allianz hold the largest number of blocks,
- most blockholders hold a single block,
- individuals hold the largest number of blocks as a group, and
- industrial firms hold almost as many, but larger blocks.

Table 32 lists all blockholders controlling more than three blocks. Deutsche Bank holds 27 blocks, Allianz holds 25 blocks, and VIAG AG, Dresdner Bank, and Munich Re hold 14 blocks each. However, since Allianz, Munich Re and Dresdner Bank are closely linked (see Becht and Boehmer 1999), Allianz and Munich Re are at the top of the blockholder league table – at least in terms of the number of blocks held. There are also differences in the average size of controlled blocks (see Boehmer 1999b for illustrative calculations of the value of controlled blocks). Table 33 shows that holding many blocks is the exception; 85% of all registered ultimate shareholders control just one voting block.

Table 34 reports the number of blocks held by various blockholder types and the average percentage of voting rights controlled.⁶⁹ Most blocks (207) are held by individuals and families, followed by industrial firms (186) and banks (116). The median size of the blocks held by industrial firms is larger than for both individuals and banks. However, this measure is likely to misrepresent economic importance, because family-controlled blocks tend to be of substantially lower value than bank-controlled blocks (see Boehmer 1999b).

⁶⁹ The category bank-related investment is not exhaustive. In this paper, we did not engage in the effort of determining the ownership structure of all registered shareholders. Therefore, additional bank-controlled firms remain in the categories industrial firm, holding, investment firm, and insurance firm.

Figure 6 contains an alternative representation of the importance of different shareholder types. The width of each rectangle is proportional to the number of blocks held and its height to the range from the 25th to the 75th percentile. The central bar indicates the median, while individual circles represent outliers (see Figure 6 for an exact description). Most notably, the 186 blocks held by industry (code c) have a median close to 70% of the votes (of affected firms).

Holding companies control 59 blocks. In these cases, the BAWe filings do not reveal who ultimately controls the voting rights. The reason is that attribution of control usually ends at the level of the controlling firm, as opposed to extending to the controlling firm's owners. Especially given the highly concentrated ownership structure in Germany, this appears to be a tremendous obstacle to transparency.

6 Summary and conclusions

The German legal environment imposes explicit disclosure requirements for certain legal forms, in particular for AGs. Pre-1995 rules include mandatory disclosure of annual reports and stakes in other firms larger than 20%. After 1995, with the transposition of the EU Transparency Directive, AGs listed in an official market also must disclose parties controlling more than 5% of the voting rights. Since creditor protection is deeply rooted in German commercial law, the practical efficacy of disclosure regulation is very low: the formation of groups involving less regulated legal forms as intermediate layers can substantially reduce transparency. This argument is illustrated using hypothetical examples and by documenting the deficiencies of the WpHG in providing transparency.

We further show that few large firms accounting for the major chunk of the market's capitalization and trading volume dominate German capital markets. The concentration of control is very high in the sense that 85% of all officially listed AGs have a dominant shareholder (controlling more than 25% of the voting rights). Insider trading rules do not automatically discourage agents to hold large voting blocks in German companies. Unlike in the United States, outside investors are not automatically considered insiders (to have access to private, price sensitive information) when a 10% voting power threshold is passed.

In addition, there is little inside competition for control at the firm level: only very few listed AGs have more than one large shareholder. Since there is no mandatory bid requirement like the UK has instituted, and since there are few legal differences between listed and unlisted AGs, the distribution of voting blocks is visibly driven by control thresholds derived from company law

(25%, 50%, and 75%). The only potential counterweight results from the proxy-voting mechanism that gives banks an important vote at AGMs, with all the inherent incentive problems of having a creditor represent shareholders. The German proxy voting process separates ownership, often completely, from control.

This exploratory study represents a first step towards explaining German corporate governance and ends with several open questions. Future work is necessary to compare voting power to ownership, measure the separation of ownership and control, determine the link between the distribution of voting blocks and supervisory board representation, and contrast integrated ownership (incorporating all ties between shareholders, not just majority links) to direct ownership. Such work will ultimately allow an analysis of how these phenomena affect corporate performance and other aspects of the German economy.

7 References

- Adams, M., 1994, Die Usurpation von Aktionärsbefugnissen mittels Ringverflechtung in der „Deutschland AG,“ *Die Aktiengesellschaft* 39, 148-158
- BAWe, 1996, Bedeutende Stimmrechtsanteile an amtlich notierten Aktiengesellschaften zum 30. September 1996. Frankfurt a. M.
- Becht, Marco, 1997, Strong Blockholders, Weak Owners and the Need for European Mandatory Disclosure. In *The Separation of Ownership and Control: A Survey of 7 European Countries*. Preliminary Report to the European Commission. Brussels: European Corporate Governance Network.
- Becht, M. and E. Boehmer, 1999, German pyramids, Working Paper, ULB and Humboldt University.
- Boehmer, E., 1999a, Corporate governance, ownership, and transparency in Germany, Habilitationsschrift, Humboldt University.
- Boehmer, E., 1999b, Who controls Germany? An empirical analysis, Working Paper, Humboldt University.
- DAI Factbook, 1996, Deutsches Aktieninstitut e. V., Frankfurt.
- European Corporate Governance Network, 1997, *The Separation of Ownership and Control: A Survey of 7 European Countries*. Preliminary Report to the European Commission. Brussels.
- Herrmann, U., 1997, Funktioniert die Unternehmenskontrolle durch Stiftungen?, *Zeitschrift für betriebswirtschaftliche Forschung* 49, 499-534.
- Hansen, H., 1996, Der deutsche Aktienmarkt: Entwicklungen, Veränderungen, Strukturen, *Die Aktiengesellschaft*, Sonderheft Oktober.
- Hoppenstedt, 1997, Aktienführer, Hoppenstedt Verlag, Darmstadt.
- Kümpel, S. und C. Ott, 1995, Kapitalmarktrecht, Hrsg., Schmidt Verlag, Berlin.
- Markus, 1996, Marketinguntersuchungen. CD-ROM. Published by Bureau van Dijk Electronic Publishing SA (<http://www.bvdep.com>)/Verband der Vereine Creditreform e. V.
- Nottmeier, H. and H. Schäfer, 1997, Praktische Fragen im Zusammenhang mit §§ 21,22 WpHG, *Die Aktiengesellschaft*, 2, pp. 87-96.
- Perotti, E. C. and E. L. von Thadden, 1998, Dominant investors and strategic transparency, Working Paper, University of Lausanne.
- Schneider, U., 1995, Mitteilungs- und Veröffentlichungspflichten bei Veränderungen des Stimmrechtsanteils an börsennotierten Gesellschaften, in: H.-D. Assmann, U. Schneider, Wertpapierhandelsgesetz: Kommentar, Verlag Dr. Otto Schmidt KG, Köln.
- Statistisches Jahrbuch der Bundesrepublik Deutschland, 1996, Statistisches Bundesamt, Wiesbaden.

Table 1: Important legal forms of private companies

	Limited liability	Minimum capital (thousand DM)	Smallest number of founders	Smallest number of managers	Degree of imperativeness of the legal rules
<i>Aktiengesellschaft (AG)</i>	Yes	100 ¹	1 ²	1 ³	High
Gesellschaft mit beschränkter Haftung (GmbH)	Yes	50 (at least 0.5 per owner) ⁴	1 ⁵	1 ⁶	High
Kommanditgesellschaft auf Aktien (KGaA)	General partners: No Shareholders: Yes ⁷	100 ⁸	5 ⁹	1 ¹⁰	High
Kommanditgesellschaft (KG)	General partners: No Limited partners: Yes ¹¹	-	2 ¹²	1	Medium
GmbH (or AG) & Co. KG ¹³	Yes	50	1	1	Medium
Offene Handelsgesellschaft (OHG)	No	-	1	1	Medium
Eingetragene Genossenschaft (e. G.)	Usually ¹⁴	0	7 ¹⁵	2 ¹⁶	Medium
Gesellschaft bürgerlichen Rechts (GbR)	No	-	1	1	Low
Stille Gesellschaft ¹⁷	Yes ¹⁸	-	-	-	Low
Eingetragener Verein (e. V.)	Yes	0	7 ¹⁹	1 ²⁰	Low
Stiftung ²¹	Not applicable	-	-	-	Low
Banks, any legal form except sole proprietorship	Depends on legal form	ECU 5 Mio. ²²	Depends on legal form	2 ²³	Very high

¹ § 7 AktG.

² § 2 AktG.

³ § 76 I AktG.

⁴ § 5 I GmbHG.

⁵ § 1 GmbHG.

⁶ § 6 I GmbHG.

⁷ § 278 I AktG. General partners are referred to as *Komplementäre*, shareholders as *Kommanditaktionäre*.

⁸ § 7 AktG.

⁹ § 280 AktG.

¹⁰ § 76 I AktG.

¹¹ § 161 I HGB. General partners are referred to as _____, limited partners as *Kommanditisten*.

¹² At least one general partner and at least one limited partner, § 161 I HGB.

¹³ This represents a hybrid form where the general partner of a KG is a (limited-liability) GmbH. While the GmbH & Co KG is the most widely used hybrid form, the (unlimited-liability) general partner may also be an AG, and the enclosing form may also be an OHG. If a GmbH or an AG is involved, all regulations affecting these forms still apply.

¹⁴ The e. G. is generally a limited-liability company (§ 2 GenG). Company statutes may deviate from this rule (§ 6 III GenG): In case of bankruptcy, members may be obligated to pay, in addition to their initial investment, a limited or an unlimited amount to creditors.

¹⁵ § 4 GenG.

¹⁶ § 24 II GenG.

¹⁷ This is not a stand-alone organization, but rather a way to participate in any other organizational form.

¹⁸ § 232 II HGB.

¹⁹ § 56 BGB.

²⁰ § 26 I BGB.

²¹ More precisely, this refers to „rechtsfähige Stiftungen bürgerlichen Rechts“ that operate a business.

²² § 33 I KWG, net of securities that have a cumulative preferential dividend.

²³ § 33 IV KWG.

Table 2: Definition of control over a company

Source of definition	Aim of regulation	Object of regulation	Content of regulation
Commercial code (HGB)	Defining firms that must publish consolidated annual financial statements	Aktiengesellschaft, GmbH	<p>§ 290 I: Firms within a group are controlled by a parent if they are led by the same parent company and the parent has a long-term stake in these firms (exceeding 20%, § 271 I)</p> <p>§ 290 II, qualifying the former: A parent always controls a subsidiary, if (i) it controls the majority of votes, (ii) it has the right to appoint the majority of management or supervisory board members AND controls votes, or (iii) exerts controlling influence via contractual agreements or company statutes¹</p>
Corporate code (AktG)	Definition of affiliated firms and groups, requirement for controlling firms to report their stake to the controlled firm	Aktiengesellschaft	<p>§ 15: Affiliated firms are stand-alone entities that match one of the following criteria:</p> <ul style="list-style-type: none"> • a firm is majority controlled if the parent owns a majority of the capital or the majority of the votes (§ 16 I) • a firm is dependent on a parent if the latter can directly or indirectly exert controlling influence or has majority control (§ 17) • firms form a group (Konzern) if firms are under common leadership (§ 18) • firms are mutually involved in each other if each owns at least 25% of the capital or the votes of the other²
Law for unlimited-liability firms (PublizitätsG)	Publication of annual financial statements	All firms except AG, GmbH, Genossenschaft, banks, insurance companies matching at least two of the following three criteria: (i) total assets > DM 150 Mio., (ii) total sales > DM 250 Mio., (iii) average employment > 5000.	<p>§ 1 V: all commercial activities of a single person form one undertaking, even if they are conducted by more than one company</p> <p>§ 11 I: Firms within a group are controlled by a parent if they are led by the same parent company</p>
Security trading law (WpHG)	Reporting of control	Aktiengesellschaft (AG) if listed in an official market	<p>§ 22: Voting rights are attributed to an entity if (excerpt):</p> <ul style="list-style-type: none"> • they are owned by a third party in the interest of the entity or a company controlled by the entity • they are owned by a company controlled by the entity • they are owned by a third party but a contractual voting agreement exists with the entity • the entity can purchase them by exercising an option • they are deposited with the entity, and it can vote in its interest unless specific instructions are given³

Source of definition	Aim of regulation	Object of regulation	Content of regulation
Law on takeovers and antitrust issues (GWB)	Control over antitrust issues	All firms	<ul style="list-style-type: none"> • § 23 I: extends §§ 17, 18 AktG to all firms and further states that if several firms jointly control another company, each of them is considered a controlling firm
Banking code (KWG)	Defining consolidated regulatory equity of a financial holding	Credit institutions in all legal forms	<p>§ 1 VI, VII, and VIII: refer to § 290 HGB but extends the definition to all legal forms</p> <p>§ 1 IX: A major stake exists if a company owns directly or indirectly at least 10% of the capital or of the voting rights or if it holds any stake and can exert material control over management</p> <p>§ 10 II: A financial group exists if a bank owns at least 40% of a company that operates a banking-related business</p>

¹ § 290 III, IV further qualify control by adding influence exerted by other subsidiaries of the parent company and subtracting influence exerted on behalf of third parties.

² Mutually involved firms may exercise at most 25% of the votes in each other, unless one of the firms controls more than 50% of the other (§ 19 IV, § 328 AktG). In the latter case, all votes may be exercised.

³ According to the BAWe and Schneider (1995), this does not include votes from shares deposited with banks.

Table 3: Ownership information that must be provided with the annual financial statements¹

	Rules requiring information on stakes in other companies in the annual accounts	Rules requiring information on company owners in the annual accounts if the stake owner is a company	Rules requiring information on company owners in the annual accounts if the stake owner is an individual	Availability of annual accounts to the public
Aktiengesellschaft (AG)	Stakes > 20% ^{2,3}	Stakes > 25% ⁴	No	Yes ⁵
Gesellschaft mit beschränkter Haftung (GmbH)	Stakes > 20% ²	All stakes ⁶	All stakes ⁶	Yes ⁵
Kommanditgesellschaft auf Aktien (KGaA)	Stakes > 20% ^{2,3}	Stakes > 25% ⁴	No	Yes ⁵
Kommanditgesellschaft (KG)	No	No	No	Small: No; Large: Yes
GmbH (or AG) & Co. KG	No	No	No	Small: No; Large: Yes
Offene Handelsgesellschaft (OHG)	No	No	No	Small: No; Large: Yes
Eingetragene Genossenschaft (e. G.)	Stakes > 20% ⁷	Stakes > 50% ⁸	No	Yes ⁹
Gesellschaft bürgerlichen Rechts (GbR)	No	No	No	Small: No; Large: Yes
Stille Gesellschaft	No	No	No	No
Eingetragener Verein (e. V.)	Small: No; Large: Yes ¹⁰	No	No	Small: No; Large: Yes
Stiftung	Small: No; Large: Yes ¹⁰	No	No	Small: No; Large: Yes
Banks ¹¹	Stakes > 20% ¹²	AG: stakes > 25%; others: stakes > 50% ¹³	No	Yes ¹⁴
Insurance companies ¹⁵	Stakes > 20% ¹⁶	AG: stakes > 25%; others: stakes > 50% ¹⁷	No	Yes ¹⁸

¹ The categorization „small“ and „large“ in the body of the table refers to companies regulated by the PublizitätsG. § 1 classifies a company as „large“ in this context if it meets two of the following three criteria: (i) total assets exceed DM 125 Mio., (ii) Total sales exceed DM 250 Mio., (iii) average employment exceeds 5000 during the previous financial year.

² § 285 XI HGB requires disclosure of the percentage stake in the target firm (if larger than 20% of the target capital), the targets nominal capital and its profit. § 286 III HGB exempts those stakes from disclosure that either have a minor effect on presenting the financial status of the reporting firm or whose disclosure could harm one of the two firms. § 313 II HGB further regulates how stakes are to be consolidated.

³ In addition, AGs must file all contractual arrangements that give them control over other firms with the company register (§§ 294 I, 298, 319 IV 327 III AktG).

⁴ § 160 VII, VIII AktG requires disclosure of all owners of more than 25% of its shares in the annual report, but only if the owner is a company. All such stakes have to be reported to the target company by the stakeholder (§ 20 I, IV AktG) and be immediately published in a financial newspaper (§ 20 VI AktG). The reporting firm has to state whether the stake exceeds 25% or 50%, and

whether the reporting firm also holds at least a 25% stake in the stakeholder. If such stakes are not reported, the owner cannot exercise voting rights associated with this stake. In principle, this means that a stake can be bought secretly. In this paper, however, the issue is control over a company and control can only be exerted if the target company is notified. Thus, we can regard the reporting requirement in § 20 AktG as binding for our purposes.

⁵ §§ 325-329 HGB.

⁶ § 40 I GmbHG. Information on owners must be published immediately (as opposed to annually) if all stakes are taken over by a single individual or company (§ 40 II GmbHG).

⁷ § 336 HGB, § 285 XI HGB.

⁸ § 336 HGB, § 285 XIV HGB. The majority owner must be named publicly if it includes the subsidiary in its consolidated annual report.

⁹ § 339 HGB.

¹⁰ § 5 II PublizitätsG, § 285 XI HGB.

¹¹ As defined in § 340 HGB and §§ 1f KWG.

¹² § 340i HGB, § 311 HGB, § 285 XI HGB.

¹³ § 160 VII, VIII AktG, and § 340i HGB referring to § 285 XIV HGB, respectively. Also, see note 8.

¹⁴ § 340I I HGB.

¹⁵ As defined in § 341 HGB.

¹⁶ § 341i HGB, § 311 HGB, § 285 XI HGB.

¹⁷ § 160 VII, VIII AktG and § 341i HGB referring to § 285 XIV HGB, respectively. Also, see note 8.

¹⁸ § 341I I HGB.

Table 4: Legal requirements on publishing ownership information

	Deposit of list of founding members publicly	Deposit current company statutes publicly	Deposit current list of owners publicly	Restrictions on transfers of ownership	Repurchase of own shares
Aktiengesellschaft (AG)	Yes ¹	Company register	No ^{2,3,4}	None for bearer shares, notification of company for registered shares ⁵	No ⁶
Gesellschaft mit beschränkter Haftung (GmbH)	Yes ⁷	Company register	Company register ⁸	Notarized sale ⁹	Yes ¹⁰
Kommanditgesellschaft auf Aktien (KGaA)	Yes ¹¹	Company register	Company register, only general partners ^{12,3,4}	See AG for transfers of limited shares. See OHG for changes of general partners	No ⁶
Kommanditgesellschaft (KG)	Yes ¹³	No	Company register ¹⁴	No transfers unless defined in company statutes or approved by all partners ¹⁵	Not applicable for general partners, yes for limited shares ¹⁶
GmbH (or AG) & Co. KG	Yes	Company register	Company register ^{8,14}	See GmbH for transfers of GmbH shares and KG for transfers of limited shares	See GmbH for GmbH shares and KG for limited shares
Offene Handelsgesellschaft (OHG)	Yes ¹⁷	No	Company register ¹⁸	No transfers unless defined in company statutes or approved by all partners ¹⁹	Not applicable
Eingetragene Genossenschaft (e. G.)	No ²⁰	Register for cooperatives	No	None unless imposed by statutes ²¹	Possible ²²
Gesellschaft bürgerlichen Rechts (GbR)	No	No	No	No transfers unless defined in statutes or approved by all partners	Not applicable
Stille Gesellschaft	No	No	No	No transfers unless defined in partnership contract or approved by all partners	Not applicable
Eingetragener Verein (e. V.)	Management only ²³	Register of unions ²⁴	No	No transfers possible ²⁵	Not applicable
Stiftung	not applicable	No	not applicable	Not applicable	Not applicable

	Deposit of list of founding members publicly	Deposit current company statutes publicly	Deposit current list of owners publicly	Restrictions on transfers of ownership	Repurchase of own shares
Banks ²⁶			No ²⁷		
Insurance companies		Company register	AGs: see above Mutuals: No	Yes, ²⁸ also see AG	No, see AG if organized as AG

¹ § 39f AktG. Among other things, firms must register nominal share capital as well as name, profession, and addresses of founders and of members of the first supervisory board.

² There are two exceptions to this rule. First, an AG where all shares are owned by one person, the shareholder must register name, profession, and address (§ 42 AktG). Second, if a company owns 25% of the capital, or 25 or 50% of capital *or* votes in an AG, it must notify the AG (§ 20 I, IV AktG). The AG, in turn, must immediately publish this information in a financial newspaper (§ 20 VI AktG). § 20 AktG, however, applies only to companies and not to individuals.

³ Owners who decide to vote personally at the AGM are publicly known, because § 129 I AktG requires that each shareholder present at the AGM is registered. This list is public and is later deposited with the company register. De facto, however, the list does not provide informative knowledge about the owners of the AG, because proxy votes delegated to banks or other entities cannot be traced back to the owner, even though the owner may have given explicit instructions on how to vote (§ 129 II, III AktG).

⁴ In addition, stake purchases leading to ownership crossing 25% or 50% must be filed immediately for approval by the BKartA, if the combined sales of buyer and target exceed DM 500 Mio. (§ 23 GWB). These filings are generally publicly available if the acquisition is approved.

⁵ § 67f AktG. The company statutes may require approval by the management board, supervisory board, or general assembly.

⁶ § 71 AktG. The major exceptions include repurchases to avoid substantial and imminent damage to the company, to issue shares to employees, or to pay a consideration associated with a takeover or similar transaction. All own holdings must be listed in the annual financial statements (§ 160 I, II AktG). Holdings of own shares must never exceed 10% of nominal capital. A further exception applies to financial institutions that may repurchase, with approval of the AGM, up to 5% of their own shares for trading purposes. Repurchased shares lose all of their rights, including dividend claims and voting rights.

⁷ § 8 GmbHG. Among other things, firms must register nominal capital as well as name, profession, and addresses of founders.

⁸ § 53f GmbHG.

⁹ § 15 GmbHG. The statutes may require approval by the company.

¹⁰ § 33 GmbHG. Repurchases are only allowed if nominal capital is fully paid in and the repurchase does not reduce nominal capital.

¹¹ §§ 39f, 282 AktG. Requirements are the same as for AGs, except that the KGaA files the name of the general partners instead of those of the management board.

¹² § 282f AktG.

¹³ §§ 106, 162 HGB. The filing includes the identity of general and limited partners and their individual shares in the firm's capital. Even though the required publication according to § 10 I HGB (which requires the company register to publish records in the government newspaper) does not include the names of limited partners, these names can be obtained directly from the register.

¹⁴ §§ 107, 175 HGB.

¹⁵ §§ 131-144 HGB for changes in general partners; § 174, 175 HGB for changes in limited partners.

¹⁶ Absent other rules in the company statutes, the repurchase of limited shares (or other changes in limited partners or capital) requires approval by all partners (§ 174, 175 HGB).

¹⁷ § 106 HGB.

¹⁸ § 107 HGB.

¹⁹ §§ 131-144 HGB.

²⁰ Only the members of the managing board must be published (§ 10 I GenG).

²¹ § 76 I GenG.

²² In the context of cooperatives, the repurchase of own shares amounts to terminating membership. The company has certain rights to expel members, which can be defined in the statutes (§ 68 GenG). Any member has the right to terminate membership, but has to adhere to certain waiting periods (§65 I, II GenG). Statutes can extend the waiting period up to five years, but cannot deny the

termination right for members. In addition, membership can be terminated for other reason, such as bankruptcy of a member (§ 66 I GenG) or, under certain conditions, after a change in statutes (§ 67a GenG).

²³ § 64 BGB.

²⁴ Refers to the *Vereinsregister*, § 59 BGB.

²⁵ § 38 BGB.

²⁶ As defined in § 340 HGB and §§ 1f KWG.

²⁷ Several filing requirements exist for banks, which must provide information on their stakes in other companies and on their ownership to the Bundesamt für Kreditwesen and to the Deutsche

²⁸ All stakes exceeding 10% of share capital for AGs or founding capital for mutuals must be approved by the BAV (§ 7a VAG).

Table 5: Accessibility and availability of ownership data

	Legal forms	Accessibility of data	Availability of data on computer
Company registers, registers of cooperatives ¹	All	Yes	No ²
Market Supervision Authority (Bundesamt für den Wertpapierhandel (BAWe), founded in 1996)	AGs listed in an official stock market	Annual publications of control rights exceeding 5%, but only a snapshot and no information on changes ³	Only the data contained in annual publications
Banking Supervision Authorities (Bundesaufsichtsamt für Kreditwesen, Deutsche Bundesbank)	Financial institutions	No ⁴	No
Insurance Companies Supervision Authority	Insurance companies		No
Competition Authorities (Bundeskartellamt, BKartA)	All	Monthly publications of takeover filings	No

¹ The register of cooperatives is held at the same courts that hold the company registers (§ 10 II GenG).

² The company registers are administered in a decentralized way by local courts. Although § 8a HGB allows a computerized register, to our knowledge no court is using this option to date.

³ According to BAWe (1997), the office is planning disclosures that are more elaborate. The full text of publications on share-price relevant events as required by the insider regulation is already available on several WWW sites.

⁴ The Bundesbank publishes aggregate figures of banking and other economic activity periodically, but does not provide data on individual institutions.

Table 6: Shareholders' meetings and boards of Aktiengesellschaften

	% of capital needed to initiate an irregular AGM	Depositing of shares before the AGM	Maximum term of appointment for management board (MB) and supervisory board (SB) executives	Disclosure of executive compensation	Disclosure of information upon request of individual shareholders at the AGM	Disclosure of executive trading in shares of their company	Legal actions by shareholders against executives
Aktiengesellschaft (AG)	5 ¹	3 or 10 days ²	MB: 5 years, renewable ³ SB: 4 years, renewable ⁴	Aggregates for MB and SB, respectively ⁵	Since 1993: Stakes in other firms exceeding 10% of their votes or capital, or DM 100 Mio market value and the identity of large owners ⁶	No	Yes ⁷
Additional requirements or special rules for listed companies	None	None	None	None	None	No ⁸	None

¹ § 122 I AktG. Company statutes may specify a smaller percentage.

² § 123 III, IV AktG. Company statutes may require that shareholders deposit their shares with a notary or a financial institution (under discretion of the shareholders) at least 10 days before the AGM. Statutes may further require that shareholders register for the AGM at least three days before the meeting.

³ § 84 I AktG.

⁴ § 102 I AktG.

⁵ § 285 IX HGB. The aggregate must include all compensation and other benefits to board members that have accrued during the past financial year. Companies are exempt from this rule, if publishing this information allows the public to identify compensation paid to a specific individual (§ 286 IV AktG).

⁶ § 131 AktG and KG, 26.8.93 - 2 W 6111/92, ZIP 1993, 1618. This ruling was the result of a successful suit of E. Wenger against Siemens AG. The court argues that since the EU Transparency Directive requires disclosure of 10% stakes to the public, at least the same right should apply to shareholders of the firm. Thus, Schneider (1995) expects that after 1996, when the transposition of the Transparency Directive becomes effective, stakes exceeding 5% must be disclosed to shareholders. According to Schneider, it is not clear, however, whether this only applies to stakes in listed firms or to stakes in any firm. Schneider's argument that large owners must be disclosed upon request follows the same reasoning.

⁷ If executives violate their fiduciary duty according to § 93 AktG, they are generally personally liable for damages to the company. Shareholders representing at least 10% of capital can initiate legal proceedings against executives.

⁸ § 17 WpHG explicitly specifies for AGs listed in an official market that data related to specific individuals must be deleted unless it is relevant to a currently prosecuted insider-trading violation. In no instance must this information be published before publicly accessible court proceedings.

Table 7: Proxy rules

	Can company employees exercise proxy votes?	Can banks exercise proxy votes?	Can other individuals or organizations exercise proxy votes?
Aktiengesellschaft	Yes ¹	Yes ¹	Yes ¹
Additional req. or spec. rules for listed companies	None	None	None

¹ § 135 AktG. All proxy votes are exercised anonymously in the sense that the owner of the votes is not named publicly (§ 129 II, III AktG).

Table 8: Important types of limited-liability equity securities

Type of share	Issuing legal form	Exchange listing	Voting rights	Requirements for new issues
Stammaktie (common stock)	AG, KGaA	Possible	Always, generally one per share	75% AGM vote ¹
Vorzugsaktie (preferred stock)	AG, KGaA	Possible	Generally no, unless the required cumulative preferential dividend is not paid in two consecutive years, and in special matters of interest to preferred-stock holders ²	75% AGM vote ³
Genußschein (participation right)	All	Possible	No	75% AGM vote ⁴
Geschäftsanteil (cooperative share)	e. G.	No	Generally one vote per member, independent of stake size ⁵	Membership request and management approval ⁶
Geschäftsanteil (GmbH share)	GmbH	No	Votes proportional to stake size ⁷	75% AGM vote ⁸

¹ § 182 AktG. The company statutes may stipulate more or less restrictive requirements.

² §§ 139-141. AGs may only issue shares without votes if they have a cumulative preferred dividend claim attached.

³ § 182 AktG. The company statutes may stipulate only requirements that are more restrictive. A different situation arises if a company has already preferred stock outstanding. In that case, old preferred-stock holders must approve new preferred share with equal or better preference with a 75% majority (not adjustable by company statutes and in addition to the AGM approval) (§141 II, III AktG). This additional vote is not required if further issues of preferred shares have been explicitly approved before the first preferred issue.

⁴ For AGs and KGaAs: § 221 AktG. The company statutes may stipulate more or less restrictive requirements. For all other forms, issuance generally requires 75% majorities.

⁵ § 43 III GenG. The statutes can grant a maximum of three more voting rights to specific members.

⁶ § 15 GenG. Increasing the share of existing members requires a 75% AGM majority (§ 16 II GenG).

⁷ § 47 II GmbHG.

⁸ A seasoned equity offering by a GmbH requires a change of statutes and thus a 75% majority (§§ 3 I, 53 II GmbHG).

Table 9: Legal devices to leverage control relative to ownership in listed AGs

Device	Current relevance	Limitations	Implications for transparency
Non-voting shares	All AGs can issue two classes of stock	Nominal value of non-voting shares must not exceed that of voting shares	None: distribution of voting rights across classes of stock published in annual report
Multiple-vote shares ¹	Only relevant in a few formerly state-owned firms	Illegal unless specifically approved by state government	None: shareholders with multiple voting rights per share are published in annual report
Voting caps ²	May be imposed by company statutes	In practice easy to circumvent	Reduces transparency: to circumvent caps, shareholdings must be disguised by depositing them with friendly parties
Proxy Voting	Possible in all AGs. Widely used by banks, especially in listed companies with a significant % of dispersed shareholdings	Voting instructions must be sought; but usually no instructions are provided	Reduces transparency significantly. It is not possible to determine who owns the shares and who controls the votes (the owner or the person voting the shares)
Large share blocks	Widely used, weak minority protection allows blockholders to pursue interests that may not match that of other shareholders	Certain (legal) transfers from minority shareholders require 75% AGM votes	None given the WpHG: voting blocks must be disclosed
Pyramids	Widely used	None except potentially higher administrative costs	Reduces transparency: intermediate levels may legally hide true ownership structure
Cross shareholdings	Widely used	Need at least three companies to circumvent voting limitation	(see comment on pyramids)
Contractual control arrangement	Widely used	Requires 75% AGM vote	None: must be published in annual report
Personal interlockings	Widely used	Needs supporting voting block at AGM (blockholder, bank)	Reduces transparency: affiliation of supervisory board members is often not obvious; often creditors without shareholdings are represented who do not benefit from providing transparency to (potential) shareholders

¹ Multiple voting rights are illegal as of May 1st, 1998, and existing ones have to be phased out over a five-year period (KonTraG).

² Voting caps are illegal as of May 1st, 1998, and existing ones have to be phased out over a two-year period (KonTraG).

Table 10: Descriptive statistics on listed AGs in 1995

	Amtlicher Handel (official market)	Geregelter Markt (regulated market)	Freiverkehr (OTC market) ¹	All segments
Number of AGs, of which	755	194	869	1818
domestic firms	522	173	117	812
foreign firms	233	21	752	1006
Market value of domestic firms (DM Bn.)	795	19	12	826
IPOs of domestic AGs 1977 - 1995	121	127	21	269

Source: DAI Factbook 1996

¹ Geregelter Freiverkehr until April 1987, then Freiverkehr.

Table 11: Descriptive statistics on share trading and ownership in 1995

1995	All shares	Domestic shares
Trading volume ¹ (DM Bn.)	1683	1644
Share of total volume by the 5% highest-volume companies		83%
Share of total market value by the 5% highest-valued companies		67%
Trading volume / market capitalization (1993)	114%	
Trading volume / GDP (1993)	30%	
Market capitalization / GDP (1993)	24%	
Shares as a percentage of total assets of private households	5.3%	
Percentage of population holding shares	5.5%	
Percentage of shares held by private households	14.6%	
Shares as a percentage of total financial portfolio of private households	32.8%	21.7%
Percentage of shares held by companies	42.1%	
Percentage of shares held by banks	10.3%	
Percentage of shares held by investment companies	7.6%	
Percentage of shares held by insurance companies	12.4%	
Percentage of shares held by government	4.3%	
Percentage of shares held by foreign owners	8.7%	

Source: DAI Factbook 1996

¹ Volume includes all transactions, regardless of whether the trade is on floor, off floor, by member firms, or by non-member firms. In addition, the reported figures include double counting.

Table 12: Number of companies by industry and sales in 1990

Industry	All companies						AG, KGaA, GmbH						KG, OHG, GmbH & Co KG						Sole proprietorships			
	Sales in DM Mio.						Sales in DM Mio.						Sales in DM Mio.						Sales in DM Mio.			
	Total	< 5	< 10	< 25	< 100	>= 100	Total	< 5	< 10	< 25	< 100	>= 100	Total	< 5	< 10	< 25	< 100	>= 100	Total	< 5	< 10	>= 10
All companies	61741	23879	11668	12922	9684	3588	28983	9854	5885	6397	4637	2210	19585	4638	3868	5275	4551	1253	12253	9161	1763	1329
Manufacturing	26150	8641	4807	5571	5051	2080	13070	4071	2499	2726	2471	1303	9552	2012	1778	2566	2464	732	3324	2483	498	343
Chemicals	853	127	117	183	250	176	524	83	55	102	134	150	305	34	56	75	114	26	24	10	6	8
Plastics	1564	466	295	398	316	89	934	291	187	225	169	62	508	101	82	154	144	27	121	73	26	22
Rubber	164	52	17	25	34	36	92	23	10	17	20	22	63	21	6	8	14	14	8	?	?	?
Stone	1402	497	324	322	213	46	477	177	98	79	86	37	794	226	204	231	124	9	128	92	22	14
Ceramics	304	74	52	74	70	34	160	29	30	31	42	28	114	25	17	40	27	5	?	?	?	?
Iron	1303	357	261	309	269	107	645	181	116	156	125	67	533	91	118	144	140	40	125	85	27	13
NE-Metals	139	16	10	14	45	54	94	10	6	5	31	42	40	?	4	8	14	11	5	?	?	?
Foundries	335	69	50	94	101	21	172	41	20	44	53	14	138	17	22	46	46	7	25	11	8	6
Steel	944	310	204	227	162	41	557	186	126	132	85	28	296	56	65	90	72	13	89	66	13	10
Machines	4350	1287	805	1006	883	369	2645	796	512	594	494	249	1354	229	240	385	380	120	346	257	53	36
Cars & Trucks	631	201	123	107	119	81	335	89	77	60	59	50	202	40	30	44	57	31	93	71	16	6
Electronics	1814	471	322	366	433	222	1171	317	221	233	243	157	520	77	76	117	185	65	121	75	25	21
Metal products	1626	466	340	400	318	102	763	236	179	166	137	45	696	110	130	228	172	56	165	118	31	16
Wood	795	429	158	120	72	16	212	85	57	38	26	6	321	133	64	70	44	10	260	210	37	13
Wood products	1546	768	282	248	203	45	671	324	140	117	71	19	511	139	104	115	128	25	358	300	37	21
Paper	143	17	16	26	43	41	65	12	7	10	13	23	73	?	8	16	29	18	5	?	?	?
Paper products	535	123	92	139	130	51	281	70	49	69	64	29	213	29	35	63	65	21	41	24	8	9
Printing	1100	439	263	238	143	17	563	248	137	110	60	8	404	99	98	117	81	9	132	91	28	13
Textiles	1257	383	215	282	305	72	526	160	92	100	131	43	605	127	105	172	172	29	125	96	17	12
Clothing	919	303	166	210	194	46	428	142	93	92	81	20	366	74	59	99	108	26	125	87	14	24
Food	2271	774	312	423	461	301	723	154	98	158	189	124	845	173	121	190	222	139	531	398	63	70
Construction	5083	2735	1003	829	430	86	2469	1293	527	415	183	51	1494	480	376	359	244	35	1102	946	99	57
Wholesale	16405	5216	3158	3957	3050	1024	8446	2534	1716	2119	1481	596	4745	965	849	1298	1274	359	2572	1615	478	479
Retail	11742	5883	2327	2334	979	219	4015	1499	980	1036	403	97	3114	831	730	938	503	112	4573	3530	614	429

Source: Deutsche Bundesbank 1996

Table 13: Taxable value (Einheitswert) of commercial companies in 1989 by legal form¹

Legal form	Number of reporting firms	Taxable value in DM Mio.	Average value in DM Mio.
Total	580396	755767	1.30
Individuals	234058	61920	0.26
Companies, of which	346338	693847	2.00
Aktiengesellschaften (AGs), Kommanditgesellschaften auf Aktien (KGaAs)	1774	210366	118.58
Gesellschaften mit beschränkter Haftung (GmbHs)	230037	214839	0.93
Genossenschaften ²	2286	6256	2.74
Offene Handelsgesellschaften (OHGs), Kommanditgesellschaften (KGs), and similar forms	108372	246741	2.28
Firms owned by state and municipalities	1354	12217	9.02
Others	2515	3427	1.36

Source: Statistisches Jahrbuch 1996

¹ West Germany only, excluding financial institutions, insurance companies investment funds, and holding companies.

² Erwerbs- und Wirtschaftsgenossenschaften.

Table 14: Sales taxed with value-added tax by legal form and sales in 1992¹

Legal form (Number of firms)		Sales in DM Mio., percentage of total taxable sale											
		25 000- 50 000	50 000- 100 000	100 000- 250 000	250 000- 500 000	500 000- 1 Mio.	1 Mio.- 5 Mio.	5 Mio.- 10 Mio.	10 Mio.- 25 Mio.	25 Mio.- 50 Mio.	50 Mio.- 100 Mio.	> 100 Mio.	Total
All (2,631,812)	Mio. DM	12 172	31 526	103 428	150 291	228 922	783 980	396 355	570 526	445 591	442 344	3 163 309	6 328 444
	%	0.2	0.5	1.6	2.4	3.6	12.4	6.3	9.0	7.0	7.0	50.0	100
Proprietorships (1,926,988)	Mio. DM	10 592	27 310	86 125	114 978	152 275	334 783	84 213	71 322	30 037	16 579	22 530	950 743
	%	1.1	2.9	9.1	12.1	16.0	35.2	8.9	7.5	3.2	1.7	2.4	100
of which: OHG (210,167)	Mio. DM	932	2 250	8 183	12 977	20 032	64 348	31 072	40 297	25 324	23 127	175 191	403 734
	%	0.2	0.6	2.0	3.2	5.0	15.9	7.7	10.0	6.3	5.7	43.4	100
KG (87,317)	Mio. DM	56	190	972	2 368	6 719	73 794	81 526	176 524	177 081	191 154	709 435	1 419 818
	%	0.0	0.0	0.1	0.2	0.5	5.2	5.7	12.4	12.5	13.5	50.0	100
AG, KGaA, bergrechtl.	Mio. DM	1	5	21	42	109	921	1 078	3 306	5 894	13 252	1 204 503	1 229 132
Gewerkschaften (2,164)	%	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.3	0.5	1.1	98.0	100
GmbH (359,358)	Mio. DM	368	1 219	6 817	18 161	46 597	289 820	182 220	250 276	180 154	164 462	841 237	1 981 329
	%	0.0	0.1	0.3	0.9	2.4	14.6	9.2	12.6	9.1	8.3	42.5	100
Cooperatives ² (10,151)	Mio. DM	15	45	170	353	805	8 489	8 119	12 805	11 466	13 578	64 330	120 176
	%	0.0	0.0	0.1	0.3	0.7	7.1	6.8	10.7	9.5	11.3	53.5	100
Firms owned by state and municipalities (6,012)	Mio. DM	8	32	168	346	737	3 536	2 151	3 324	3 760	5 073	75 403	94 538
	%	0.0	0.0	0.2	0.4	0.8	3.7	2.3	3.5	4.0	5.4	79.8	100

Source: Statistisches Jahrbuch 1996

¹ West Germany only, excluding financial institutions, insurance companies investment funds, and holding companies.

² Erwerbs- und Wirtschaftsgenossenschaften.

Table 15: Financial institutions in 1995

Type of institution	Number of institutions	Total assets in DM Mio. ¹	Average total assets in DM Mio.
All institutions	3622	7538879	2081
Credit banks (Kreditbanken)	335	1824933	5448
State banks (Girozentralen)	13	1370397	105415
State savings banks (Sparkassen)	626	1512917	2417
Cooperative head banks (Genossenschaftliche Zentralbanken)	4	263630	65908
Credit unions (Kreditgenossenschaften)	2591	882082	340
Real estate banks, private and state-owned (Hypothekenbanken, öffentlich-rechtliche Grundkreditanstalten)	35	968728	27678
Special credit institutions (Kreditinstitute mit Sonderaufgaben)	18	716192	39788

Source: Statistisches Jahrbuch 1996

¹ Excluding assets of foreign subsidiaries and real-estate savings banks (Bausparkassen).

Table 16: Insurance companies in 1994

Type	Number of reporting companies	Gross premia in DM Mio.	Average gross premia in DM Mio.
Life insurance	120	83976	700
Pension insurance	1115	3528	3
Health insurance	101	28007	277
Property damage and casualty insurance	777	98820	127
All companies excl. reinsurance	2113	214331	101
Reinsurance	32	55218	1726

Source: Statistisches Jahrbuch 1996

Table 17. Reported voting stakes in RWE AG as reported by BAWe

Name of shareholder	Direct and attributed shares	Single vote	Attributed	Single vote
RW Holding Aktiengesellschaft	12.1			
Stadt Essen	8.1893997			
Allianz Aktiengesellschaft Holding	8.1169996		7.676000118	
Quarta-Vermögensverwaltungsgesellschaft mbH	6			

Source: BAWe (1996), p. 60

Table 18. Reported voting stakes in Aachener und Münchener Versicherung AG

Name of shareholder	Direct	Direct & attributed	Attributed	Blocks
AMB Aachener und Münchener Beteiligungs-Aktiengesellschaft	75.50	77.00	1.50	77.00

Source: BAWe (1996) and own calculations

Table 19. Reported voting stakes in AGIV AG: Source of attributed votes is ambiguous

Name of shareholder	Direct	Direct and attributed	Attributed	Blocks
BHF-Bank AG	48.70	48.70		48.70
EVS AG	0.00	10.01	10.01	10.01?
STOCK Beteiligungsgesellschaft mbH	10.01	10.01		0.00?

Source: BAWe (1996) and own calculations

Table 20. Reported voting stakes in Rhenag AG: Parent company is ambiguous

Name of shareholder	Direct	Direct and attributed	Attributed	Blocks
RWE AG	0.00	54.09	54.09	54.09
RWE Energie AG	54.09	54.09		
Preussen Elektra AG	0.00	40.00	40.00	?
VEBA AG	0.00	40.00	40.00	40.00
Thüga AG	40.00	40.00		

Source: BAWe (1996) and own calculations.

Table 21. Reported voting stakes in Markt- und Kühlhallen AG: Number of blocks

Name of shareholder	Direct	Direct and attributed	Attributed	Blocks
DIB Industriebeteiligung GmbH & Co. Holding KG	0.00	41.41	41.41	
Doblinger, Alfons	0.00	41.41	41.41	41.41
Doblinger Industriebeteiligung KG	41.41	41.41		
BB-Kapitalbeteiligungsgesellschaft mbH	41.40	41.40		41.40

Source: BAWe (1996) and own calculations.

Table 22. Notified voting stakes in Monachia AG: Number of blocks

Name of Shareholder	Direct	Direct & Attributed	Attributed	Blocks
RWE Aktiengesellschaft	0.00	45.22	45.22	45.22
Allianz Aktiengesellschaft Holding	45.22	45.22		45.22
HOCHTIEF Aktiengesellschaft	45.22	45.22		?

Source: BAWe (1996) and own calculations.

Table 23. Number of entries per notified company

No. of entries	Frequency	Percentage
14	2	0.5
11	1	0.2
10	2	0.5
9	2	0.5
8	4	0.9
7	7	1.6
6	20	4.7
5	22	5.1
4	51	11.9
3	71	16.5
2	105	24.4
1	136	31.6
0	7	1.6
Total	430	100.0

Source: BAWe (1996, 97, 98) and own calculations. Note: BAWe (1996) lists 404 companies, but two companies had a double entry, reducing the actual number of companies to 402. These were matched to a list of all companies listed on an official market obtained by transcribing the *Börsenzeitung* of 11 January 1997. After eliminating special cases, 430 companies were investigated. Seven companies had not received any notifications (0 entries in the table). See the main text for further details on the construction of the dataset.

Table 24. Companies with the largest number of notifications

Company name	Number of entries	Type of owners
PORSCHE, Dr. Ing. h. c., F., Aktiengesellschaft	14	family pool
Tarkett Aktiengesellschaft	14	Standard Chartered Bank, Goldman Sachs, and several subsidiaries
SAP Aktiengesellschaft	11	founders and their holdings
Flachglas Aktiengesellschaft	10	Elders Glass Ltd and all subsidiaries (including Dahlbusch AG)
SCHWARZ Pharma Aktiengesellschaft	10	pool of heirs (Erbengemeinschaft)
Dahlbusch Aktiengesellschaft	9	Elders Glass Ltd and all subsidiaries
Süd-Chemie Aktiengesellschaft	9	different first level shareholders: individuals, banks, Allianz, the Messerschmitt Trust
FUCHS Petrolub AG Oel + Chemie	8	Fuchs family holdings and banks (the latter direct)
STEUCON Grundbesitz- und Beteiligungs-Aktiengesellschaft	8	family members over 5% and holdings
VBH Vereinigter Baubeschlag-Handel Aktiengesellschaft	8	family pool
ZWL Grundbesitz- und Beteiligungs-Aktiengesellschaft	8	family pool and holdings

Source: BAWe (1996) and own calculations

Table 25. Reported voting stakes in Tarkett AG: Number of entries per voting block vs. information content

Name of shareholder	Direct	Direct and attributed	Attributed	Blocks
Advisory Partners, L. P.	0.00	28.87	28.87	
Chartered Financial Holdings Limited	0.00	32.73	32.73	
CWB Capital Partners (Investments) Limited	0.00	32.73	32.73	
CWB Capital Partners (Nominees) Limited	32.73	32.73		
CWB Capital Partners Limited	0.00	32.73	32.73	
Goldman Sachs & Co. Verwaltungs GmbH	12.19	12.19		
Goldman Sachs Advisors, Inc.	0.00	28.87	28.87	
Goldman Sachs Advisors, L. P.	0.00	28.87	28.87	28.87
Goldman Sachs Capital Partners, L. P.	9.58	28.87	19.29	
Goldman Sachs Invest. Partners Esp. C.V.	7.10	7.10		
Rhein-Donau Capital Partners	0.00	12.19	12.19	
Standard Chartered (SFD No. 1) Limited	0.00	32.73	32.73	
Standard Chartered (SFD No. 2) Limited	0.00	32.73	32.73	
Standard Chartered Bank	0.00	32.73	32.73	32.73

Source: BAWe (1996) and own calculations

Table 26. Reported voting stakes in Herlitz AG: Informal family pools are not reported

Name of shareholder	Direct	Direct and attributed	Attributed	Blocks
Herlitz, Günter	6.36	6.36		6.36
Herlitz, Dr., Klaus	3.60	5.13	1.52	5.13

Source: BAWe (1996) and own calculations

Table 27. Reported voting stakes in Veba AG

Name of shareholder	Direct	Direct and attributed	Attributed	Blocks
Allianz Aktiengesellschaft Holding	0.01	11.46	11.45	11.46
Lambda-Vermögensverwaltungsgesellschaft mbH	10.20	10.20		?

Source: BAWe (1996) and own calculations.

Table 28. Exercised votes at Veba AG's annual general meeting, 23 May 1996

Voting Shareholders	Own shares voted	Other directly controlled shares	Deposited shares	Total shares voted	% of attending par value	% of total par value
Dresdner Bank	0	0	405,939,535	405,939,535	33.29%	16.63%
Deutsche Bank	0	0	113,401,145	113,401,145	9.30%	4.65%
Commerzbank	0	0	22,793,400	22,793,400	1.87%	0.93%
BHF-Bank	0	0	24,426,855	24,426,855	2.00%	1.00%
Bayerische Hypobank	0	0	16,782,800	16,782,800	1.38%	0.69%
Bayerische Vereinsbank	0	0	13,968,900	13,968,900	1.15%	0.57%
Chase Bank	0	0	36,202,560	36,202,560	2.97%	1.48%
Vereins-u. Westbank	0	0	13,387,755	13,387,755	1.10%	0.55%
Bankgesellschaft Berlin	5,780,800	0	2,197,795	7,978,595	0.65%	0.33%
Other German private banks	0	400,000	112,129,320	112,529,320	9.23%	4.61%
Foreign Banks	0	0	6,410,420	6,410,420	0.53%	0.26%
WestLB	0	0	42,820,065	42,820,065	3.51%	1.75%
NordLB	0	0	14,615,585	14,615,585	1.20%	0.60%
Other state banks	75,000	0	34,702,220	34,777,220	2.85%	1.42%
DG Bank	0	0	14,982,660	14,982,660	1.23%	0.61%
Other credit unions	0	0	18,244,415	18,244,415	1.50%	0.75%
Kapitalanlagegesellschaften	0	219,512,250	0	219,512,250	17.77%	8.88%
Allianz	0	0	2,797,000	2,797,000	0.23%	0.11%
Kapitalanlagegesellschaft	0	0	0	0	0.00%	0.00%
Other Companies	3,200	93,552,800	0	93,556,000	7.67%	3.83%
Shareholder Associations	0	1,258,950	1,815,005	3,073,955	0.25%	0.13%
Small Shareholders	N/A.	N/A.	N/A.	4,019,820	0.33%	0.16%
Attending						
Total Attending				1,219,423,255	100.00%	49.96%
Total Not Attending				1,221,472,445		50.04%
Total Par Value				2,440,895,700		100.00%

Source: VEBA AG and own calculations

Table 29. Reported voting stakes in DEPFA AG: No group structure reported

Name of shareholder	Direct	Direct and attributed	Attributed	Blocks
DEPFA Holding mbH	40.00	40.00		40.00

Source: BAWe (1996)

Table 30. Concentration of voting blocks of 430 officially listed *Aktiengesellschaften*

	C ₁			C ₃			C ₅			C _{all}		
A. Empirical Distribution												
Range	Freq.	%	Cum. %	Freq.	%	Cum. %	Freq.	%	Cum. %	Freq.	%	Cum. %
0-4.99	7	1.63	1.63	7	1.63	1.63	7	1.63	1.63	7	1.63	1.63
5-9.99	10	2.33	3.95	8	1.86	3.49	8	1.86	3.49	8	1.86	3.49
10-14.99	25	5.81	9.77	11	2.56	6.05	11	2.56	6.05	11	2.56	6.05
15-19.99	15	3.49	13.26	4	0.93	6.98	4	0.93	6.98	4	0.93	6.98
20-24.99	19	4.42	17.67	4	0.93	7.91	4	0.93	7.91	4	0.93	7.91
25-29.99	32	7.44	25.12	12	2.79	10.7	12	2.79	10.7	12	2.79	10.7
30-34.99	11	2.56	27.67	16	3.72	14.42	12	2.79	13.49	12	2.79	13.49
35-39.99	9	2.09	29.77	12	2.79	17.21	11	2.56	16.05	11	2.56	16.05
40-44.99	11	2.56	32.33	12	2.79	20	10	2.33	18.37	10	2.33	18.37
45-49.99	13	3.02	35.35	17	3.95	23.95	15	3.49	21.86	14	3.26	21.63
50-54.99	39	9.07	44.42	18	4.19	28.14	15	3.49	25.35	16	3.72	25.35
55-59.99	13	3.02	47.44	16	3.72	31.86	12	2.79	28.14	11	2.56	27.91
60-64.99	21	4.88	52.33	22	5.12	36.98	27	6.28	34.42	26	6.05	33.95
65-69.99	12	2.79	55.12	16	3.72	40.7	15	3.49	37.91	15	3.49	37.44
70-74.99	20	4.65	59.77	21	4.88	45.58	19	4.42	42.33	19	4.42	41.86
75-79.99	49	11.4	71.16	53	12.33	57.91	58	13.49	55.81	57	13.26	55.12
80-84.99	11	2.56	73.72	28	6.51	64.42	29	6.74	62.56	31	7.21	62.33
85-89.99	21	4.88	78.6	33	7.67	72.09	36	8.37	70.93	37	8.6	70.93
90-94.99	27	6.28	84.88	36	8.37	80.47	37	8.6	79.53	36	8.37	79.3
95-100	65	15.12	100	84	19.53	100	88	20.47	100	89	20.7	100
Total	430	100		430	100		430	100		430	100	
B. Descriptive Statistics												
Min.	0.0			0.0			0.0			0.0		
Median	62.4			75.4			76.2			76.5		
Mean	58.9			68.7			70.0			70.2		
Max.	100.0			100.0			100.0			100.0		

C_n is defined as the sum of the *n* largest voting blocks per company. Source: BAWe (1996, 97, 98) and own calculations. Note: BAWe (1996) lists 404 companies, but two companies had a double entry, reducing the actual number of companies to 402. These were matched to a list of all companies listed on an official market obtained by transcribing the *Börsenzeitung* of 11 January 1997. After eliminating special cases, 430 companies were investigated. Seven companies had received no notifications (0 entries in the table). See text for further details on the construction of the dataset.

Table 31. Number of blocks in 430 officially listed Aktiengesellschaften

Number of blocks per company	Companies		
	Frequency	Percent	Cumulative percentage
1	256	59.5	59.5
2	88	20.5	80.0
3	38	8.8	88.8
4	35	8.1	97.0
5	5	1.2	98.1
6	6	1.4	99.5
7	1	0.2	99.8
8	1	0.2	100.0
Total	430	100	

Source: BAWe (1996, 97, 98) and own calculations. Note: BAWe (1996) lists 404 companies, but two companies had a double entry, reducing the actual number of companies to 402. These were matched to a list of all companies listed on an official market obtained by transcribing the *Börsenzeitung* of 11 January 1997. After eliminating special cases, 430 companies were investigated. Seven companies had not received any notifications (0 entries in the table). See the main text for further details on the construction of the dataset.

Table 32. Shareholders controlling votes in 4 or more officially listed Aktiengesellschaften

Blockholder Name	N	Mean	Median	Min.	Max.
Deutsche Bank Aktiengesellschaft	27	22.3	11.0	5.0	94.3
Allianz Aktiengesellschaft Holding	25	17.0	12.4	5.0	46.5
VIAG Aktiengesellschaft	14	48.4	50.6	6.8	98.3
Dresdner Bank Aktiengesellschaft	14	28.0	14.5	6.5	96.5
Münchener Rückversicherungs-Gesellschaft Aktiengesellschaft	14	23.8	15.3	5.0	96.7
RWE Aktiengesellschaft	10	65.0	65.2	34.9	99.5
Bayerische Vereinsbank Aktiengesellschaft	9	56.3	75.0	9.9	85.4
Commerzbank Aktiengesellschaft	8	28.7	12.2	10.0	97.5
VEBA Aktiengesellschaft	6	37.6	41.7	14.0	56.3
DG Bank, Deutsche Genossenschaftsbank	6	18.2	8.5	5.4	55.4
Bayerische Hypotheken- und Wechselbank Aktiengesellschaft	6	34.7	29.9	5.0	75.8
Oetker, Rudolf August	5	82.8	86.7	64.0	96.6
METRO Holding Aktiengesellschaft	5	80.2	75.8	67.2	95.6
Bayerische Landesbank Girozentrale	5	28.6	25.0	10.0	61.4
Deutsche Babcock Aktiengesellschaft	5	69.7	67.3	65.5	75.5
WestLB Westdeutsche Landesbank, Girozentrale	5	12.9	9.7	7.2	29.1
BW Bank Baden-Württembergische Bank Aktiengesellschaft	5	10.8	12.6	6.3	15.0
AMB Aachener und Münchener Beteiligungs-Aktiengesellschaft	5	81.3	77.0	75.2	98.4
Württembergische Aktiengesellschaft Versicherungs-Beteiligungsgesellschaft	5	39.7	25.1	5.0	97.3
Merckle, Adolf	4	33.6	30.5	10.4	63.2
Gothaer Lebensversicherung a. G.	4	19.7	10.0	10.0	48.9
Schickedanz Holding-Stiftung & Co. KG	4	65.1	69.5	25.0	96.6
AGIV Aktiengesellschaft für Industrie und Verkehrswesen	4	70.8	67.8	50.6	96.9
Bayerische Braustiftung Josef Schörghuber & Co. Holding KG	4	79.1	84.5	49.3	98.1
BHF-Bank Berliner Handels- und Frankfurter Bank Aktiengesellschaft	4	34.7	29.4	5.1	75.1

Table 33. Number of blockholders and the number of their holdings in 430 officially listed Aktiengesellschaften

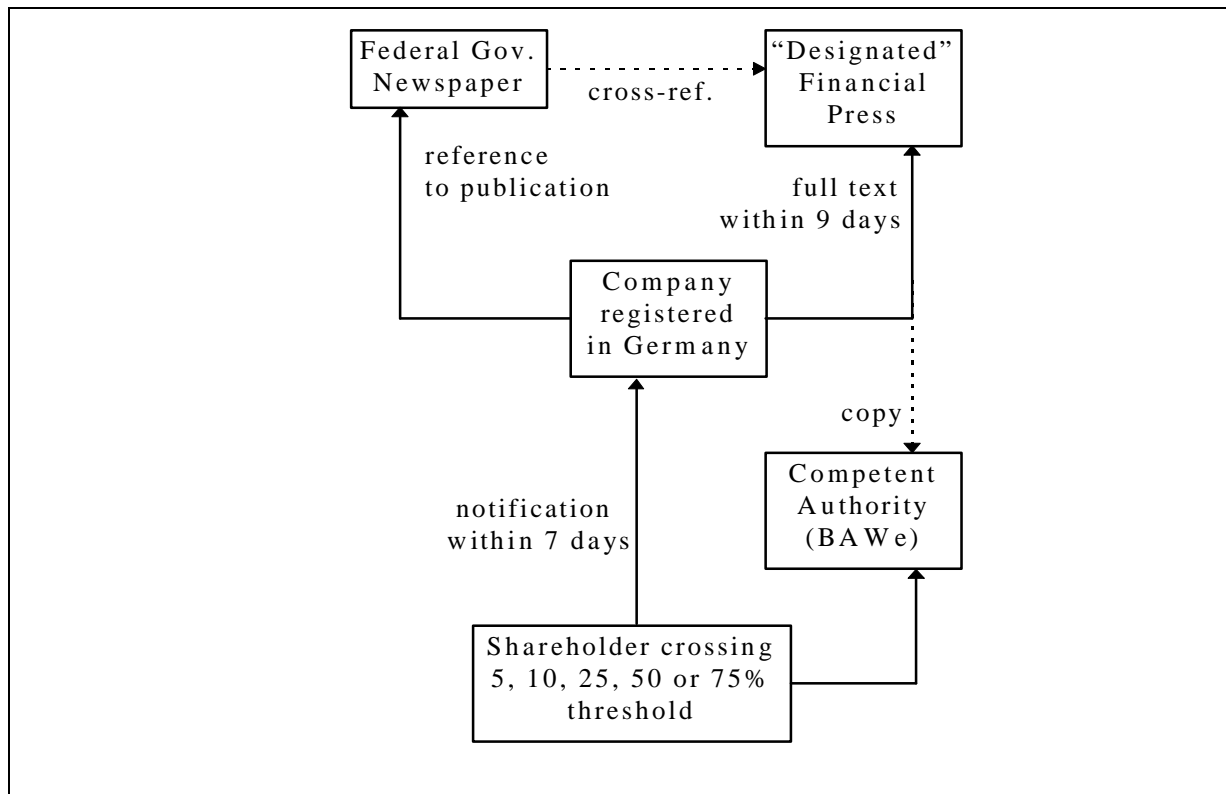
Number of blocks held by blockholder	Blockholders		
	Frequency	Percent	Cumulative percentage
1	437	85.02	85.02
2	41	7.98	93
3	11	2.14	95.14
4	6	1.17	96.3
5	8	1.56	97.86
6	3	0.58	98.44
8	1	0.19	98.64
9	1	0.19	98.83
10	1	0.19	99.03
14	3	0.58	99.61
25	1	0.19	99.81
27	1	0.19	100
Total	514	100	

Source: BAWe (1996, 97, 98) and own calculations.

Table 34. Control of voting blocks by blockholder type of shareholder in 430 officially listed *Aktiengesellschaften*

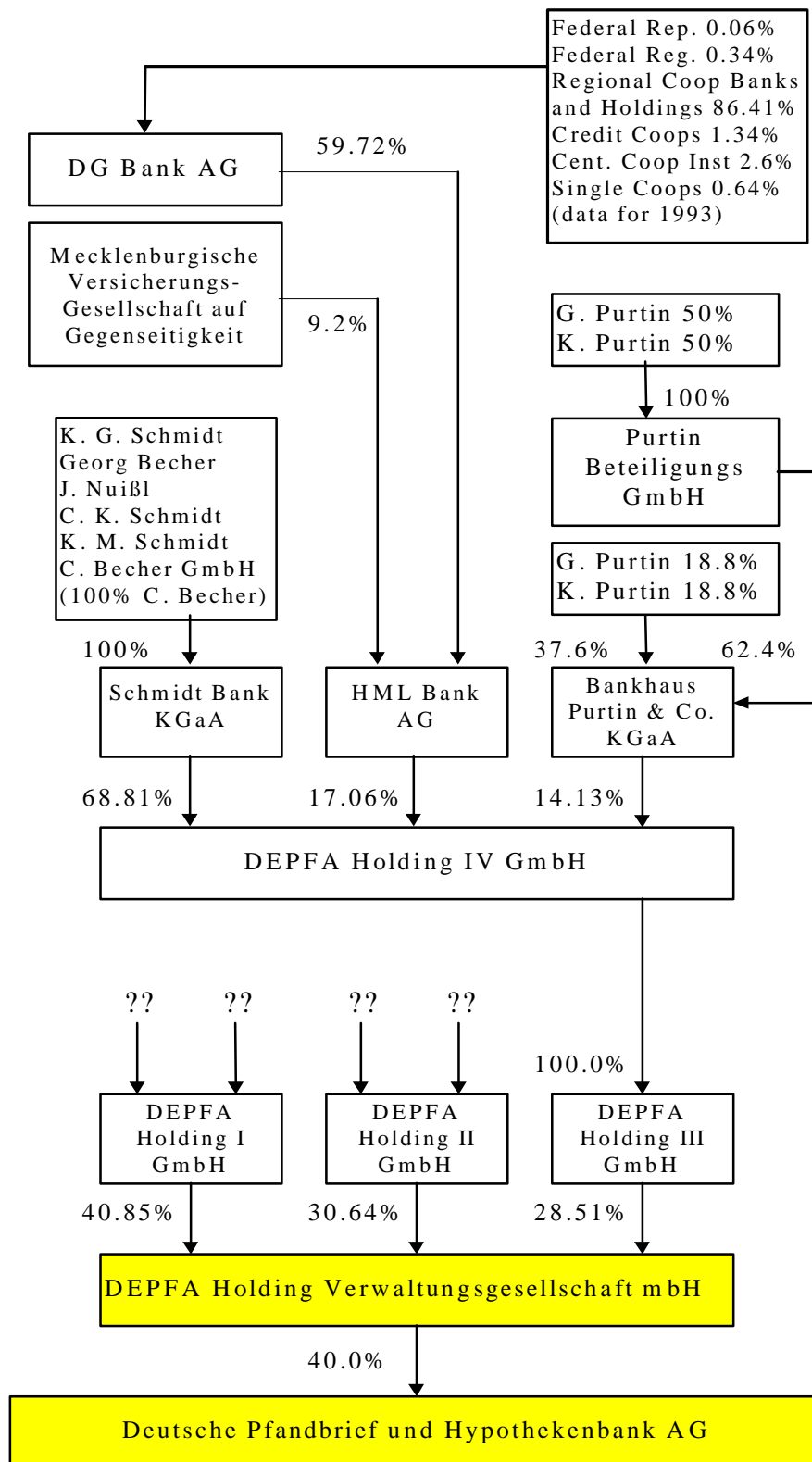
Blockholder Type	Number of Blocks	Minimum %	Median %	Mean %	Maximum %
Foreign government	3	13.0	20.2	18.9	23.6
Bank	116	5.0	15.0	29.0	99.0
Industrial firm	186	5.0	70.6	61.2	100.0
Association, GbR, worker/family pool, coops	21	5.9	49.1	45.2	100.0
Government	23	8.2	37.5	43.9	99.0
Holding	59	6.2	42.9	51.0	100.0
Investment firm	41	5.5	25.2	39.8	99.0
Bank-related investment firm	11	5.0	25.1	30.6	97.3
Individual	207	5.0	18.2	27.2	100.0
Foundation	17	8.0	50.0	49.2	98.1
Insurance firm	71	5.0	12.9	27.7	99.3
Total	755	5.0	25.1	40.0	100.0

Figure 1. The Mechanics of the Notification and Publication Process



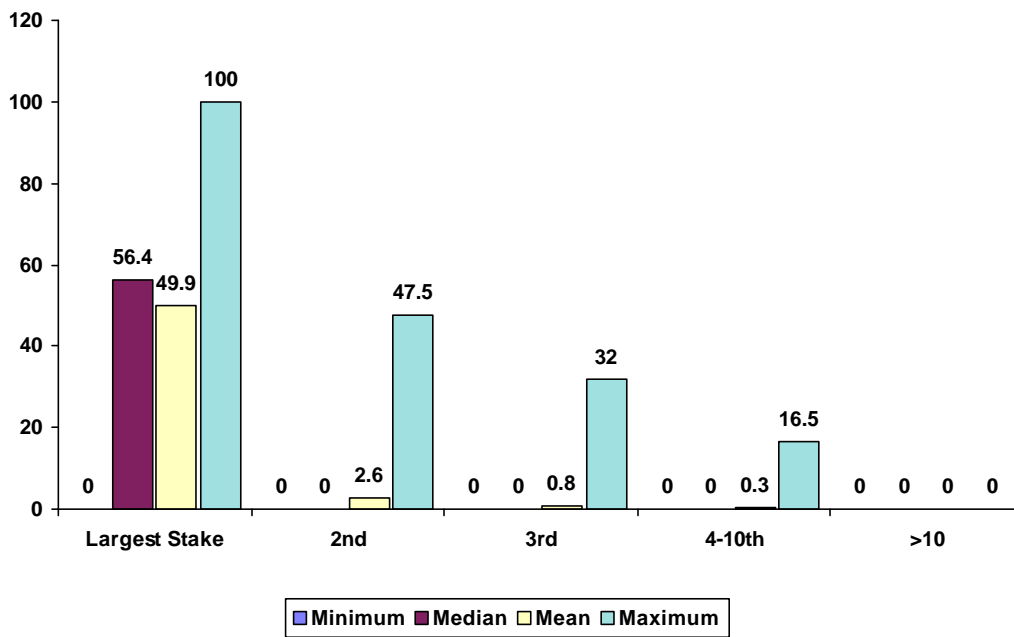
Shareholders who hold shares that have a vote at the annual general meeting of German companies listed in an official EU market have to notify this company and the competent authority (BAWe) when their holding rises or falls above or below 5%, 10%, 25%, 50%, or 75% of the total votes attributable to the share type. For first time notifications during 1995, special rules applied. The initial notification threshold was 5%. All companies listed on a German official market must publish a notification in a German financial paper that has been awarded the privilege of publishing such notifications by the relevant German stock exchange(s). Until recently, the company had to publish a note in the official government newspaper (*Bundesanzeiger*), indicating in which newspaper(s) the notification is published. If the company is listed on another market within the EU the company has to publish the same information in a similar local newspaper in the local language. The companies also provide the competent authority (BAWe) with copies of the published notifications. The shareholder has to notify the company and the competent authority within 7 calendar days and the company must publish the information within 9 days. Hence, a maximum of 16 days can pass from the day the shareholder crossed the threshold and the day the public is informed.

Figure 2. Ownership structure of DEPFA AG



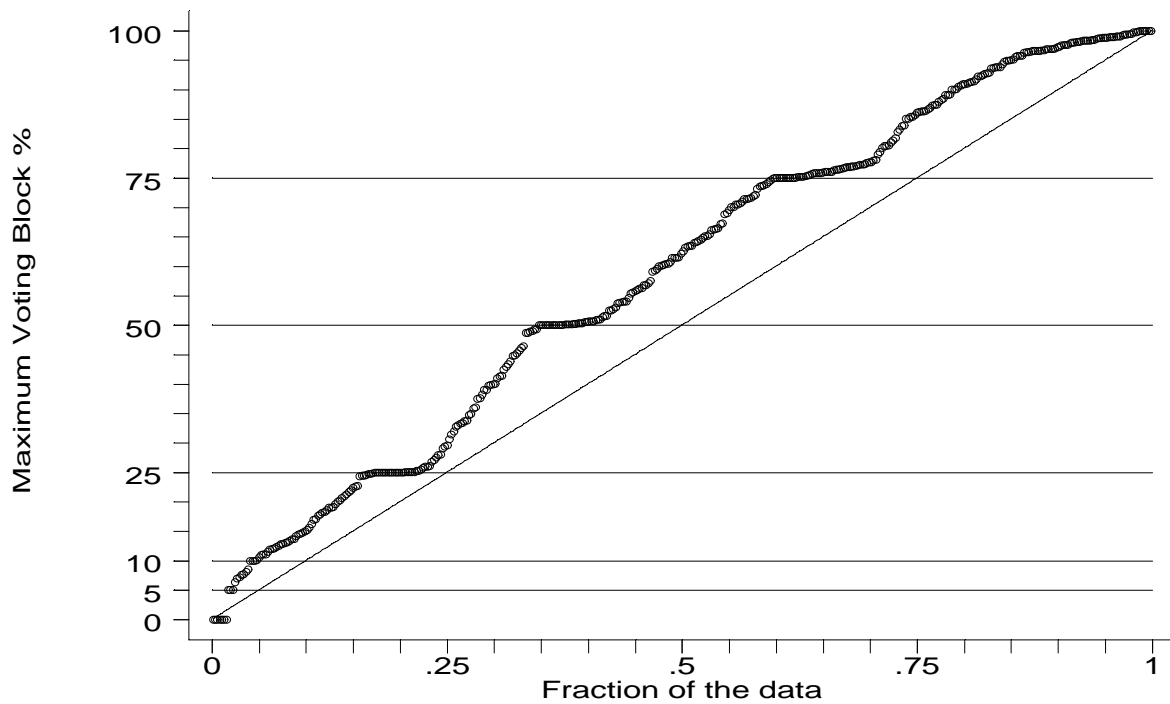
Source: Markus (Update 26, Nov. 1996), Wer gehört zu wem (1994).

Figure 3. Voting blocks by rank of stakes for 430 officially listed *Aktiengesellschaften*



For each of the 430 companies, we first rank the voting blocks in these firms. For each category the minimum, median, mean, and maximum are represented in the figure.

Figure 4. Percentile plot of the largest voting block in 430 officially listed *Aktiengesellschaften*



Note: For each company the largest voting block was selected and the 430 blocks were ranked by size. The horizontal axis shows the corresponding percentiles, the vertical axis the size of the block. The important corporate governance thresholds (10% for individual anti-director rights, 25% to block statute changes, 50% majority, and 75% super-majority) are clearly visible.

Figure 5. Histogram of the largest voting block in 430 officially listed *Aktiengesellschaften*

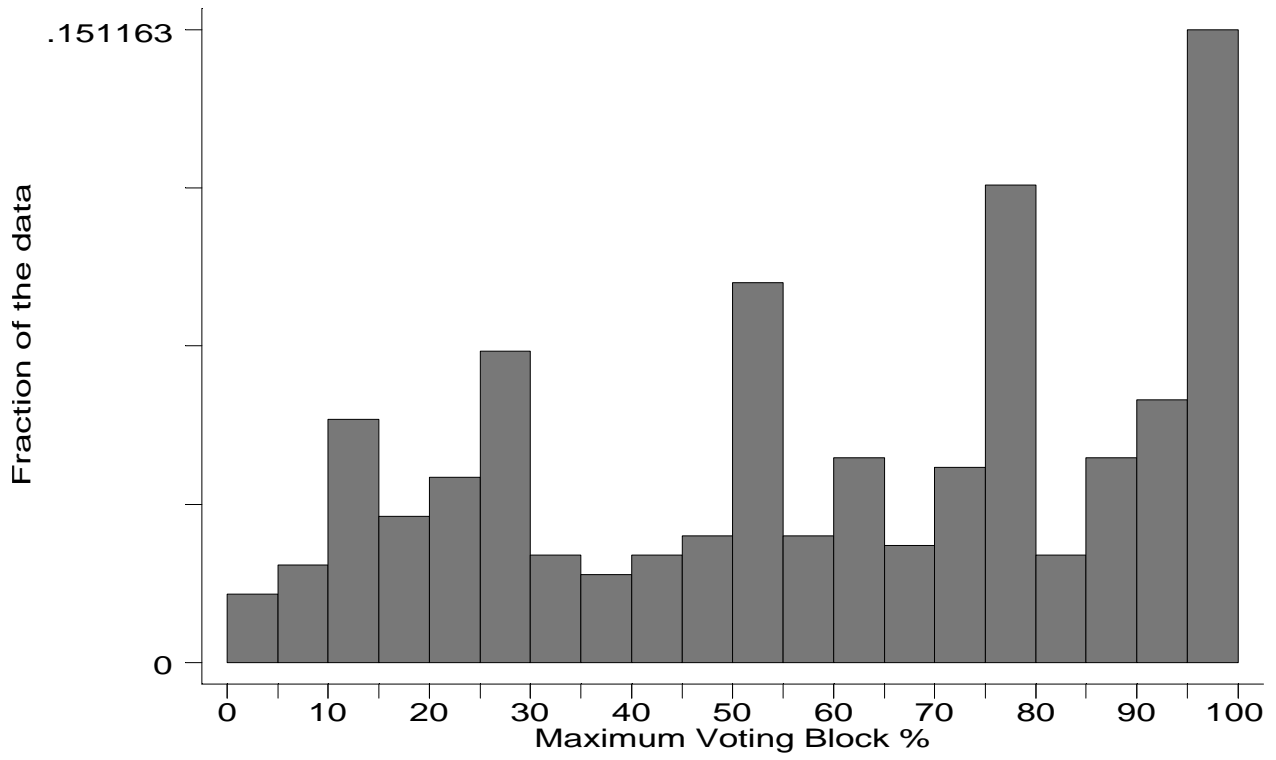
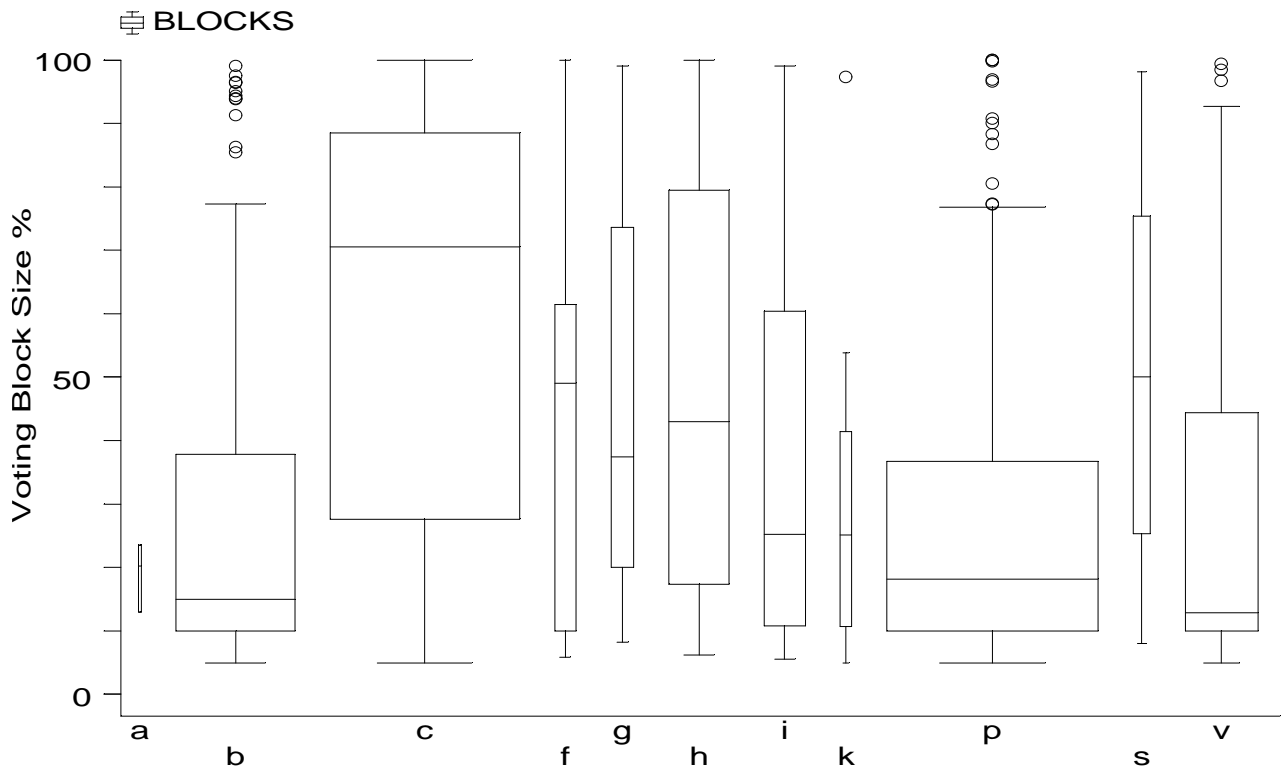


Figure 6. Distribution of blocks in 430 officially listed *Aktiengesellschaften* by blockholder type



See below for a definition of the categories on the horizontal axis. The figure shows a standard box-and-whisker plot. The box extends from the 25th to the 75th percentile and the line in the middle of the box is drawn at the median. The line connecting the box with the upper bar (whisker) is drawn from the 75th percentile to the data point (upper adjacent value) equal or just below a value given by the 75th percentile plus 1.5 the interquartile range. Larger data points, if applicable, are marked individually (outside values). The width of the boxes is proportional to the number of observations in the category.

Code	Blockholder type	Comments
a	Foreign government	does not include foreign entities that fall under the other categories
b	Bank	
c	Industrial firm	
f	Association, GbR, worker/family pool, coops	idea behind pooling these: a limited number of individuals shares control
g	Government	
h	Holding	Verwaltungsgesellschaften, Holdings
i	Investment firm	Beteiligungsgesellschaften
j	Church	
k	Bank-related investment firm	(not exhaustive)
p	Individual	includes KGs that are named after an individual
s	Foundation	
v	Insurance firm	