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**Composition of Supervisory Boards in Germany:
Inside or Outside Control of Banks?**

by

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Abstract

This paper examines the composition of supervisory boards of German banks for a sample of 41 large banks in the period 1999-2006. We find that the supervisory board structure reflects both outside control by shareholders and inside control by stakeholders. Most of the non-employee board members are representatives of other banks and industrial companies. The high presence of former executives and German board members indicates inside control. In banks controlled by other banks or insurance companies it is less likely that the chairperson of the supervisory board is a former executive of the same bank. Over time, inside networking through the supervisory board decreased.

JEL classification: G21, G34

Keywords: corporate governance, dual board system, principal agent theory, stakeholder theory, banks

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1. Introduction

After corporate failures and scandals in the last decade, the functioning of corporate boards has become an important agenda in public debate and academic research. Questions about the corporate governance of banks and the role of boards in monitoring bank managers arose last but not least with the actual financial crisis. Boards are an important internal governance instrument to mitigate agency conflicts between management and residual claimants in public corporations. They have the authority to ratify and monitor major decisions initiated by the management and to hire, fire, and set the compensation of top-level managers (Fama/Jensen 1983). This applies to boards of directors in unitary board systems, where the non-executive directors have the dual role of advising and monitoring managers, and to supervisory boards in dual board systems, which are separated from the management board. The composition of boards varies according to the representation of insiders, outsiders, shareholders or stakeholders, which have different monitoring capacities and interests. The dual board system was adopted recently by some Italian banks to improve corporate governance by a clearer division of responsibilities (Masera 2006, Brogi 2008). It eased bank mergers through the possibility to send former managers, who do not obtain a place in the new management, to the supervisory board of the corporation after the merger (Cera/Presti 2007, Bragantini 2008). Also international literature shows that former executives are often sent to the board of newly established companies after a merger (Resti et al. 2006).

The Anglo-Saxon literature on the composition of boards has concentrated on board independence by the presence of outside directors on unitary boards (Hermalin/Weisbach 2003). In Continental European countries with two-tier board systems, the focus has been on the role of stakeholders or major shareholders on the supervisory board. Studies on the German corporate governance system have concentrated on the influence of banks as shareholders and supervisory board members on the performance of non-financial companies (Dittmann et al. 2008). The issue of the composition of boards in financial institutions, however, has been neglected. While board membership in industrial companies may help banks to perform their function of delegated monitoring (Diamond 1984), the question who sits on the boards of banks to monitor the delegated monitors has hardly been investigated so far. The corporate governance problem of banks differs from that of non-financial firms in several regards: banks are more opaque and complex, more highly leveraged and more highly regulated (Polo 2007, Levine 2004, Masera, 2006, Macey/O'Hara 2003). Higher opacity and complexity may require larger boards with the competence to both monitor and advice bank managers. Because of a larger shareholder-creditor conflict, stakeholders such as creditors,

local communities and regulators should play a larger role in the corporate governance of banks (Macey/O'Hara 2003). According to the Basel Committee on Banking Supervision, board members should not only “Understand and execute their oversight role, including understanding the bank’s risk profile”, but also “Promote bank safety and soundness, understand the regulatory environment and ensure the bank maintains an effective relationship with supervisors” (Basel Committee on Banking Supervision 2006, p. 6).

The present paper provides a first attempt to thoroughly investigate the supervisory board structure of banks in Germany.¹ We examine the origin of non-employee board members of 41 large banks in the legal form of a stock corporation or a commercial partnership limited by shares for the period 1999-2006. Savings banks and cooperative banks are neglected because they have different legal forms and agency conflicts. We employ univariate and multivariate analyses to test hypotheses about the presence of major shareholders and stakeholders on the supervisory board. We find that major shareholders represented on the board are mainly other banks and industrial companies, followed by insurance companies and public bodies. As stakeholder representatives we identify managers of industrial companies, former executives of the same bank, self-employed people, managers of trade associations and university professors. We find a comparatively high presence of former executives and a low presence of foreign board members consistent with the hypothesis of inside control within Germany. The incidence that the chairperson of the supervisory board is a former executive of the same bank is lower in banks controlled by other banks or insurance companies. Over time, inside networking through the supervisory board decreased.

The rest of the paper is organized as follows. Section 2 provides a literature review, and Section 3 presents the hypotheses to be tested. Section 4 describes the data set and descriptive statistics. Multivariate results are presented in Section 5. Section 6 concludes.

2. Literature Review

Most of the literature on board composition is related to the Anglo-Saxon unitary board system, where the board is composed of executive directors, i.e. the managers, and outside, non-executive directors. The main functions of the non-executive directors are to advise and monitor the management. Adams and Ferreira (2007) analyze theoretically the consequences of this dual role of the board on CEO’s incentives to disclose information to the board. If he reveals his information, he gets better advice, but will be monitored more intensively. Since

¹ For a preliminary study based on a smaller data set see Andreani/Neuberger (2007).

CEOs may be reluctant to share information with independent boards, which are tougher monitors, management-friendly boards can be optimal.

The literature on the effectiveness of boards focuses on their monitoring role, assuming that board composition determines the board's monitoring strength. Within the principal-agent framework, the board is viewed as the principal who monitors (and potentially replaces) the management (acting as agent). From the perspective of the shareholders (as ultimate principals), it acts as a delegated monitor. Shareholders choose the composition of the board so that its incentives to monitor maximize firm value (Adams 2000). Hermalin and Weisbach (1988) explain board independence as resulting from a bargaining game between the board that prefers to maintain its independence and the CEO who prefers a less independent board. They predict that CEO turnover is more sensitive to performance when the board is more independent, and that poor firm performance increases the probability of independent directors being added to the board. Many empirical studies examine the influence of the proportion of outside directors on the board on corporate performance². Overall, they do not find that board composition affects firm performance in cross sections, even after correcting for board endogeneity.

Another strand of the literature focuses on the relationship between board size and corporate performance. Large boards may be less effective than small boards, because agency problems tend to increase with board size. This is clearly supported by empirical evidence (reviewed by Hermalin/Weisbach 2003). The positive relationship between CEO turnover and poor performance tends to be stronger when boards are dominated by outside boards or are smaller (Weisbach 1988). This indicates that independent and smaller boards are more effective monitors than dependent and larger boards. Moreover, board composition and size are found to affect the quality of responses to a hostile takeover, adoption of a poison pill, and the design of CEO compensation schemes (Hermalin/Weisbach 2003, p. 17). While most of the studies are related to non-financial firms, only few consider banks. Adams and Mehran (2005) examine the relationships between board structure (size and composition) and company performance for US banking firms. They find that larger boards seem to be more desirable in banks due to features of the bank holding organizational form and M&A activities. Brogi (2008, p. 133), analysing a sample of 40 European banks (including 6 German banks) finds that in 2005 banks with smaller boards performed better than those with larger boards, taking into account the price earnings ratio, Tobin's Q and ROA. De Andres and Vallelado (2008)

² For an overview see Hermalin/Weisbach (2003).

examine a sample of 69 large international commercial banks from six OECD countries³ for the period 1995-2005. They find an inverted U-shaped relation between board size and performance (Tobin's Q, ROA, shareholder market return) as well as between the proportion of outsiders and performance. This result indicates that the information and council of inside directors in the board are important for efficiency, consistent with the hypothesis of a trade-off between the monitor (independence) and advisory (information) functions of the board. It contradicts the dominant recommendation that more independence in boards is better for bank performance. Some studies seek to explain board composition, looking at firm-level in cross-section (e.g. Weisbach 1988, Hermalin/Weisbach 1988, Denis/Sarin 1999). They find that insider-dominated boards can be explained by large ownership positions of the CEO or founders, while outsider-dominated boards are more likely in larger and older firms with small ownership concentration. For a cross section of countries with unitary boards, Li (1994) finds that ownership concentration, bank control and state ownership affect the percentage of outside directors on the boards. Kroszner and Strahan (2001) find that the likelihood of bankers on the board is higher in stable firms with collateralizable assets. Studies examining changes in corporate boards find that poor firm performance increases the likelihood that inside directors will be replaced by outside directors (Hermalin/Weisbach 1988) or that bankers will appoint directors on the board (Gilson 1990, Morck/Nakamura 1999). The likelihood of adding inside directors tends to increase, when a CEO nears retirement (Hermalin/Weisbach 1988, Hermalin/Weisbach 2003, p. 17, Adams 2000, p. 4). Evidence in favor of an advisory role of boards has been found by Agrawal and Knoeber (2001), who showed that the proportion of outsiders with political expertise on the board depends on the firm's need for political advice.

In the dual or two-tier board system of Germany and other countries of Continental Europe, the board's advisory and monitoring functions are separated. The management board comprises the CEO and executive directors, who are solely responsible for advising the CEO. The supervisory board comprises independent directors as representatives of shareholders and important stakeholder groups such as employees and former executive directors. Their task is to appoint and monitor the management on behalf of shareholders, employees and the public interest. Adams (2000) shows that in certain situations, shareholders prefer a dual board to a sole board system, because the manager does not face a tradeoff in the provision of information when the two roles of the board are separated. Graziano and Luporini (2005) show that a two-tier board structure results in higher expected profits for firms with a large

³ Canada, US, UK, Spain, France, Italy, all with one-tier board systems (Andrei/Vallelado 2008, p. 2572).

shareholder on the supervisory board. It can limit the interference of the large shareholder without reducing his incentive to monitor the manager.

The advantage of stakeholder representatives on the supervisory board is explained within the nexus of contracts theory, according to which the duty of managers is to serve the interests of all the contractual parts. As the rights of shareholders in corporate governance are justified by their role as individual risk bearers, other rights are needed to provide adequate protection for non shareholder constituencies to the extent that they also bear risk (Boatright, 2002). In modern capitalism most of the firms operate under limited liability so that their shareholders are in effect indemnified against high risks, while stakeholders such as suppliers and workers, that have made specific investments, bear risks in particular due to hold-up (Rajan/Zingales 2000, Dow 2003).

Evidence about the composition of supervisory boards in dual board systems is scarce. Studies on the corporate governance of German firms do not investigate the independence of board members, but the role of major shareholder or stakeholder groups. They focus on the influence of banks as shareholders or supervisory board members on the profitability of non-financial companies.⁴ Some studies find a positive effect of bank control on firm performance (Cable 1985, Gorton/Schmidt 2000, Lehmann/Weigand 2000, Edwards/Nibler 2000), while others show that this only holds in some cases (Boehmer 2000, Franks/Mayer 1998) or cannot be supported at all (Agarwal/Elston 2001, Chirinko/Elston 2006). The first study to explain supervisory board composition in Germany is that of Edwards and Fisher (1994), who regressed the number of bank supervisory board seats in 56 stock corporations on bank own votes and proxy votes. They found a significant positive influence of bank own votes through shareholdings on the number of bank supervisory board representatives (Edwards/Fischer 1994, p. 206).

The above studies refer to the 1980s and 1990s, when the German system of corporate control was characterized by a network of mutual shareholdings and interlocking directorates among the largest companies (Adams 1999, Wenger/Kaserer 1998, Windolf 2002, Pfannschmidt 1993, 1995). These historically developed close ties between banks and industrial firms have been broken up after a tax reform in 2002, which abolished capital gains taxes on the profits from equity sales (Höpner/Krempel 2003). Dittmann et al. (2008) examine the influence of bankers on the boards of the top 100 listed companies in Germany in the period 1994-2005. They show that from 1994 to 2005, the average equity ownership of banks in non-financial

⁴ For a recent overview see Dittmann et al. (2008, pp. 7).

companies in Germany declined from 4.1% to 0.4%, and the number of top 100 firms with bankers on the board declined from 51% to 33%. Most of these changes occurred between 2002 and 2004. Since bank representation on boards declined less strongly than bank equity ownership, bank representatives do not seem to reflect primarily equity interests (Dittmann et al. 2008, p. 13). By multivariate regressions of the percentage of bankers on the board, firm financing policies and performance, Dittmann et al. (2008) test several hypotheses about bank representation on boards. They find that banks benefit from being present on the boards of non-financial firms, while the latter do not gain from this involvement. Bankers seem to seek boards to promote their own business rather than to act as monitors or capital market experts who help the company to obtain funding. They prefer appointments to larger boards that provide better networking opportunities and to faster growing companies, where they might yield larger private benefits.

The above studies on corporate governance in Germany focus on the governance of non-financial companies, neglecting banks. Some studies include banks in their samples, but do not disclose their numbers with respect to the whole sample (Pfannschmidt 1995) or do not examine differences between both groups (Streitferdt 2002, Fohlin 1999). Some studies even explicitly exclude banks and insurance companies (Köke 2001, p. 43, Dherment et al. 2001, p. 6, Edwards/Nibler 2000, p. 244). According to our knowledge only Pfannschmidt (1993, p. 230) analyzes a sub-sample of 24 banks, finding that the presence of crossholdings and interlocking is well below the average for non-banks. Dittmann et al. (2008) use a panel dataset comprising 137 non-financial firms and 11 banks, but also focus on the influence of bank board representation on non-financial firms, without discussing the supervisory board of banks. Hau and Thum (2008) recently examined the financial competence of the board members of the 29 largest banks in Germany. On a descriptive level, they show that the financial competence of the supervisory board is lower in state-owned than in private banks. This just reflects the fact that public officers are more highly represented in the boards of public banks. Studies about the representation of different shareholder or stakeholder groups in the boards of German banks are missing so far.

Recent reviews on the corporate governance of banks point to the uniqueness of banks. The governance concepts for corporations in general may not apply to banks, because they are more opaque and more highly regulated, which reduces the efficiency of corporate governance mechanisms (Polo 2007, Levine 2004, Caprio/Levine 2002, Macey/O'Hara 2003). Because of their liquidity production role and higher leverage, banks are subject to a stronger conflict of interest between shareholders and creditors than non-bank firms. Macey

and O'Hara (2003) refer to the dominant model of corporate governance, according to which the corporation is a complex web of explicit and implicit contracts among various claimants. In the case of banks, the group of claimants includes not only shareholders and stakeholders such as creditors, employees, local communities and customers, but also regulators to ensure the safety and soundness of these enterprises. Because of the inherent difficulties in monitoring banks, fiduciary duties of corporate officers and directors should not only be owed to shareholders, but also to creditors. Cross-holdings, pyramid structures and supervisory boards in a two-tier system may be helpful mechanisms to shield management from direct shareholder involvement. "In countries like the Netherlands – and, to a lesser extent, Germany – rather autonomous supervisory boards operate semi-independently from shareholders and effectively shield management from direct shareholder involvement" (Macey/O'Hara 2003, p. 96; see also Montalenti, 2007). Therefore, the Franco-German corporate governance model is superior to the US model for the banking sector (Macey and O'Hara 2003, p. 103).

3. Hypotheses

To examine the supervisory board composition of German banks, we formulate hypotheses about the representation of different interest groups on the board. They refer to ordinary members and the chairperson. In large companies with more than 2000 employees, subject to the German co-determination act, half of all board members must be employee representatives, while in smaller companies, the share of employee representatives must be one third. The chairperson of the board has to be elected first with a two-third majority of the supervisory board members, and then with a simple majority vote among the shareholder representatives. Since he has the casting vote in case of a tie, the shareholders retain control of the supervisory board also in large companies. Our hypotheses refer to the shareholder representatives, which are elected by the shareholders' annual general meeting. A single shareholder is not allowed to nominate all board members, even if he controls 100% of the capital. According to the principal-agent-theory, the supervisory board is a delegated monitor on behalf of shareholders or stakeholders as principals. Since the incentive to monitor the management increases with the volume of shareholdings, we formulate the hypotheses:

H1: The supervisory board structure reflects control by major shareholders.

H1.1: The number of representatives of major shareholders increases with the volume of their shareholdings.

H1.2: The chairperson of the supervisory board is a representative of a major shareholder.

In fact, both the managing board and supervisory board are considered as representing a multiplicity of stakeholders and not only shareholders. The election of stakeholders by the

shareholders' annual general meeting is likely to occur through networking. In general, stakeholders are involved in the decision making of companies by dynamic interactions through networking, forming coalitions, acting closely or at a certain distance (Dow 2003). The German system of stakeholder control constitutes a "hard system", where the involvement of stakeholders rests on mandatory rights, in contrast to "soft systems", where the involvement rests on voluntary agreements among the different players (Charny 1999). Until recently, it was based on a network of cross holdings and interlocking directorates among the largest German banks, insurance and industrial companies. Even if this network has diminished, it may still exist, in particular for the largest and oldest companies. Other possible stakeholders are corporate customers holding long-term relationships to their housebank,⁵ representatives of the state or local community, and experts with specific knowledge about the respective bank. Foreign shareholders may not be represented on the supervisory boards, because they are outside the networking process.

Thus, we expect:

H2: The supervisory board structure reflects inside control by stakeholders.

H2.1: The supervisory board contains representatives of stakeholders, which are not major shareholders ('stakeholder control').

H2.2: The supervisory board contains representatives of larger and older companies that hold blocks, especially in larger and older banks ('Deutschland AG').

H2.3: The number of foreign members in the supervisory board is low and does not depend on the volume of foreign shareholdings ('control inside Germany').

An often referred question is the role of former executives in the supervisory board of German companies. Retiring members of the managing board, in particular the president, often move into the supervisory board, where they take the role of the chairman. On the one hand, this may mitigate the problem of asymmetric information between the managing board and supervisory board, because former managers have special expertise and many informal contacts (Allen/Gale 2000, p. 29). On the other hand, this may restrain the monitoring activity of the supervisory board by creating an incentive problem in a repeated game: if one member of the managing board moves to the supervisory board, he does not only have to monitor his former colleagues, but also the consequences of his own decisions (Allen/Gale

⁵ For a survey on relationship lending provided by housebanks see Boot (2000). Mutual shareholdings between a housebank and its corporate customer may help to improve the commitment of both partners to their long-term relationship.

2000, p.38). This may reduce shareholder value. Since former executives are insiders that hold stakes in the company, we expect:

H3: The presence of former executives in the supervisory board reflects inside control by stakeholders.

H3.1: The presence of major shareholders has a negative influence on the presence of former executives on the supervisory board.

H3.2: The presence of major shareholders has a negative influence on the incidence that the chairperson of the supervisory board is a former executive.

Finally, we expect that the inside network has been reduced due to globalization and the dissolution of the “Deutschland AG”, especially after the tax reform in 2002.

H4: There is a development from inside networking towards outside control.

4. Data Set and Descriptive Statistics

To analyze the composition of supervisory boards of German banks we constructed a sample of banks in the legal form of a stock corporation (AG) or a commercial partnership limited by shares (KgaA) for the period 1999-2006. The banks were selected from the list of the 100 largest banks according to the assets managed in 2001 (N.N. 2002). To avoid a repetition of observations due to board nominations within a group we eliminated those banks from the sample which were controlled by other groups within the sample. The resulting sample consists of 41 banks. The source of our data regarding the composition of the supervisory boards is the disclosure of mandates reported in the companies' annual reports.

The size of the supervisory board ranges from a minimum of 3 to a maximum of 21 members, depending on company size, legal form and codetermination rules (§95 AktG). In the case of an AG or KgaA with less than 500 employees and registered before 10/08/1994, and in the case of an AG, KgaA or GmbH (limited liability company) with more than 500 up to 2000 employees, the employee representatives cover 1/3 of the total seats, which range from 3 to 21, and have to be divisible by three (§1 Drittelbeteiligungsgesetz, formerly Betriebsverfassungsgesetz 1952). In the case of an AG, KgaA or GmbH with more than 2000 employees, the supervisory board comprises 12, 16 or 20 seats, equally divided between shareholder and labor representatives (§§ 1 and 7 Mitbestimmungsgesetz). Our sample comprises only the shareholder representatives, which are elected by the shareholders' annual general meeting. The number of seats in each year is documented in Table 1.

Table 1: Number of seats (shareholder representatives) on the supervisory board

Year	number of seats
1999	312
2000	306
2001	321
2002	317
2003	299
2004	289
2005	300
2006	284

Source: own compilation, number of banks: 41

To classify the board members we use the following groups:

- 1) Managers in industrial companies
- 2) Managers in banks and other credit institutions
- 3) Managers in insurance companies
- 4) Former executives of banks
- 5) University professors, researchers in research institutions or centers, and similar
- 6) Public officers, employees of public institutions, judges
- 7) Self-employed people (lawyers, consultants and similar professions)
- 8) Directors or managers of trade associations
- 9) Others

If a person can be classified in more than one group we assume that the membership in one of the first four groups dominates that in one of the last five groups. Within these, we assume that 5) dominates 6), 6) dominates 7), and so on. In those cases in which the composition of the supervisory board changed during the year, we consider the member who has been in the supervisory board for more than 181 days, or for the most days of that year.

To analyze the composition of supervisory boards with respect to its members' provenience, we define the following two groups:

- 10) German citizenship
- 11) Foreign citizenship

A closer description of the variables used can be gathered from Table 2. Descriptive statistics (Table 3) show that the average number of shareholder representatives of the supervisory board is 7 to 8 members across all banks in our sample from 1999 to 2006. Regarding the structure of the supervisory board, we find that over all periods bankers hold the largest share

of members increasing from 32% in 1999 to 46% in 2006. This reflects only partly the share blocks held by banks, which range from 61% to 65% and are relatively stable (see Table 4). In those cases in which another bank holds 100% of the voting capital, bank representatives do not cover all of the shareholder seats.

The second largest group in the supervisory board is represented by industrialists. Their share of members decreased from nearly 28% to 25%, having its maximum of 30% in 2000 (see Table 3). Since it always significantly exceeds the percentage of share blocks held by industrial companies, which ranges from 6% to 8% (see Table 4), we can conclude that it reflects control by industrial companies both in their role as major shareholders (H1) and stakeholders (H2). This is consistent with the hypothesis of a long-term commitment of non-financial companies with their housebanks, which in turn hold seats in the boards of non-financial companies, even if this leads to often referred conflicts of interests (Sarcinelli, 2005, Cesarini 2007).

Furthermore, we identify insurance companies, former executives, public officers, self-employed and trade organizations as five groups having almost an equal share in the supervisory board ranging from 6% to 8% in 1999 (see Table 3). The share of all these groups except self-employed decreased to 4-6%. The decline was largest for insurance companies (-4%), followed by public officers and trade organizations (-3%), while the share of former executives remained relatively stable (-1%). In 2006, former executives played a larger role than representatives of insurance companies in the supervisory board. Comparing these results with those of Rang (2004), who examined the presence of former executives in the supervisory boards of 145 German stock corporations (with only 7 banks in the sample) in the period 2001-2004, we find a higher incidence of former executives in our banking sample. While in the sample of Rang (2004), the percentage of companies with at least one former executive increased from 23% in 2001 to 36% in 2004, it increased from 35% in 2001 to 41% in 2004 in our sample.

The declining role of insurance representatives goes along with a decline in their major shareholdings after 2001 (see Table 4). Also the presence of public officers seems to be related to their role of major shareholders, which always lies between 4 and 5%. In 9 of the 41 banks in our sample, a public body is directly or indirectly among the main shareholders. University professors hold the lowest share in the board, which remains always below 3%.⁶

⁶ Windolf (2002) found similar results for large German companies, where public officers covered 7.4% and university professors covered 3.7% of the supervisory board seats.

With respect to nationality, Germans hold the majority of members with a share of 92% in 1999, lowering to 86% in 2006. The share of foreigners increases in opposite direction. This is consistent with H4. However, the percentage of foreign members in the supervisory board is always smaller than the percentage of foreigners as major shareholders (mostly about the half), which supports H2.3.

The dominant role of bank managers in the supervisory boards of banks is also reflected by the fact that the chairperson of the board is a manager of another bank in 53% of all cases and a former executive of the same bank in 17% of all cases. Compared to the sample of Rang (2004), where the percentage of companies with a former executive as chairman of the supervisory board was 19.7% in 2004, in our banking sample it was lower with 15% in the same year. The incidence that managers of non-financial companies or public bodies hold the position of the chairman is 5% (of all cases) for both groups in our sample.

Comparing the board structure of the banks in our sample with that of the 100 largest mostly non-financial companies⁷ in Germany reported by the Monopolies Commission, we find that the financial sector (banks and insurance companies) is more highly represented in the boards of banks than in the boards of the “top 100” companies (see Table 5). The role of financial companies in the network of personal interlocks among the “top 100” decreased steadily from 191 board members in 1996 to 30 board members in 2004. This corresponds to the shrinking network of mutual shareholdings among the largest financial and non-financial companies (Monopolkommission 2008, p. 199). In line with this, we observe a declining inter-sectoral representation in the boards of banks: while the representation of industrial and insurance companies decreased, that of other banks increased (see Table 3).

⁷ In 2004 and 2006, the 100 largest companies (measured by value added) comprised only 9 banks and 8, respectively 7 insurance companies (Monopolkommission 2008, p. 153).

Table 2: Definition of the variables and summary statistics for the whole sample

Variable	Obs	Mean	Std.Dev.	Min	Max
SBIND	314	2.060	2.707	0	10
SBBAN	314	2.891	2.387	0	10
SBINS	314	0.487	0.854	0	4
SBPUB	314	0.455	0.994	0	5
SBUNI	314	0.171	0.410	0	2
SBSEL	314	0.439	0.735	0	3
SBTRA	314	0.449	1.453	0	8
SBGER	314	6.550	3.862	0	15
SBFOR	314	1.184	2.366	0	14
SBFEX	314	0.595	0.945	0	4
CHIND	313	0.079	0.271	0	1
CHBAN	313	0.527	0.500	0	1
CHINS	313	0.060	0.239	0	1
CHPUB	313	0.054	0.226	0	1
CHFEX	313	0.166	0.372	0	1
CONIND	315	6.482	23.187	0	100
CONBAN	314	63.873	43.479	0	100
CONINS	315	8.203	24.788	0	100
CONPUB	315	4.300	15.409	0	91,86
CONGER	314	69.565	40.649	0	100
CONFOR	314	17.223	35.325	0	100
BLOCK	314	85.777	27.683	0	100
AGE	316	83.522	58.647	2	221
ASSETS		92,230.4			1,454,70
EMP	299	4	179,002.7	18	0
TIME	297	4,282.08	8,011.80	12	32,510
	336	0.5	0.5	0	1

Source: own calculations

Table 3: Description of board size (shareholder representatives) and structure (percentage of seats of shareholder representatives in the supervisory board) 1999 - 2006

year	board size	managers of banks	managers of industrial companies	managers of insurance companies	former executives	public officers	university professors	self-employed	trade organizations	Germans	foreigners
1999	7.8	32.05	27.56	7.69	7.69	7.69	1.60	6.09	6.41	91.99	8.01
2000	7.7	30.10	29.77	8.74	7.12	7.12	2.59	6.15	6.15	94.12	5.88
2001	8	34.89	26.79	6.54	7.79	5.92	2.18	7.17	5.30	91.59	8.41
2002	7.9	36.91	25.55	5.99	8.52	5.36	2.52	5.36	6.62	90.85	9.15
2003	7.7	38.46	25.75	7.36	7.36	4.68	2.68	4.35	6.02	90.64	9.36
2004	7.4	40.42	26.48	5.92	9.06	5.23	1.39	4.18	5.92	89.97	10.03
2005	7.7	41.33	26.00	4.00	7.67	6.33	2.00	5.33	6.00	90.00	10.00
2006	7.5	46.13	25.00	3.87	6.34	4.58	2.82	6.69	3.87	85.92	14.08

Source: own compilation

Note: n= 40 in 1999-2001, n = 39 in 2002-2004, n = 38 in 2005 and 2006

Table 4: Description of shareholder structure (percentage of major shares) 1999 - 2006

year	banks	industrial companies	insurance companies	public bodies	Germans	foreigners	blockholders
1999	64.36	5.92	5.32	4.07	66.62	16.61	81.61
2000	64.36	5.92	5.61	4.34	67.18	16.61	84.67
2001	61.86	5.92	10.11	4.34	69.18	16.61	84.67
2002	61.43	6.07	9.91	4.17	68.11	16.99	84.12
2003	62.20	6.07	9.22	4.46	68.48	16.99	84.49
2004	62.16	6.07	9.10	4.77	71.82	14.43	85.15
2005	68.67	7.73	8.67	4.22	71.57	20.07	92.22
2006	64.84	8.19	7.79	4.03	72.64	19.61	89.28

Source: own compilation

Note: n= 40 in 1999-2001, n = 39 in 2002-2004, n = 38 in 2005 and 2006

Table 5: Description of board structure (percentage of seats of shareholder representatives in the supervisory board) in the 100 largest companies (“top 100”) in Germany 2002, 2004, 2006

year	managers of banks		Managers of insurance companies		Managers of non-financial companies among top 100
	among top 100	other banks ^a	among top 100	other insurance companies ^a	
2000	6.2	2.4	1.6	0.8	10.0
2002	2.0	4.6	1.8	0.8	10.0
2004	2.4	3.2	1.4	1.8	8.0
2006	1.8	3.0	1.2	1.2	8.8

^a managers of banks or insurance companies outside the “top 100”, former executives and non-executive employees of banks or insurance companies among the “top 100”

Source: Monopolkommission (2004, 2006, 2008), own calculations.

5. Regression Results and Discussion

In order to test our hypotheses we use the number of representatives of a group and the incidence of the chairperson belonging to a group as dependent variables. We perform two different types of regressions. Some previous studies rely on OLS estimations but do not note that observations including a value of zero will not be included in the regressions so that observations would be truncated. As observations on supervisory board structure are limited to zero and values above zero estimations based on OLS would provide truncated normal distributions in the observations we use censored Tobit estimations in cross sectional analyses for all time periods. If the dependent variable is a binary one we use Probit regressions. All our regression results which will be tabulated and interpreted are based on robust estimations. In some cases both univariate and multivariate regressions have not been possible due to technical reasons. In that case bivariate correlation results are provided.

According to hypothesis H4 we are interested in developments over time. Insides in this can be gathered from a comparison of cross section regressions over time. Furthermore, we perform univariate and multivariate random effects panel regressions including a dummy variable equal to one if an observation stems from the period 2003-2006 after the capital gains tax reform. We expect changes in the structure of the board to occur. After controlling for the relative difference between different quadrature points robust results are provided and the results may be confidently interpreted.⁸

As has been expected according to H1, the number of representatives of major shareholders depends strongly on the percentage of their shareholdings. Table 6 shows the results of panel regressions for the presence of industrialists and bankers on the board. On the univariate level, we find a strong positive influence of the independent variable CONIND (CONBAN) on the dependent variable SBIND (SBBAN). Panel regressions for SBPUB support these findings. Due to technical reasons no panel regressions can be performed for the influence of CONINS on SBINS, but bivariate regressions confirm a positive and significant correlation between the variables inside an interval of 43% and 85%. Panel regressions for SBBAN make evident that on the multivariate level, major shareholdings of both banks and public bodies influence the number of bank managers on the supervisory board. Thus, state-owned banks seem to have more representatives not only of public bodies, but also of banks on their boards compared to private banks or banks with less public ownership. All in all, we are not able to reject

⁸ If the relative difference of the coefficients is larger than 0.01% quadrature points are chosen inappropriately. In that case we corrected the integration points to improve the accuracy of our estimations. In case of not correctable results we abstain from performing panel random effects estimations as the coefficients would not be interpretable.

hypothesis H1.1. The time dummy shows a negative influence on the number of industrialists on the supervisory board (see model (2) in Table 6), but a positive effect on the number of bankers (see models (4) and (6) in Table 6). This may reflect a decline in insider networking between financial and non-financial companies after the capital gains tax reform in 2002, consistent with H4.

Table 6: Explanation of industrialists and bankers on the board (panel regressions)

	Panel RE (1)	Panel RE (2)	Panel RE (3)	Panel RE (4)	Panel RE (5)	Panel RE (6)
dep. var. method	SBIND Tobit		SBBAN Tobit		SBBAN Tobit	
CONIND	***0.0353 (2.87)	***0.0374 (3.15)			-0.0170 (-1.24)	-0.0184 (-1.37)
CONBAN			***0.0292 (6.45)	***0.0288 (6.44)	***0.0322 (5.66)	***0.0309 (5.48)
CONINS					0.0116 (1.36)	0.0097 (1.16)
CONPUB					**0.0407 (2.08)	**0.0408 (2.09)
TIME		*-0.4256 (-1.84)		***0.4677 (2.67)		***0.4719 (2.69)
intercept	0.3216	***1.0131	0.6022	0.4131	0.2401	0.1205
LR Chi ²	***8.2462	***12.403	***41.568	***49.831	***47.83	***55.845
n	313	313	312	312	312	312

source: own calculations

note: RE = random effects estimation

Tables 7-11 show the results of cross sectional analyses. For almost all periods the influence of CONIND on SBIND, CONBAN on SBBAN, CONINS on SBINS and CONPUB on SBPUB is positive and statistically significant. This again supports the hypothesis of shareholder control (H1.1). We find that the results improved in their quality as we included BLOCK as an additional independent variable. However, the influence of the percentage of shares maintained by block holders differs between groups. In the case of SBIND and SBINS, it is negative and significant, which may indicate that industrialists and managers of insurance companies on the board represent the interests of stakeholders and not only those of industrial and insurance companies as major shareholders (consistent with H2.1). This does not seem to be the case for bankers and public officers, as the influence of BLOCK on SBBAN and SBPUB is insignificant.

For SBUNI, SBSEL and SBTRA, no significant impact of major shareholdings could be calculated in cross-sectional analyses and panel estimations. Thus, the presence of university professors, self-employed and managers of trade associations on the supervisory board seems to reflect stakeholder rather than shareholder control in line with hypothesis H2.1.

The presence of the so called ‘Deutschland AG’ as hypothesized by H2.2 cannot be rejected. We tried different estimation models for both cross-section and panel regressions by inserting ASSETS and EMP in the regressions and found EMP to have the largest impact on SBIND. Both variables show a positive and significant influence on the dependent variable, but the degree of explanation is higher for EMP than for ASSETS. Although AGE does not show the expected significance, it improves the explanatory power of our regressions. Similar results have been found in panel regressions, but TIME cannot be found to be significant. Therefore, the results are not tabulated.

Due to data limitations regressions on a probable ‘control inside Germany’ (H2.3) have not been possible. Thus, we rely on bivariate correlations to gather some evidence on this hypothesis. As assumed, SBGER and CONGER are positively correlated, but correlation coefficients are not significant in all periods under investigation. This may indicate that the presence of German members on the supervisory board reflects inside control by stakeholders rather than major shareholders (H2.1). However, in the period 2004-2006 the correlation coefficients are significant, consistent with the hypothesis of a development towards outside control (H4). SBFOR and CONFOR are highly positively correlated across all time periods, consistent with the shareholder control hypothesis (H1.1). Therefore, we have to reject hypothesis 2.3 in this respect.

Summarizing, according to the above arguments hypothesis H2 of the supervisory board structure reflecting inside control by stakeholders can only partly be rejected.

Table 7: Explanation of industrialists on the board (cross section regressions)

Variable	1999	2000	2001	2002	2003	2004	2005	2006
dep. variable								
method				SBIND	Tobit			
BLOCK	** -0.0512 (-2.50)	-0.0232 (-1.08)	-0.4218 (1.60)	** -0.0430 (-2.11)	** -0.0608 (2.55)	** -0.0597 (-2.31)	*** -0.0956 (-3.63)	*** -0.0756 (-3.35)
CONIND	** 0.0608 (2.15)	* 0.0537 (1.68)	** 0.0667 (2.07)	** 0.0589 (2.34)	** 0.0754 (2.55)	** 0.0777 (2.54)	*** 0.0672 (3.09)	*** 0.0697 (3.28)
intercept	*** 4.5653	2.5015	3.5447	** 4.1888	** 4.8425	** 4.6068	*** 8.8125	*** 6.4156
Sigma cons	*** 3.8045	*** 4.3676	*** 4.3488	*** 3.4141	*** 3.9451	*** 4.0764	*** 3.4180	*** 3.3527
LR Chi ²	*** 9.1949	3.6525	** 5.9219	*** 8.1671	*** 10.8700	*** 9.8205	*** 16.5043	*** 16.1025
Pseudo R ²	0.0595	0.0232	0.0399	0.0546	0.0772	0.0717	0.1221	0.1198
n	40	40	40	39	39	39	37	38

source: own calculations

Table 8: Explanation of bankers on the board (cross section regressions)

Variable	1999	2000	2001	2002	2003	2004	2005	2006
dep. variable								
method				SBBAN	Tobit			
BLOCK	0.0222 (1.07)	0.0200 (1.35)	0.0273 (1.45)	0.0113 (0.71)	0.0024 (0.13)	0.0239 (1.19)	0.0478 (1.58)	0.0295 (1.61)
CONBAN	0.0194 (1.35)	** 0.0204 (1.95)	** 0.0219 (2.10)	*** 0.0287 (2.77)	*** 0.0372 (2.99)	*** 0.0381 (3.44)	*** 0.0353 (3.39)	*** 0.0354 (3.74)
intercept	-1.1785	-1.2404	-1.2416	0.0233	-0.0668	-1.9488	-4.0810	-1.7893
LR Chi ²	** 7.1374	** 7.3128	*** 11.3696	*** 11.8052	*** 11.7717	*** 19.1629	*** 19.4271	*** 17.7465
Pseudo R ²	0.0428	0.0448	0.0660	0.0686	0.0699	0.1134	0.1195	0.1028
n	40	40	40	39	39	39	37	38

source: own calculations

Table 9: Explanation of representatives of insurance companies on the board (cross section regressions)

Variable	1999	2000	2001	2002	2003	2004	2005	2006
dep. variable								
method				SBINS	Tobit			
BLOCK	**0.0216 (-2.50)	-0.0090 (-1.08)	**0.0212 (-2.63)	**0.0274 (-2.39)	***0.0337 (-2.79)	*-0.0202 (-1.98)	-0.0265 (-1.42)	-0.0186 (-1.61)
CONINS	-0.0011 (-0.06)	*0.0254 (1.65)	***0.0256 (3.18)	***0.0388 (3.40)	***0.0360 (3.06)	***0.0410 (4.09)	**0.0419 (2.64)	***0.0436 (3.79)
intercept	**1.5861	0.5303	*1.2489	1.0475	*1.7430	0.4941	0.1364	-0.1222
LR Chi ²	**6.7792	3.9598	***14.8101	***15.6118	***14.6877	***17.6356	***10.6582	***17.6912
Pseudo R ²	0.0713	0.0395	0.1676	0.1928	0.1687	0.2428	0.1907	0.3459
n	40	40	40	39	39	39	37	38

source: own calculations

Table 10: Explanation of public officers on the board (cross section regressions)

Variable	1999	2000	2001	2002	2003	2004	2005	2006
dep. variable								
method				SBPUB	Tobit			
BLOCK	-0.0199 (-1.44)	-0.0224 (-1.50)	-0.0044 (-0.27)	-0.0144 (-1.11)	-0.0117 (-0.60)	-0.0035 (-0.16)	0.0013 (0.03)	0.0067 (0.18)
CONPUB	**0.0643 (2.60)	***0.0686 (2.75)	***0.0856 (3.32)	***0.0660 (3.08)	*0.0528 (1.69)	***0.0802 (2.72)	**0.1961 (2.35)	*0.0909 (1.81)
intercept	0.2876	0.3642	-1.5284	-0.2456	-1.3466	-2.4507	-4.2866	-4.5270
LR Chi ²	***8.7507	***10.5250	***11.6676	***10.6650	3.3728	***9.4638	**7.0766	*4.2987
Pseudo R ²	0.1013	0.1289	0.1617	0.1456	0.0532	0.1578	0.1260	0.0801
n	40	40	40	39	39	39	37	38

source: own calculations

Table 11: Explanation of industrialists on the board (cross section regressions): Results on 'Deutschland AG'

Variable	1999	2000	2001	2002	2003	2004	2005	2006
dep. Var.								
method				SBIND				
				Tobit				
CONIND	0.0413 (1.55)	0.0441 (1.54)	*0.0554 (1.85)	**0.0501 (2.10)	** 0.0582 (2.24)	**0.0601 (2.34)	**0.0610 (2.78)	**0.0667 (2.68)
EMP	***0.0001 (2.71)	***0.0002 (2.71)	**0.0002 (2.67)	***0.0001 (3.01)	***0.0002 (3.34)	***0.0003 (3.69)	***0.0003 (3.60)	**0.0002 (2.44)
intercept	0.2012	-0.0606	-0.7811	-0.3714	-1.0738	-1.3238	-1.2380	-1.6111
LR Chi ²	***9.2342	***9.2054	***10.1324	***12.2526	***14.7743	***16.9224	***16.6928	***11.1646
Pseudo R ²	0.0669	0.0618	0.0714	0.0889	0.1049	0.1235	0.1234	0.0909
n	37	37	40	36	38	38	37	35

source: own calculations

To calculate the probability that the chair of the supervisory board is a member of an industrial company, bank, public body or insurance company we performed Probit regression models. On the univariate level across all time periods, we find strong evidence that each interest group promotes the probability of inaugurating a member of the own interest group into the position of the chair of the supervisory board. Since TIME does not show a significant sign we are not able to make statements on developments over time. All in all, the regression models show a high degree of explanation of variance in the dataset due to a pseudo R2 staggering around 40% in case of CHIND, CHBAN and CHINS, and around 30% in case of CHPUB. Thus, we are not able to reject hypothesis H1.2 that the chairperson of the supervisory board is a representative of a major shareholder. This furthermore shows that supervisory board structure reflects control by major shareholders and H1 cannot be rejected.

A further aspect is the presence of major shareholders as an influence on the presence of former executives in the supervisory board. To analyze this, we performed panel regressions, which however, showed problems with quadrature points so that the results may not be confidently interpreted. Therefore, cross section regressions are supposed to be more appropriate. From a theoretical background we hypothesized CONBAN, CONINS, CONPUB and BLOCK as independent variables to have a negative influence. In the empirical analysis we find a negative influence, but since it is not significant these signs might be calculated by accident and thus should not be interpreted. On the univariate level the coefficient of BLOCK can be found to be negative, but happens to be significant only in 1999 and 2001. For the remaining years, we do not find support for hypothesis H3.1.

With reference to the influence of major shareholders on the probability of a former executive being the chairperson of the supervisory board we find the following results tabulated in Table 12. Panel random effects estimations provide evidence that network effects occur as the coefficients of CONBAN and CONINS are negative and significant as has been hypothesized (H3.2). The other independent variables do not support our hypothesis as they are negative but insignificant (in line with Resti et al. 2006, p. 202). We may conclude that it is not in the interest of financial companies which hold major shares to nominate a former executive as the chairperson of the board, because this reduces shareholder value. The special expertise of former managers seems to be outweighed by a loss of monitoring activity. A change over time cannot be identified as TIME is positive but insignificant.

Table 12: Evidence of a former executive to be the chairperson of the supervisory board

Variable	Panel RE	Panel Re
dep. Var.	CHFEX	
method	Probit	
BLOCK	-0.0051 (-0.62)	-0.0051 (-0.64)
CONIND	-0.0020 (-0.14)	-0.0034 (-0.24)
CONBAN	**-0.0207 (-2.54)	***-0.0210 (-2.60)
CONINS	**-0.0291 (-2.09)	**-0.0294 (-2.15)
CONPUB	-0.0302 (-0.93)	-0.0309 (-0.97)
TIME		0.2013 (0.66)
intercept	-0.1584	-0.2096
Wald Chi ²	**11.1212	*11.7709
Pseudo R ²		
N	312	312

Source: own calculations

Summing up the regression results with respect to the question about a development from inside networking towards outside control, we state that in some cases, developments over cross-sections as well as a significance of the year dummy can be identified. But due to the fact that this empirical evidence cannot be provided across all regressions, we have to reject H4 partly.

6. Conclusions

Deficits in the corporate governance of banks have been brought to light by the actual financial crisis. This paper focuses on the supervisory board as control instrument and examines its composition for a sample of large German banks. It closes a gap in the empirical literature on board structure, which so far has focused on the unitary board in Anglo-Saxon countries and the supervisory board of non-financial companies within the two-tier board system of Germany. Because of the unique features of banks, control by stakeholders other than shareholders should play a larger role in banks than in non-financial companies. While stakeholder control is based on networking by insiders, shareholder control works through voting rights by major shareholders inside or outside a company network.

On the basis of univariate and multivariate analyses for 41 German banks in the period 1999-2006, we find the following: First, the supervisory board structure only partly reflects control

by major shareholders, primarily other banks, followed by industrial companies, insurance companies and public bodies. The larger the shareholdings of one of these groups, the more supervisory board seats it holds and the more likely it is that the chairman of the board pertains to this group.

Secondly, the presence of industrial companies on the board also reflects inside control by stakeholders, which do not hold major shares. The second most important stakeholder group are former executives of the same company, whose incidence on the board seems to be higher in banks than in non-financial companies. Less important stakeholder groups on the board are self-employed people, managers of trade associations and university professors. The low presence of foreign board members relative to foreign shareholders supports the hypothesis of inside control within Germany. Even if the preference for supervisory board members of the same nationality may be an instrument to reduce agency conflicts by communicating in the national language, it does not properly reflect the internationalization of the company with respect to its shareholders and employees.⁹

Third, the incidence that the chairperson of the supervisory board is a former executive of the same bank is lower in banks controlled by other banks or insurance companies. Thus, financial companies holding share blocks seem to prefer managers of financial companies as chairperson of the board, who are not former executives of the same bank (in contrast to Resti et al. 2006). This corresponds to the recommendation of the German Corporate Governance Code that “It shall not be the rule for the former Management Board chairman or a Management Board member to become Supervisory Board chairman or the chairman of a Supervisory Board committee. If this is intended, special reasons shall be presented to the annual general meeting.” (Government Commission 2006, 5.4.4).

Fourth, we find some evidence for a decrease in inside networking and an increase in outside control over time. The declining presence of managers of industrial and insurance companies goes along with a growing presence of managers of other banks on the boards of German banks. However, larger banks still have a larger share of industrialists on their boards. This seems to be due to still existing interlocking directories between the largest financial and non-financial companies in Germany (‘Deutschland AG’).

In trying to answer the normative question, ‘Who should monitor the delegated monitors?’, we face a trade-off between inside and outside control of banks: On the one hand, outside control through major shareholders on the board helps to improve the board’s monitoring

⁹ See also Breuer (2001).

function on behalf of shareholders. On the other hand, insiders of the industry tend to have better financial expertise to control and advise the highly opaque and complex banking business. Therefore, banks may best be monitored by managers of other banks holding share blocks. Our observation of a dominant and increasing role of other banks' managers on the boards of banks can thus be appreciated. However, this applies only to those banks in our sample, which are small enough to be controlled by other banks. Since the largest banks cannot be controlled by other banks (being their competitors), they must be controlled by other shareholders or stakeholders. We find that managers of industrial companies still play the largest role in the boards of the largest banks, although the network of mutual shareholdings has been reduced. Managers of large industrial or insurance companies are likely to be better monitors of banks than public officers or managers of smaller companies, because they tend to have more financial expertise. They should also be preferred to former executives of the same bank, because they have better monitoring incentives. Whether this also holds for a comparison with independent financial experts acting as professional supervisory board members is an open question. On the one hand, professional board members are likely to have more distance, time and special knowledge to monitor banks than managers of non-financial companies. On the other hand, they may lack actual expertise and management experience to monitor and consult bank managers. Therefore, professional board members can be only part of the solution and should be employed complementary to active corporate managers (Schoppen 2008).

Recent changes in the shareholder structure of major German banks and some recent scandals in the quality of risk management pose new issues for future analysis. According to our evidence state-owned banks are likely to have a control deficit vis-à-vis private banks because they have more public officers with less financial expertise on their boards. However, we find that banks with more public ownership also have more bankers on their boards. Finally, we have to keep in mind that according to the German system of corporate control, the supervisory board should not only represent the interests of shareholders, but also those of stakeholders, such as the public in the case of banks, to ensure their safety and soundness. Investigating the relationship between the supervisory board structure and performance of the banks in our sample is a task for future research.

References

- Adams, M. (1999), Cross Holdings in Germany. *Journal of Institutional and Theoretical Economics* 155: 80-109.
- Adams, R. B. (2000), The Dual Role of Corporate Boards as Advisors and Monitors of Management: Theory and Evidence. Available at: <http://ssrn.com/abstract=241581> or DOI: 10.2139/ssrn.241581 (22.01.2009).
- Adams, R. B. and D. Ferreira (2007), A Theory of Friendly Boards. *Journal of Finance* 62 (1): 217 - 250 .
- Adams, R.B. and H. Mehran (2005), Corporate Performance, Board Structure and its Determinants in the Banking Industry. EFA 2005 Moscow Meetings. Available at: <http://ssrn.com/abstract=302593> or DOI: 10.2139/ssrn.302593 (22.01.2009).
- Agarwal, R. and J. A. Elston (2001), Bank-Firm Relationships, Financing and Firm Performance in Germany. *Economic Letters* 72: 225-232.
- Agrawal, A. and C. Knoeber (2001), Do Some Outside Directors Play a Political Role? *Journal of Law and Economics* 44(1): 179-198.
- Allen, F. and D. Gale (2000), Corporate Governance and Competition, in: X. Vives (ed.), *Corporate Governance: Theoretical and Empirical Perspectives*. Cambridge, Cambridge University Press: 23-90.
- Andreani, E. and D. Neuberger (2007), Corporate governance bancaria e sistema dualistico: riflessioni sull'esperienza tedesca. *Banca Impresa Società* 26: 197-226.
- Basel Committee on Banking Supervision (2006), *Enhancing Corporate Governance for Banking Organisations*. Bank for International Settlements, February 2006.
- Boatright, J. (2002), Contractors as Stakeholders: Reconciling Stakeholder Theory with the Nexus of Contracts Firm. *Journal of Banking and Finance* 26: 1837-1852.
- Boehmer, E. (2000), Business Groups, Bank Control, and Large Shareholders: An Analysis of German Takeovers. *Journal of Financial Intermediation* 9: 117-148.
- Boot, A.W.A. (2000), Relationship Banking: What Do We Know? *Journal of Financial Intermediation* 9: 7-25.
- Bragantini, S. (2008), Mediobanca e il pasticcio dei due consigli. Available at: www.lavoce.info/articoli/pagina_1000535.html (05.08.2008).

- Breuer, R. (2001), Corporate Governance der Verantwortung verpflichtet. *Die Bank* 8: 544-548.
- Brogi, M. (2008), Corporate Governance e sistema dualistico per banche ed assicurazioni. Bancaria Editrice, Rome.
- Cable, J. (1985), Capital Market Information and Industrial Performance: The Role of West German Banks. *The Economic Journal* 95, no. 377: 118-132.
- Caprio, G. and R. Levine (2002), Corporate Governance in Finance: Concepts and International Observations. In: Litan, R. E., Pomerleano, M., Sundarajan, V. (eds.), *Financial Sector Governance: The Roles of the Public and Private Sectors*, Washington, D.C., Brookings Institution Press: 17-50.
- Cera, M. and G. Presti (2007), Banche e sistema Dualistico: Forme, Funzioni, Finzioni. *Analisi Giuridica dell'Economia* 2/2007.
- Cesarini, F. (2007), Conflitti di interesse nell'erogazione del credito. *Bancaria* n. 6/2007: 2-11.
- Chirinko, R. S. and J. A. Elston (2006), Finance, Control, and Profitability: The Influence of German Banks. *Journal of Economic Behavior & Organization* 59(1): 69-88.
- Charny, D. (1999), Workers and Corporate Governance: The Role of Political Culture. In: Margaret Blair and Mark Roe (eds.), *Employees and Corporate Governance*. Washington, D.C., Brookings Institution Press.
- De Andres, P. and E. Vallengado (2008), Corporate Governance in Banking: The Role of the Board of Directors. *Journal of Banking and Finance* 32: 2570-2580.
- Denis, D. and D. Sarin (1999), Ownership and Board Structures in Publicly Traded Corporations. *Journal of Financial Economics* 52: 187-224.
- Diamond, D. W. (1984), Financial Intermediation and Delegated Monitoring. *Review of Economic Studies* 51: 393-414
- Dittmann, I., Maug, E. and C. Schneider (2008), Bankers on the Boards of German Firms: What they do, what they are worth, and why they are (still) there. *Ecgi Finance Working Paper* No. 196/2008.
- Dow, G. (2003), *Governing the Firm: Workers' Control in Theory and Practice*. Cambridge University Press, Cambridge.

- Edwards, J. S. S. and K. Fischer (1994), *Banks, Finance and Investment in Germany*. Cambridge University Press, Cambridge.
- Edwards, J. and M. Nibler (2000), Corporate Governance in Germany: The Role of Banks and Ownership Concentration. *Economic Policy* 15 (October): 239-267.
- Fama, E. F. and M. C. Jensen (1983), Separation of Ownership and Control. *Journal of Law and Economics* 27: 301-325.
- Fohlin, C. (1999), The Rise of Interlocking Directorates in Imperial Germany. *Economic History Review* 52: 307–333.
- Franks, J. and C. Mayer (1998), Bank Control, Takeovers and Corporate Governance in Germany. *Journal of Banking and Finance* 22: 1385-1402.
- Gilson, S. (1990), Bankruptcy, Boards, Banks, and Blockholders. *Journal of Financial Economics* 27: 355-387.
- Gorton, G. and F. A. Schmid (2000), Universal Banking and the Performance of German Firms. *Journal of Financial Economics* 58 (February): 29-80.
- Government Commission (2006), *German Corporate Governance Code, as amended on June 12, 2006*, Berlin.
- Graziano, C. and A. Luporini (2005), Ownership Concentration, Monitoring and Optimal Board Structure. CESifo Working Paper No. 1543, Fondazione Eni Enrico Mattei FEEM Working Paper No. 14.05, September 2005.
- Hau, H. and M. Thum (2008). Wie (in-)kompetent sind die Aufsichtsräte deutscher Banken? *ifo Schnelldienst*, 61. Jahrgang, 19/2008: 27-29.
- Hermalin, B. and M. Weisbach (1988), The Determinants of Board Composition. *Rand Journal of Economics* 19 (4): 589-606.
- Hermalin, B. and M. Weisbach (2003), Boards of Directors as an Endogenously Determined Institution: A Survey of the Economic Literature. *Federal Reserve Bank of New York Economic Policy Review*, April 2003.
- Hermalin, B. and M. Weisbach (1998), Endogenously Chosen Boards of Directors and Their Monitoring of the CEO. *American Economic Review* 88: 96-118.
- Höpner, M. and L. Krempel (2003), *The Politics of the German Company Network*. MPIG Working Paper 03/9, Max Planck Institute for the Study of Societies, Köln.

- Köke, J. (2001), New Evidence on Ownership Structures in Germany. *Kredit und Kapital* 2: 257-292.
- Kroszner, R. and P. Strahan (2001), Bankers on Boards: Monitoring, Conflicts of Interest, and Lender Liability. *Journal of Financial Economics* 62 (3): 415-452.
- Lehmann, E. and J. Weigand (2000), Does the Governed Corporation Perform Better? Governance Structures and Corporate Performance in Germany. *European Finance Review* 4: 157-195.
- Levine, R. (2004), The Corporate Governance of Banks: A Concise Discussion of Concepts and Issues. World Bank Policy Research Working Paper 3404, September 2004.
- Li, J. (1994), Ownership Structure and Board Composition: A Multi-country Test of Agency Theory Predictions. *Managerial and Decision Economics* 15: 359-368.
- Macey, J. R. and M. O'Hara (2003), The Corporate Governance of Banks. FRBNY Economic Policy Review, April 2003: 91-107.
- Masera, R. (2006), La Corporate Governance nelle banche. Il Mulino, Bologna.
- Monopolkommission (2004), Wettbewerbspolitik im Schatten „Nationaler Champions“. Hauptgutachten XV: 2003/2003, Bundestagsdrucksache 15/3610.
- Monopolkommission (2006), Mehr Wettbewerb auch im Dienstleistungssektor!. Hauptgutachten VI: 2004/2005, Bundestagsdrucksache 16/2460.
- Monopolkommission (2008), Weniger Staat, mehr Wettbewerb. Hauptgutachten XVII: 2006/2007, Bundestagsdrucksache 16/10140.
- Montalenti P. (2007), Il sistema dualistico: il consiglio di sorveglianza tra funzioni di controllo e funzioni di alta amministrazione. In: Cera, M. and G. Presti (eds), *Banche e sistema Dualistico: Forme, Funzioni, Finzioni. Analisi Giuridica dell'Economia*, 2, 2007: 269-284.
- Morck, R. and M. Nakamura (1999), Banks and Corporate Control in Japan. *Journal of Finance* 54: 319-40.
- N.N. (2002), Die Top 100 der deutschen Kreditwirtschaft. *Die Bank* 7: 496-498.
- Pfannschmidt, A. (1993), Personelle Verflechtungen über Aufsichtsräte: Mehrfachmandate in deutschen Unternehmen. Gabler, Wiesbaden.

- Pfannschmidt, A. (1995), Mehrfachmandate in deutschen Unternehmen. *Zeitschrift für Betriebswirtschaft* 2: 177-203.
- Polo, A. (2007), Corporate Governance of Banks: The Current State of the Debate. Munich Personal RePEc Archive, 19 March 2007.
- Rajan, R. G. and L. Zingales (2000), The Governance of the New Enterprise. In: X. Vives (ed.), *Corporate Governance. Theoretical and Empirical Perspectives*, Cambridge U. Press: 201-226.
- Rang, R. (2004), Ehemalige Vorstände als Kontrolleure. Hans Böckler Stiftung, 1/11/2004.
- Resti, A., C. Epis and L. Galbiati (2006), *Le fusioni bancarie. La lezione dell'esperienza*. Bancaria Editrice, Rome.
- Sarcinelli, M. (2005), Sui conflitti d'interesse nelle banche, con divagazione. Associazione per lo Sviluppo degli Studi di Banca e Borsa, Rome, 4th November 2005. Available at: <http://www.assbb.it/CMI/quaderno224.pdf> (22.01.2009).
- Schoppen, W. (2008), Beruf Aufsichtsrat – ist nur Teil der Lösung. *Frankfurter Allgemeine Zeitung* No. 293, 15 December 2008: 20.
- Streitferdt, F. (2002), *Eine ökonomische Analyse von Bankbeteiligungen*. Schäffer-Poeschel Verlag, Stuttgart.
- Weisbach, M. (1988), Outside Directors and CEO Turnover. *Journal of Financial Economics* 20: 431-460.
- Wenger, E. and C. Kaserer (1998), German Banks and Corporate Governance: A Critical View. In: Hopt K. et al.(eds), *Comparative Corporate Governance: The State of the Art and Emerging Research*. Clarendon Press, Oxford: 499-535.
- Windolf, P. (2002), *Corporate Networks in Europe and the United States*. Oxford University Press.