OWNERSHIP AND CONTROL IN GERMANY: DO CROSS-SHAREHOLDINGS REFLECT BANK CONTROL ON LARGE COMPANIES?

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Abstract

This paper aims to analyse the relationships (equity and non-equity) between German banks and German firms, which are the peculiarities of the German institutional system of corporate governance. Scholars agree on the fact that cross shareholdings among banks, insurance companies and institutional firms (Charkham 1994, Baums 1993), combined with long term shareholdings (Gerschenkron 1989), and close relationships and interlocking between board members of different companies (Tilly 1969, Hopt and Prigge 1998), are the main features of bank-firms relationships in Germany. Specifically the main purpose of the paper is to demonstrate, for the panel of German companies investigated, that bank-firm relationship relies not only on patrimonial linkages but also on personal relationships. In the light of the sweeping changes that this model has undergone since the late 1990s, an empirical study has been carried out regarding relationships (patrimonial and personal) among the first 100 German companies with the highest turnover and the 6 main German financial institutions, showing the evolving trend along a period of 8 years and comparing the collected data with previous research. Therefore, in order to try to measure the extent of the banks role in Corporate Governance and to evaluate in a deeper sense the effective influence they have on the industry management, we carried out two different analyses. The first, takes into consideration the equity relationships between banks/insurances and the German industrial firms, the second analyses the number of seats held by the same banks in the correspondent supervisory board. In particular, in our opinion, the analysis of the composition of the supervisory boards can help to outline the personal relationships above mentioned. Therefore is understood, that we consider the presence of bank's representatives in others than banks' supervisory boards as signal of banks' opportunity to exert power and influence.

Keywords: corporate governance, interlocking, cross-shareholdings

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1. The German "financial capitalism": traditional features and evolving trends

The system of relationships between banks and companies is traditionally considered as one of the main success factors of German industrialisation and the distinguishing aspects of the national capitalism model (Gerschenkron 1968). The Hilferding's expression "financial capitalism" is still used to characterize a national system where banks play a central role in dealing with industrial companies. The specificity of the German model derives from a combination of different factors as described below.

1) Universal banks. The German law, contrary to other systems based on a pure banking model, allows banks to hold relevant equity shares in industrial companies (Großl 1989). Holding equity shares enables banks to influence the management board and therefore the company's decisions. The greater the equity share is, the stronger the influence the bank may exert (Porter 1992, defines this situation as "shareholder direction"). Although, according to the German law there are long-term banking institutions [62], the universal banks are the most common. At the end of 2005, universal banks made up 80% of the total number of financial institutions and accounted for 79% of total banking revenues (Table 1).

[62] Among these specialist banks there are mortgage banks (Hypothekenbank) and building and loan associations (Bausparkassen) (Banfi, Locatelli, Schena 1991).

Table 1. German banks (Deutsche Bundesbank: 2002-2005)

Category	2002			2005		
	Nr. of banks	Tunover (mio €)	Nr. of branches in Germany	Nr. of banks	Tunover (mio €)	Nr. of branches in Germany
Commercial banks:	354	2306208	5122	357	2592895	14044
Big banks	4	1497060	2256	5	1859720	11446
Regional banks and other commercial banks	245	700590	2849	217	629831	9059
Branches of foreign banks	105	108558	17	135	103344	72
Landesbanken	13	2642446	553	12	2581304	580
Saving banks	519		15628	463		13950
Regional institutions of credit cooperatives	2	772084	12	2	834801	11
Credit cooperatives	1490		13889	1293		12722
Mortgage banks	25	880899	117	24	890447	56
Special purpose banks	15	510366	19	18	701627	31
Building and loan associations:	28	164503	2843	26		2682
private	17		2027	15		1951
pubblic	11		816	11		731
Banks out of monthly statistics	145		18	148		24
Total banks	2963	7276506			7794375	
Deutsche Postbank AG[1)]	1					
Total	2964			2726		

Notes: 1) in 2005 Deutsche Postbank figures has been included by Deutsche Bundesbank among the category "Big banks".
Source: Deutsche Bundesbank (August 2003), pp. 104-107 and Deutsche Bundesbank (July 2007), pp. 104-107, and own calculations.

2) The high level of industry concentration. Within the German banking sector four institutes play a dominant role: we refer to the traditional top three commercial banks (Deutsche Bank, Dresdner Bank, and Commerzbank), founded at the beginning of the Eighteenth Century in the period of the first German industrialization, and to Bayerische Hypo- und Vereinsbank[63], which was added to the "Großbanken" category in January 1999 by Bundesbank. These banks account for 20% of the whole banking revenues (Table 1). The remaining banks are the other minor commercial banks, savings banks, and cooperative banks. The latter two are organized according to a three-tier system (local branches, regional and central institutes[64]).

3) Hausbank. The bank-firm relationship in Germany is long-term oriented and very concentrated (Charkham 1989). This doesn't mean that the German companies work exclusively with one bank, but one bank in particular plays a more prevalent role than the others. In other words, one bank provides the larger share of debt and manages the most relevant financial operations in the medium-long term. Providing both debt and equity, enhances the bank-company relationships allowing the bank to participate in and influence the company's management decisions (Gerschenkron 1968). Generally big commercial banks manage the whole range of financial products and can support customers also in capital market operations. As a consequence they are in the best position to play the "Hausbank" role when dealing with the financed firms (Limentani 2003).

4) Proxy votes (Depotstimmrechte). German banks add proxy votes to the votes related to direct equity shares, i.e. they can exercise the voting rights for the shares that retail customers deposit with them. This enhances their influence on companies in which they hold equity shares, especially in public companies. Empirical researches (Baums and Fraune 1994 and Gottschalk 1988)[65] show that banks, taken as a whole, can exercise, through proxy votes, the 60% of the voting rights in addition to about the 25% arising from direct and indirect equity shares. As a result in Germany the banking system generally has a strong power over the industrial companies gathering in some cases the 90% of the voting rights (i.e. Basf and Bayer) and sometimes more than 95% (Siemens, Hoechst and Mannesmann). Some authors (Jensen and Meckling 1979, Merkt 2002) highlight the risk of a conflict of interest associated with the dominating

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[63] Bayerische Hypo- und Vereinsbank comes from the merger between Bayerische Hypobank and Bayerische Vereinsbank occurred in 1998.

[64] Respectively, Deutsche Girozentrale for saving banks and Deutsche Genossenschaftsbank for cooperative banks.

[65] The only researches available regarding proxy votes are the ones published by Baums and Fraune (1994) and Gottschalk (1988). The data they analysed had been provided by the Monopolkommission, which at that time investigated on the influence the banks were able to exert on German non-financial companies. The most difficult data to obtain are those concerning bank control of equity voting rights, because banks are not obliged to declare them. For further details see note 22.

position banks have in the companies. Banks play many roles at the same time: they simultaneously act as creditors, shareholders, proxy-agents and even consultants, with the risk of giving priority to one or some of these. In this situation they might not represent all of the interests related to the different roles equally. For instance, a bank having an important financial exposure in a company may prefer low-risk investment policies, maybe compromising the interest of the stockholders they are also supposed to represent (Baums and Schmitz 1998).

5) The minor role played by the stock market in the governance of German companies. The German financial system is bank-oriented (de Jong 1997). The size of debt and equity markets is not as important as it is in anglosaxon systems. We can refer to the capitalization data as a percentage of the GDP. The average German capitalization is 38% in the period 1990-2005 (table 2), while the US and UK data are respectively 113% and 132%. It is as nearly the same as Italy's average capitalization (33.1%).

Table 2. Domestic market capitalization on GDP (average 1990-2005)

Paese	Indici di borsa	Capitalizzazione di mercato sul Pil media %
America		
Stati Uniti		112.5%
	NYSE	89.3%
	Nasdaq	22.0%
	Amex	1.2%
Bermuda	Bermuda	N.A.
Argentina	Buenos aires	16.6%
Perù	Lima	18.2%
Messico	Mexican Exchange	28.6%
Cile	Santiago	89.4%
Brasile	Sao Paulo	27.6%
Canada	TSX Group	81.2%
Europa - Africa - Medio Oriente		
Grecia	Athens Exchange	37.0%
Italia	Borsa Italiana	33.1%
Ungheria	Budapest	23.8%
Danimarca, Finlandia, Svezia	OMX	95.9%
Germania	Deutsche Borse	37.6%
Francia, Paesi Bassi, Belgio, Portogallo	Euronext	72.9%
Irlanda	Irish	61.0%
Turchia	Istanbul	25.0%
Sud Africa	JSE	145.0%
Slovenia	Ljubljana	13.7%
Regno Unito	London	132.3%
Lussemburgo	Luxemburg	136.8%
Malta	Malta	35.2%
Norvegia	Oslo	35.0%
Spagna	BME Spanish Exchanges	52.9%
Svizzera	Swiss Exchange	181.8%
Iran	Tehran	10.9%
Israele	Tel-Aviv	47.2%
Polonia	Warsaw	11.7%
Austria	Wiener borse	18.0%
Asia - Pacifico		
Australia	Australian	80.6%
Sri Lanka	Colombo	15.2%
Cina, P.R.: Hong Kong	Hong kong	297.3%
Cina, P.R.: Mainland		26.0%
	Shangai	18.0%
	Shenzhen	8.0%
Indonesia	Jakarta	20.5%
Giappone	Tokyo	72.6%
Corea	Korea	41.6%
Malesia	Bursa Malasya	171.5%
India		97.7%
	Bombay	50.9%
	National Stock Exchange India	46.8%
Nuova Zelanda	New Zeland	42.2%
Filippine	Philippine	46.0%
Singapore	Singapore	158.9%
Taiwan Prov. Cina	Taiwan	93.8%
Thailandia	Thailand	53.1%

Notes: N.A.: Not Available.
Source: IMF World Economic Outlook (2007) and World Federation of Exchange (2007), own calculations.

This difference indicates the minor role of the German capital market in corporate funding. In fact German non-financial companies are mainly financed indirectly, by banks. The data in Table 3 shows how banks are the prevalent source of funding of the German industrial companies (the banking loans amount on average to 36% of the overall companies liabilities in the period 1993-2000).

Table 3. Financing of non-financial German companies from 1993 to 2000

	1993	1994	1995	1996	1997	1998	1999	2000	*average*
Total (DM billion)	**463,3**	**483,8**	**491,5**	**528,9**	**498,2**	**690,8**	**780,5**	**935,4**	**609,05**
Internal financing rate	**59,1%**	**60,2%**	**72,4%**	**68,6%**	**71,6%**	**54,7%**	**44,2%**	**36,2%**	**58,4%**
External financing rate	**48,2%**	**42,6%**	**32,7%**	**32,8%**	**31,0%**	**46,4%**	**49,4%**	**64,6%**	**43,5%**
of external financing:									
Banks	**32,1%**	**16,3%**	**55,6%**	**57,6%**	**55,3%**	**40,7%**	**32,1%**	**13,5%**	**37,9%**
- domestic	32,5%	17,9%	52,8%	56,5%	51,3%	39,2%	22,8%	15,1%	36,0%
- foreign	-0,4%	-1,7%	2,8%	1,1%	4,0%	1,5%	9,3%	-1,6%	1,9%
Other investors	**10,6%**	**16,3%**	**19,6%**	**14,8%**	**22,7%**	**21,9%**	**44,3%**	**45,1%**	**24,4%**
- domestic	6,8%	6,4%	5,9%	-3,5%	1,9%	5,5%	11,6%	1,0%	4,5%
- foreign	3,8%	9,9%	13,8%	18,2%	20,7%	16,4%	32,8%	44,1%	20,0%
Equity investment	**12,4%**	**18,3%**	**20,1%**	**28,6%**	**21,2%**	**36,9%**	**20,6%**	**37,2%**	**24,4%**
- domestic	13,8%	16,2%	17,1%	29,5%	16,1%	35,2%	10,2%	5,2%	17,9%
- foreign	-1,5%	2,2%	3,1%	-0,9%	5,1%	1,7%	10,4%	32,0%	6,5%
Other	**44,8%**	**49,1%**	**4,7%**	**-0,9%**	**0,8%**	**0,5%**	**3,0%**	**4,3%**	**13,3%**

Source: Jürgens and Rupp (2002), pp. 8-9.

6) Cross-shareholdings. German companies, both industrial and financial, hold long term shareholdings in other companies. Equity linkages are often reciprocated, creating a cross shares system ("Ringverflechtungen") between companies and other companies and between companies and banks. The cross equity shareholdings, which sometimes find expression in Konzern[66], give stability (Gerschenkron 1968) to the corporate relationships and lead to the development of mutually defined strategies.

7) Interlocking directorate. To the opposite of most western economies, German companies have a two-tier board: in German companies there is an additional board (called the supervisory board) which nominates the members of the board of directors and approves its most important decisions. Other than by the workers[67], the supervisory board members are appointed by the shareholders. The system of cross-shareholdings leads to a system of interlocking at level of supervisory boards of many companies and banks, often involving the same people. Interlocks are characterized by extremely close relationships and interdependencies between board members of different companies and therefore lead to stable intercompany relationships and mutual strategies (Tilly 1969, Hopt and Prigge 1998). The fact that companies nominate their own members in the other companies' supervisory boards, without having significant ownership stake, is a widespread phenomenon in Germany. The presence of bank's representatives in the supervisory boards of industrial companies, also without being a shareholder, is a strong signal of the influence the overall financial sector can exert on the management of the industry.

8) Stable ownership. Cross shareholdings among banks, insurance companies and industrial firms combined with long term shareholdings lead to ownership stability and continuity, protecting the companies from hostile takeovers (Porter 1992 describes the German model using terms as "permanent owner" and "dedicated capital" to distinguish it from the anglosaxon one described as "fluid" and "transient"). This is proven by the fact that from the end of the second world war until the famous Mannesmann-Vodafone case (occurred in 1999/2000) (Höpner and Jackson 2001), only three relevant public takeovers occurred and only one was successful. In 1989 Veba AG made a take over attempt on Feldmule AG (Franks and Meyer 1990, Nolte and Leber 1998) and in 1990/91 Continental AG resisted the take over attempt by Pirelli (Baums 1993, Droste 1995). The third case, this one successful, refers to the Hoesch AG take over by Krupp AG (Baestlein 1997, Schmidt et al. 1997, Franks and Meyer 1998). The stable ownership protects management from hostile takeovers attempts and allows them to make long term oriented decisions.

The aspects described above contribute jointly to explain the main characteristic of German bank-industry relationships: to be precise, the

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66 The general characteristic of a Konzern is that at least one legally indipendent company is under centralized control exerted by the parent company (§ 18 AktG).

67 The system of co-determination of the employees (Mitbestimmung) also contributes to the unique nature of the German system of corporate governance (Figge 1992, Hohmann-Dennhardt 1980, Müller 1986). The co-determination of employees is twofold: via supervisory boards and via works councils. Various laws determine the proportion of employee representation on the supervisory board, and distinguish three regimes of co-determination (full-parity, quasi-parity and one third regimes), depending on the size of the firms, the total number of employees and the sector in which the firm works. More broadly, the co-determination system means that workers' representatives have information, consultation and veto rights on certain issues. Therefore German workers have, besides external mechanisms of representation, as trade unions, also direct mechanisms of influence and control inside the firm.

presence of strong and stable ties among companies (both financial and industrial) which leads to widely shared strategies.

This aspect has been discussed by many authors and defined in different ways. To mention a few, Porter (1992) refers to a "relation oriented" model, indicating how investment decisions are long term oriented and not only aimed at capital gain. Shonfield (1965) uses the term "collective management" in order to highlight the widespread agreements among companies often leading to cartels creation. Albert (1991) with the term "dialogue sociale" describes the widespread practice in German society in looking for consent involving all the stakeholders in decision making.

In our opinion the specific feature of bank-firm relationships depends on the characteristics of the German institutional system of governance[68]. Taking mutual decisions as well as looking for broad consent characterize not only bank-firm relationships, but also the whole German system, at all levels and for both private companies and public offices. In our opinion the widespread use of this modus operandi can be explained only referring to institutional variables. Business behaviour is embedded in the institutional model and becomes routine (de Jong 1997, Guatri and Vicari 1994, Kirat and Lung 1999, Porter and Sölvell 1999, Warglien 1997). The German institutional and constitutional framework (and in particular subsidiarity) plays a key role in this process of "contextualization"[69] (Onetti 2001).

At the moment the German system is quickly evolving as a consequence of a variety of factors. In the following points, without aiming to cover all the sweeping changes, that, since the late 1990s, have undergone this model, we will discuss those as considered with the most relevance.

1) The growing internationalization of German companies. The German companies have been increasing their international presence since the beginning of the nineties. This happened both through the listing of many important German companies on foreign stock exchanges (i.e. Daimler and SAP on NYSE) and through the acquisition of foreign companies[70]: two prime examples are the acquisition of Morgan Grenfell and Bankers Trust by Deutsche Bank and of Kleinwort Benson by Dresdner Bank.

2) The growth of foreign direct investments in German companies. A prime example is the takeover of Mannesmann by Vodafone Air Touch[71]. Given that it involved a leading German company and large capital, it has often been cited by many authors (Jürgens et al. 2000) as a turning point in the transformation of the German system of corporate governance.

3) Banks' growing attention towards economic performance. The internationalization of financial markets puts the banks in competition with one another to raise capital. As a consequence banks have to meet investors' expectations in terms of value creation also in the short term (as regards the growing attention paid by banks to the shareholder value, see Jürgens and Rupp 2002). This reduces the possibility for banks to manage their investment portfolio exclusively on a long term basis[72].

4) The increase of German companies' bankruptcy. As shown in Figure 1, the number of companies that faced bankruptcy in the decade 1995-2004 almost doubled.

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[68] The term governance refers to different concepts. In this paper we use it referring to its broader meaning, highlighting the influence that the institutional environment exerts on stakeholder behaviour. Therefore, quoting Warglien (1997), for governance model we intend (p. 1): "institutional arrangements within and between firms, as well as (…) the institutional environment within which such arrangements emerge". In this way is possible to show up both the regulatory and institutional aspects ("formal regulation", de Jong 1997, p. 5) and the informal one ("social factors and processes", Warglien 1997, p. 1; "informal customs", de Jong 1997, p. 5). In general "a system of corporate governance is defined as a more or less country specific framework" (Weimer and Pape 1999, p. 152), even if the recent debate regarding economic geography (Zucchella and Maccarini 1999) leads to the definition of the new concept of economic regions, where the national border are loosing importance.

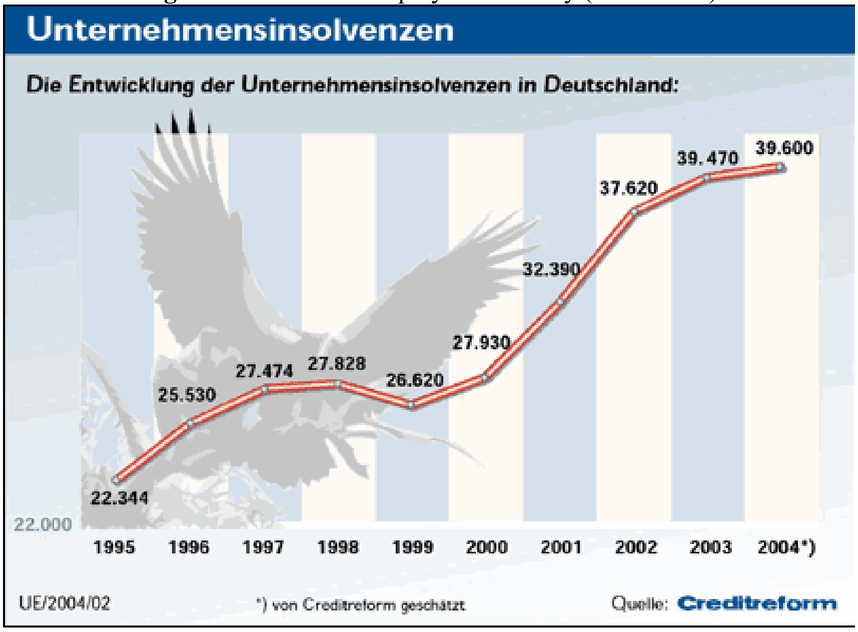
[69] Boschma (2005) refers to (p. 63) "institutional proximity" pointing out as "interactions between players are influenced, shaped and constrained by the institutional environment".

[70] This phenomenon regarding the growing internationalization of German companies is in particular so much related to the USA to lead some authors (Meyer-Larsen 1999) to define it as "Germany Inc.".

[71] Initially this takeover attempt was hosted by the supervisory board of Mannesmann, then after months of negotiations the two involved parts reach an agreement and Vodafone could acquire the second German operator of mobile telephony. The Vodafone-Mannesmann takeover leads the German legislator to promulgate in December 2001, the Takeover Act (Wertpapierwerbs- und Übernahmegesetz – WpÜG), in order to regulate all the tender offer, which take place on the German financial market or any other tender offer, which regards a German company.

[72] Porter (1992) describes the German traditional approach pointing out (p. 70) as "owners are virtually permanent, they seek long term appreciation of their shares, which they hold in perpetuity".

Figure 1. Firm's bankruptcy in Germany (1995-2004)



Source: Creditreform (2004)

In 2002 this phenomenon became evident because it involved some leading companies such as Herlitz, Fairchild Dornier, Kirch Media and Philipp Holzmann. The latter was the most relevant one because it involved a well established century old company and showed for the first time how German banks changed their traditional lending policies. Holzmann went into a deep financial crisis in 1990 as the recession hit the construction industry. The main German banks provided a 2.2 billions euro rescue plan to which the government added an additional 120 millions euro. In 2001, Holzmann accumulated losses of 463 mln. euro and debt for 1,5 bln. Euro; on these grounds Dresdner Bank, Commerzbank and Bayerische Hypo- und Vereinsbank refused to take part to the new rescue plan proposed by Deutsche Bank, the most exposed bank. This fact can be interpreted in two ways: on one hand, it signals the change in the traditional bank lending policies aimed at guaranteeing corporate continuity (i.e. bank receive company equity shares in exchange for providing new loans); on the other hand, as a symptom of the difficulties German banks are facing: as bankruptcies increase, they have to accumulate more for credit default, reducing their profit margins.

5) Banks' reduction of corporate equity shareholdings. Banks and insurance companies are progressively restricting the cross shares network they belong to. On one hand, this phenomenon is related to the strategic repositioning of the main commercial banks towards investment banking and asset management. On the other, it is pushed by the recent tax reform, approved by the Schröder government in 2000 and become effective in 2002, lowering the fiscal burdens on shares transfer[73]. Moreover the reform should stimulate the market for corporate control, making the German capital markets more interesting for domestic and foreign investors.

6) The increased role of financial markets. The stock market bubble burst at the beginning of 2000 – which led to the closure of Neuer Markt – has undervalued the growing role financial markets have acquired in Germany and the rest of Europe in the last decade (Jürgens and Rupp 2002). The development of capital markets increases the range of financing options available to the companies - mainly to the largest ones -, improving their bargaining power with banks and reducing their dependence to banking loans[74].

7) Recent evolution in the German law. An important development is the Law on corporate control and transparency (Gesetz zur Kontrolle und Transparenz im Unternehmensbereich – KonTraG), which, approved in May 1998, aims at improving the investor's position by forcing companies to provide them more information. In particular, the law

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[73] The key point of this tax reform are:
- Reduction of the tax rate to 25% for both retained profits (from 40%) and distributed profits (from 30%);
- Capital gains tax for equity participation of corporations in other domestic incorporated companies will be abolished.

[74] The traditional role of German banks is changing in particular in relation to the larger German non-financial companies, to whom banks are becoming financial services providers (Jürgens and Rupp 2002). As regards the so called Mittelstand (small-medium sized firms), instead, the traditional role of universal banks remains unchanged.

proposes to limit the "Depotstimmrecht effect" by obliging the banks, owning more than 5% of voting rights of listed companies or participating in the syndicate for public offering of their shares, to inform their customers how the bank will exert the voting rights[75]. To the same purpose is the modification of the Article 135, par. 3 of Act on stock corporation (AktienGesetz – AktG). According to this, banks are not allowed to exert voting rights on behalf of their depositing customers when they own more than 5% of the company equity shares, unless they received specific voting instructions from their customers or give up their own voting rights[76]. As a consequence of the above mentioned measures, the banks' discretional power in exerting proxy voting rights has been strongly restricted (Martin 2004). Moreover the German corporate governance code (Deutscher Corporate Governance Codex – DCGC), become effective in February 2002, limits the banks' practice of nominating their own representatives in the supervisory boards of companies, in which they hold equity shares (Hopt 2003). According to the new code, the number of external supervisory board positions that the same person may hold in listed companies is limited to five[77].

8) The current law harmonisation process in the EU and the international self-regulation process. The process of law harmonization, at EU level, is going to reduce the law specificity of the German system. To mention the most relevant cases, we have: the German securities trading Act[78] adopted in 1995 (implementing the European Union's Large Holdings Directive 88/627/EEC), which deals with the disclosure of information on the company's shareholder structure and with insider trading regulation; other measures aiming at standardizing the different types of companies (the Regulation on the statute for a European company in 2000, the Directive 2002/14/CE regarding worker's information and participation rights in 2002). At the same time we can see the diffusion of international agreements, as for example the Basel one, regarding the banks' patrimonial requirements, which is going to have effects on the behaviour of financial institutions.

The recent changes in the German model above described indicate a certain trend towards a market-oriented system. Although there has been some degree of convergence, in particular to the anglo-saxon model, the fundamental differences with respect to a market-based system are still significant[79]. Therefore, despite the importance of the evolutionary trends above described, is our opinion that the peculiar features of the German bank-industry relationship won't change, at least in the short time, because they are expression of the culture of co-decision and co-responsibility (the so called Mitbestimmung) deeply rooted in the German system (Shonfield 1965, Albert 1991, de Jong 1997, Warglien 1997 and Hacketal et al. 2003). Only considering all these aspects, we can explain the stability characterizing the bank-firm relationship, stability which presumes a widespread participation and sharing in decisions. Stability, which comes out not only from reciprocated equity linkages (cross-shareholdings), which rarely are substantial enough to assert effective control, but rather from strategic co-decision, deeply embedded in the institutional model. Talking about strategic co-decision we refer to the common participation of the different subject involved in the decision making process, whose behaviour and answers, at strategic and organizational level are expression of this culture. Is therefore our opinion that the evolutionary aspects of the German model can be interpreted and faced, only taking into consideration this point of view.

What said above finds confirmation so far, in the empirical research we carried out on the German bank-industry relationship. If, on one hand, we find out that the patrimonial ties among financial and industrial sector are rarefying, on the other hand, we observe how the personal linkages among supervisory boards remained unaltered. These findings seem to validate the thesis regarding the existence and the importance of the culture of strategic co-decision. As this modus operandi is deeply rooted in the German system, unlikely will be modified by the recent changes above described. On the opposite this culture will probably help to direct the evolutionary process, characterizing it with the specificities of which the German model is traditionally bearer.

2. Research hypothesis, data and methodology

This paper aims at analysing the characteristics of the bank-industry relationship in Germany, showing the ties among financial and industrial companies, both in terms of cross-equity-shareholdings and interlocking directorates for the 1998, 2001 and 2005. The

[75] To the same information duties are also subjected banks, whose officials are members of the supervisory board or of the board of management of the company at issue.

[76] Moreover, banks are forced to disclose, in their annual reports, all the mandates in other supervisory or management boards accumulated by their officials.

[77] Before the DCGC this limit was fixed in 10 mandates.

[78] The German securities trading Act (Wertpapierhandelsgesetz – WpHG) states that stakes above thresholds of 5% of the voting rights need to be disclosed to the Financial Supervisory Authority (BaFin), which makes than this information public. Prior to 1995, shareholders only had to report their stakes if they exceeded the threshold of 25%.

[79] As regards the persistence of the fundamental peculiarities of the German corporate governance system, see also: Baliga and Polak (2004), Mayer and Whittington (2004) and Goergen, Manjon and Rennenboog (2004).

relationships among the German financial and industrial sector create a close and complex network of companies. The analysis of equity shareholdings can explain the ties among the companies, but is our opinion that does not provide a complete and exhaustive picture of the network. Around the patrimonial linkages develop wider relationships, which often are personal, that are of crucial importance to explain the behaviour, the strategic choices, in other terms the governance of the involved companies.

Sample

The sample investigated is made of:

– on the industrial side: the 100 largest German non-financial companies for turnover at the end of 2005 (chosen from the "top 500 deutsche Unternehmen" – WELT ONLINE ranking);

– on the financial side: the 4 Großbanken (Deutsche Bank, Dresdner Bank, Commerzbank and Bayerische Hypo- und Vereinsbank) and the 2 main German insurance companies (Allianz and Münchener Rückversicherungsgesellschaft).

As regards the time period, it has been decided to consider the sample over 8 years, from 1998 to 2005. The year 1998 was chosen because only after the issue of the KonTraG (Gesetz zur Kontrolle und Transparenz im Unternehmensbereich) in 1998, banks have been forced by law to publish in their annual reports all the mandates that their collaborators have on the supervisory and management board of large companies, and all the stakes above thresholds of 5% of the voting rights they held in the same companies[80].

Data collection

The data on shareholdings has been collected analysing the annual reports of all the 106 companies of the sample for the time period considered, and through a database ("Wer Gehört zu wem?", Commerzbank) that every year gathers the data regarding the major shareholders (if existing) of about 12,000 German companies. The data on the composition of the supervisory boards has been collected only through annual reports because they are the only official documents that display such information. The information of the mandates that each bank/insurance's employee detects in the supervisory board of other German companies was first gathered from the annual reports of the 6 financial institutions, then, this data has been cross-checked with the information published in the annual reports of the 100 companies in the sample.

Methodology

In order to investigate the relationship between German banks and German firms (equity and non-equity) two different empirical analysis have been carried out:

– First, the analysis of the equity linkages among banks/insurance companies and the 100 largest German non-financial firms;

– The second analysis has been carried out on personal linkages among the 6 financial institutions and the 100 largest German non-financial firms to evaluate in a deeper sense the role that banks and insurances have in German corporate governance and to provide evidences of the effective influence they are able to exert in corporate management. The object of the study has been the composition of the supervisory board of all the 100 largest German non-financial firms and all the mandates detained by all the employees (managers, collaborators, supervisors, and so on) of the 6 financial institutions in these companies identifying the number and type of seats (if chairman or not) held by the same financial institutions in the supervisory board of the firms. Such a methodological choice, i.e., to consider the presence of banks' representatives in other than banks' supervisory boards as a signal of banks' opportunity to exert power and influence and as a proxy of banks' influence in the system of corporate governance is strongly supported in the literature (see among the others, Pfannschmidt 1993, Windolf and Beyer 1995, Leimkühler 1996, Hopt and Prigge 1998). Specifically the main purpose of the analysis is to demonstrate, for the panel of German companies investigated, that bank-firm relationship relies not only on patrimonial linkages but also on personal relationships. To provide evidence of this fact, we statistically test how the stock participations held by the six financial institutions considered are not able to completely explain the considerable number of seats they have in the supervisory boards of the firms we chose for the panel.

Variables and research hypotheses

The variables analysed are two:

– Shareholders' structure: in this framework, what should be pointed out, is that the analysis of the banks/insurances shareholdings in the German industry along with the analysis of the shareholders' structure of the 100 German firms in the sample, will be the basis for providing a map showing the wide relationship network, which directly or indirectly joins a high number of firms and financial institutions.

[80] Before the *KonTraG* states this principle, the *WpHG* (*Wertpapierhandelsgesetz* – Security Trading Act) requires that stakes above thresholds of 5% of the voting rights need to be disclosed to the Financial Supervisory Authority (*BaFin*), which then makes this information public. Prior to 1995, shareholders only had to report their stakes if they exceeded the threshold of 25%.

– Composition of the supervisory board: the study of this variable is on the basis of the second analysis previously described. Studying the presence of banks/insurances' members seated on the supervisory boards of non-financial firms is important in understanding the governance mechanisms used by banks to exert their influence in the firms' management (see among the others, Pfannschmidt 1993, Windolf and Beyer 1995, Leimkühler 1996, Hopt and Prigge 1998). It has been decided to focus on the composition of this board because it is the one that appointed the members of the other one (the board of managing directors), and because of its, at least theoretically, correspondence to the shareholdings (Windolf and Beyer 1995, Gorton and Schmid 1996).

The hypotheses developed are concentrated mainly on the relationship between corporate ownership and interlock ties:

Hp. 1: On the supervisory boards of sample companies there are only members of financial institutions participating in the company's equity.

Support for this research hypothesis can be found in various studies carried out on the German corporate governance model. As the supervisory board's members are nominated at the annual general meeting of shareholders, except for the seats reserved for the workers' representatives, it is expected to find, theoretically, a certain correspondence between the representatives of shareholders in the Aufsichtsrat and the stock held by the same shareholders (Gorton and Schmid, 1996; Böhm, 1992; Edwards and Fischer, 1994; Seger, 1997).

Hp. 2: Most of the personal linkages through banks' representatives are among the first 10/50 German companies.

The main studies carried out on the composition of supervisory boards outlined that the banks' members are mainly represented on the boards of the largest German companies and in particular the DAX ones (see among the others André 1996, Seger 1997, Hansen 1994).

3. Bank-firm relationship and cross-shareholdings

The German system of relationships between banks and companies is traditionally considered as one of the main features of the German model of corporate governance (Gerschenkron 1968, Charkham 1989, Baums 1993). The issue related to the dominant role that banks play in German corporate governance, based on direct share ownership and on a system of proxy voting, under which they cast votes for other shareholders, has been under debate from the early seventies. Several studies (Gessler 1979, Gottschalk 1988, Baums and Fraune 1994) have been carried out with the purpose of measuring the extent of banks' influence and control they exert in corporate governance.

The most quoted researches carried out on this issue are the Gottschalk one (1988) and the study of Baums and Fraune (1994). Gottschalk's study took into consideration 33 among the 100 major German enterprises listed in 1986 (column a, Table 4), while Baums and Fraune the 24 biggest German companies listed in 1992 (column b, Table 4).

In Table 4[81] we put together the data related to the 16 German firms considered by both authors in their researches. We can observe that the data collected in 1986 are not far from the data of Baums and Fraune of 1992: this fact can be interpreted as a signal of relative stability of the phenomenon under examination. Analysing the data in Table 4, comes out how the German bank system, considered as a whole[82] holds the majority of exerted voting rights in almost all cases (15 enterprises in 1986 and 13 in 1992). Moreover we can observe how the majority of exerted voting rights is often (6 companies in 1988 and 3 in 1992) concentrated in the hands of the 3 Großbanken, which anyhow exceed the 20% of exerted voting rights in 14 cases in 1986 and 11 cases in 1992.

As a consequence, from the analysed data comes out how the banks, as a whole, could appoint the majority of the members which represent the shareholders in the supervisory boards, of almost the considered companies. Moreover, the voting rights appear to be, on average, concentrated in the hands of the 3 Großbanken, confirming the role of guide they traditionally have in the German system.

[81] In both studies the role of banks has been quantified in terms of voting rights presented by German banks in the AGMs of the analysed firms as a percentage of all voting rights presented in each AGM. Both studies considered, besides the voting rights related to direct shares held by banks, also the votes casted on the basis of proxy voting as well as the votes casted by the subsidiaries and the management companies possessed by the respective bank.

[82] As sum of the voting rights exerted by the 3 big commercial banks (Großbanken), by the regional banks (Regionalbanken), by the saving banks (Sparkassen), by the credit cooperatives (Kreditgenossenschaften) and by other banks.

Table 4. Voting rights of banks at the AGMs of some German companies (two empirical researches in comparison)

Enterprise	Voting rights presented at the AGM		Voting rights presented % of voting rights at the AGM			
			3 big banks[1]		Total big banks	
	a	b	a	b	a	b
BASF	55,40	50,39	51,68	40,35	96,64	94,71
Bayer	53,18	50,21	54,50	41,66	95,78	91,32
Degussa	70,94	73,26	41,79	33,86	67,09	60,65
Deutsche Babcock	67,13	37,30	22,54	31,38	97,01	90,58
Hoechst	57,73	71,39	63,48	69,49	98,34	98,46
KHD	72,40	69,60	49,54	73,97	85,29	97,96
Linde	52,99	60,03	59,87	57,93	90,37	99,07
MAN	64,10	72,09	30,17	18,89	52,85	48,20
Mannesmann	50,63	37,20	50,53	38,76	95,40	98,11
Preussag	69,58	69,00	19,34	18,10	99,68	99,46
Schering	46,60	37,42	51,50	40,69	99,08	94,50
Siemens	60,64	52,66	32,52	34,57	79,83	95,48
Strabag	83,02	67,10	27,32	9,80	95,24	99,28
Thyssen	68,48	67,66	32,62	19,13	58,11	45,37
VEBA	50,24	53,40	47,92	41,98	98,18	90,85
Volkswagen	50,13	38,27	7,98	15,07	19,53	44,05
Media	60,82	56,69	40,21	36,60	83,03	84,25

Notes: a: Data from Gottschalk 1988
b: Data from Baums and Fraune 1992
[1]: Großbanken: Deutsche Bank, Dresdner Bank and Commerzbank

Source: Data from Gottschalk (1988) and Baums and Fraune (1994) and own calculations.

What above described confirms the considerable influence and control that banks, as a whole, may exert on corporate governance. To remark is the control exerted by banks, taken as a whole: what we have to point out is the network of relationships rather than single positions of one financial institution. The German bank-firm relationship is based on a network of tightly joined financial institutions (in which the Großbanken play a dominant role), which together exert a considerable influence on industrial companies. Using the term "Hausbank", we refer to the financial institution within this group which has the implicit or explicit mandate, to carry out the "relationship", although this term is often, in our opinion improperly, used to indicate the existence of an exclusive relationship between a bank and a firm.

In order to evaluate if the situation described for the past is still actual[83], also keeping into consideration the evolutionary trends previously mentioned, we provide a descriptive analysis of the results obtained with the analysis carried out on shareholdings.

[83] The different sources of the data (Gottschalk 1988, Baums and Fraune 1994 and the ones we collected in 2001/02) causes some problems of comparison of them, therefore we think that there are some points to make clear.

As already outlined in note 19, the empirical researches carried out by Gottschalk and Baums and Fraune, consider, besides the voting rights related to direct shares held by banks, also the votes casted on the basis of proxy voting (the so called Depotstimmrechte) as well as the votes casted by the subsidiaries and the management companies possessed by the respective bank. The studies analysed the data collected by the Monopolkommission in government inquiries carried out in order to evaluate the extent of the banks' role in the industrial sector (Nardozzi 1983).

The analysis we carried out differs from the others two mainly in three aspects:

- Firstly our research considers only the direct shareholdings of the examined financial institutions and not the proxy votes. Banks do not have to report their delegated voting rights (Becht and Boehmer 2003) as, according to § 135 V and § 128 II, the bank have to consult shareholders when casting votes on their behalf and has to follow their instructions. Therefore it has not been possible analyse them because banks regard them as confidential;
- Secondly our study has enlarged the sample analysed out of the banking sector, including the two biggest German insurance companies (Allianz and Münchener Rück). This choice is justified, on one hand, by the entity of the stocks holds in the financial and non-financial sector, and on the other, considering the recent trends that have led to the ever-growing integration between banking and insurance sector (Schüler 2004 and Börner 2000).
- At the end, the appearance, among the 3 big commercial banks, of Bayerische Hypo-und Vereinsbank, the entity resulting from the merger between Bayerische Vereinsbank and Bayerische Hypobank occurred in 1998.

As regards the financial sector, we take into consideration the six financial institutions (4 Großbanken and 2 insurance companies) previously mentioned. This choice, on one hand, limits the range of our research in comparison with the ones carried out by Gottschalk and Baums and Fraune, which considered the banking sector as a whole; on the other hand we include also the two main German insurance company, whose consideration (also by the light of what said in note 22) cannot, in our opinion, be set aside. As regards the industrial sector, we chose the 100 largest German non-financial companies for turnover at the end of 2005 (chosen from the "top 500 deutsche Unternehmen" – WELT ONLINE ranking)[84]. The importance of cross-shareholdings both among non-financial enterprises and between financial institutions and industrial firms is a principal feature of German corporate governance aimed at cementing long-term relationships between companies. Moreover, in our opinion, the tight network of linkages cannot be neutral as regards the strategies definition of the involved enterprises. The existence of reciprocated equity linkages leads to common or, at least, widely shared strategies. Under this point of view, an analysis limited to equity shareholdings does not provide a complete and exhaustive picture of the strategic linkages within the network, which often are based on informal aspects, like the existence of close relationships and interdependencies between board members of different companies (Windolf and Beyer 1995)[85].

An example of this can be found analysing the linkages of three of the DAX 30 companies: RWE (multi-utility of energy generation and sales and water), E.ON. (multi-utility of energy sector) and Thyssenkrupp (steel producer). The relationship among these three companies, as it is indirect and not immediately noticeable (these companies control RAG, a firm of the energy sector, with shareholdings of 20-30% each one), risks of not being completely estimated by only considering the equity linkages. Therefore, the opportunity of integrating the analysis of equity relationships with the analysis of the composition of the supervisory boards is particularly important because it can help to outline in a deeper sense the linkages existing among the considered companies. In fact, taking into consideration the above mentioned example again, we can notice how the supervisory boards of each company seat members of the boards of the other two firms, pointing out, therefore, the existence of a strong interrelation and interdependency between the corporate organs of these companies.

The total number of shareholdings, held by the 6 financial institutions in the 100 largest German non-financial companies, more or less halved in 2005 when compared to the total numbers obtained from 2001 and 1998. This is mainly ascribable as an effect of the tax reform, approved by the Schröder's government in 2000 and it became effective in 2002, lowering the fiscal burdens on the transfer of shares. Such a reform, as already explained in note 12, reducing taxation on capital gains, allowed the banks to sell the shareholdings they held in their portfolio that they considered no more to be core. Looking at the column total numbers, it is worth noting that the banks/insurances' shareholdings are mainly concentrated in the top 10 firms and more in the first 50 companies than in the firms ranked between 51 and 100. Such an evidence shows that the interest of the 6 leading German financial institutions is mainly focused in the biggest German companies. An explanation is needed as regards the positions between 31 to 40, that shows quite a huge number of banks/insurances' shareholdings. Within this ranking there are historical German firms such as MAN, Karstadt Quelle and Deutsche Lufthansa that in the past joined higher positioning. The interest that the 6 financial institutions have in such firms is mainly ascribable to historical reasons because they are firms with more or less a century of history. Such an interest will be better explained in the next pages when talking about interlocking directorates.

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[84] The choice we made in integrating the analysis of equity shareholdings with the analysis of the composition of the supervisory boards answer to the purpose of making up for two structural limits that our study meet. On one hand, German banks are forced by German law to disclose all the directly held participation of more than 5%. Therefore, in our research we could not consider the shareholdings under that threshold, unless they are voluntarily disclosed (as for example the case of Allianz). On the other hand, we could not analyse the proxy votes exerted by banks, because they are not disclosed (see note 22). The data collected through the lists of mandates included in the annual report of every German company and the study of the composition of the supervisory boards we carried out, enables us to compare the number of seats that banks representatives effectively hold in the boards of other companies and the number of seats that the same representatives should hold theoretically on basis of the declared shareholdings. Moreover this study enables us to make up the limits that structurally a research based on annual reports has to face.

[85] It has been noted, for example that: "The members of the supervisory board have to control company management and to prevent the misuse of power. At the same time, they are part of an encompassing network which functions as a means of social integration and cohesion among the business elites and to which they owe the position they have" (Windolf and Beyer 1995).

Table 5. Number of shareholdings held by the 6 financial institutions in the 100 largest German non-financial firms

Firms ranked between the positions	Nr of shareholdings held by																				
	Allianz			Dresdner Bank			Deutsche Bank			Munchener Ruck			Commerzbank			Bayerische Hypo- und Vereinsbank			Total		
	1998	2001	2005	1998	2001	2005	1998	2001	2005	1998	2001	2005	1998	2001	2005	1998	2001	2005	1998	2001	2005
0-10	6	8	4	1	0	1	1	1	1	3	1	1	1	1		1			13	11	7
11-20	2	2	2							2		2							4	2	4
21-30							1	1											1	1	0
31-40	2	4	1	1	2	1	1			2	1		1	1	1				7	8	3
41-50	1	2		1	1		1	1											3	4	0
51-60																					
61-70	1	1	1				1	1	1				1	1	1				3	3	3
71-80		3		2	2	1	1	2											3	7	1
81-90				1	1	1		1	1										1	2	2
91-100																					
Total	12	20	8	6	6	4	6	7	3	7	2	3	3	3	2	1	0	0	35	38	20

Source: Own calculations.

Taking into consideration the amount of equity controlled by each one of the 6 financial institutions, the control exerted by them, taken as a whole, is to be emphasised. Under this point of view, it is worth noting that the network of relationship rather than single positions of one financial institution is to be pointed out. The German bank-firm relationship is based on a network of tightly joined financial institutions, which together exert a considerable influence on industrial companies. In fact, as table 6 shows, a single financial institution rarely is in the position to exert a dominant role of control[86] on a company. As regards the panel of firms, only in two cases in 1998 and in 2001, and in only one case in 2005, a single financial institution owns a stock proportion higher than 20% and we haven't found shareholdings over 30% (table 6). What we notice instead, is that often a plurality of financial institutions, each holding stock participations between 0 and 15%, exerts jointly a considerable role in the governance of the controlled firms. In fact, in each of the 3 years shown, more or less in 90% of the cases, the stock owned by banks/insurances (on the total amount of the shareholdings they have in the 100 largest German firms) is concentrated between 0 and 15%.

[86] Legal definition of control in Germany:

- As to Commercial Code (HGB), §290: 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%). A parent always controls a subsidiary, if it controls the majority of votes, if it has the right to appoint the majority of management or supervisory board members and control votes, and if it exerts controlling influence via contractual agreements or company statutes;
- As to Corporate code (AktG), §15, 16, 17, 18: Affiliated firms are stand-alone entities: if a firm is majority-controlled, if the parent owns a majority of the capital or the majority of the votes; if a firm is dependent on a parent, if the latter can directly or indirectly exert controlling influence or has majority control; if firms form a group (Konzern), if firms are under a common leadership; if firms are mutually involved in each other, if each owns at least 25% of the capital or the votes of the other;
- Law for unlimited-liability firms (PublizitätsG), § 11: Firms within a group are controlled by a parent if they are led by the same parent company;
- Law for trading of securities (WpHG), § 22: Voting rights are attributed to an entity, if (excerpt): they are owned by a third party acting in the interest of the entity or of 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 and can be voted in the entity's interest unless specific instructions are given;
- Law on takeovers and antitrust issues (GWB), §23: Extends § 17 and 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), § 1: Refer to § 290 HGB but extends the definition to all legal forms; 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. And § 10: A financial group exists, if a bank owns at least 40% of a company that operates a banking related business.

Table 6. Number of firms of which the financial institutions hold equity shareholdings, considered under the point of view of the % of stock owned

	nr of firms of which financial institutions hold equity shareholdings																				
Proportion of stock owned %	Allianz			Dresdner Bank			Deutsche Bank			Munchener Ruck			Commerzbank			Bayerische Hypo- und Vereinsbank			Total		
	1998	2001	2005	1998	2001	2005	1998	2001	2005	1998	2001	2005	1998	2001	2005	1998	2001	2005	1998	2001	2005
0-5	5	7	7		1	2		2	1	5	1	3		1	1				10	12	14
5-10	1	7		4	2	1	3	1	1	2	1		2	1					12	12	2
10-15	5	4	1		1		3	4	1				1	1	1	1			10	10	3
15-20	1	1			1														1	2	0
20-25				1	1														1	1	0
>25		1		1		1													1	1	1
Total	12	20	8	6	6	4	6	7	3	7	2	3	3	3	2	1	0	0	35	38	20

Source: Own calculations.

Such data, will be deeply explained in the next paragraph when considered in relationship to the data related to the composition of supervisory boards.

4. Do cross-shareholdings reflect bank control on German companies? An analysis of the composition of the supervisory boards

As already said, the relationships among the German financial and industrial sector create a close and complex network of companies. The analysis of equity shareholdings can explain the ties among the companies, but is our opinion that does not provide a complete and exhaustive picture of the network. Around the patrimonial linkages develop wider relationships, which often are personal, that are of crucial importance to explain the behaviour, the strategic choices, in other terms the governance of the involved companies. The study of these personal linkages can help to understand the behaviour and the strategic choices of the involved firms (see Windolf and Beyer 1995[87]).

In order to try to measure the extent of the banks/insurances' role in Corporate Governance and to evaluate in a deeper sense the effective influence they have in corporate management, we integrated the analysis of equity cross-shareholdings with a study of the composition of the supervisory boards of the 100 largest German firms of the panel. In particular, we collected for the years 1998-2005, from the lists of mandates in the annual reports of the six financial institutions considered, the number of mandates that banks/insurances' representatives hold on the supervisory boards of the industrial firms in the panel. At the same time, we cross-checked the information in the annual reports of the financial institutions with the information provided by the 100 firms in their reports.

Analysing the data collected, one can notice, by looking at table 7, that the financial institutions holding mandates on the supervisory boards of the 100 largest German non-financial companies can be listed in order of importance in such a way:

– For the year 1998: Dresdner Bank (31 mandates), Commerzbank (30 mandates), Münchener Rück (24), Allianz (19), Deutsche Bank (12) and Bayerische Hypo- und Vereinsbank (2);

– For the year 2001: Allianz (45 mandates), Commerzbank (41) and Dresdner Bank (37), Deutsche Bank (31), Münchener Rück (29) and Bayerische Hypo- und Vereinsbank (6);

– For the year 2005: Allianz (38 mandates), Commerzbank (33), Deutsche Bank (27), Münchener Rück (17), Dresdner Bank (10) and Bayerische Hypo- und Vereinsbank (5).

Observing this data, one can also notice that in 2005, in comparison to 2001, there was a decrease in the number of members appointed by the 6 financial institutions, that is mainly ascribable to the retirement of some important directors (each holding more than 2/3 mandates on the supervisory boards of German firms) of the 4 banks and the 2 insurance companies considered. Nevertheless, it is worth noting that the presence of banks/insurances' members on the supervisory boards of large German firms is a steady phenomenon, but also a little bit increasing from 1998 to 2005.

[87] Windolf and Beyer (1995) carried out an empirical research on basis of a panel of 623 German firms. They assert that in order to completely understand the linkages among German firms, the analysis of equity shareholdings should be integrated with the analysis of personal linkages.

Table 7. Mandates of the banks insurances in the 100 largest German firms

Firms ranked between the positions	Nr of members appointed by the 6 financial institutions on the supervisory boards of the 100 firms																	
	Allianz			Dresdner Bank			Deutsche Bank			Munchener Ruck			Commerzbank			Bayerische Hypo- und Vereinsbank		
	1998	2001	2005	1998	2001	2005	1998	2001	2005	1998	2001	2005	1998	2001	2005	1998	2001	2005
0-10	12(P)	16(2P)	13(P)	14	13	5	8(3P)	16(4P)	11(3P)	11(P)	11	7(P)	4(P)	5(P)	4(2P)	2	2(P)	5
11-20	1(P)	3(P)	5(2P)		4(P)	2(P)		5(P)	5	1	4(2P)	2(P)	3(P)	3(P)	2			
21-30		3	3(2P)	2	1(P)					2(2P)	2(2P)	1(P)	4	5	5			
31-40	3(P)	9(P)	6(P)	6	7	1	3(2P)	4(P)	5(P)	4	6	3	7(P)	7(P)	7(2P)		2	
41-50	1	4	2	3	3(P)	1(P)	1(P)	2(P)	3(P)	1	2	2	7(P)	9(2P)	5(2P)		1	
51-60				1	1			1		1			1	2	2		1(P)	
61-70	2(P)	3(2P)	3(2P)	1	1	1		2	2	1	1		3	4	3			
71-80		3	2	2	3			1	1	1	1	2		1(P)	2(P)			
81-90		2	1	2	2(P)					1	1		1(P)	1				
91-100		2	3		2(P)					1	1			4	3			
Total	19(4P)	45(6P)	38(8P)	31	37(5P)	10(2P)	12(6P)	31(7P)	27(5P)	24(3P)	29(4P)	17(3P)	30(5P)	41(6P)	33(7P)	2	6(2P)	5
of which members	19	45	38	31	37	10	12	31	27	24	29	17	30	41	33	2	6	5
of which Presidents	4	6	8		5	2	6	7	5	3	4	3	5	6	7		2	

Source: Own calculations.

Moreover, the figures in table 8 show that the mandates held by banks/insurances' members are mainly concentrated in the first 50 largest German companies and mainly in the top 10. Such evidence confirms the hypothesis nr. 2 by which we assert that most of the personal linkages through bankers were among the first 10/50 German companies.

To be more precise:

– In 1998, nearly 85% of mandates held by banks/insurances' members are seated on the supervisory boards of the first 50 largest German companies; specifically 43% of such members are seated on the Aufsichtsräte of the top 10 German largest firms;

– In 2001, nearly 79% of mandates held by banks/insurances' members are seated on the supervisory boards of the first 50 largest German companies; specifically 33% of such members are seated on the Aufsichtsräte of the top 10 German largest firms;

– In 2005, nearly 81% of mandates held by banks/insurances' members are seated on the supervisory boards of the first 50 largest German companies; specifically more or less 35% of such members are seated on the Aufsichtsräte of the top 10 German largest firms.

Moreover, the presidents of the firms' supervisory boards appointed by banks/insurances are mainly concentrated in the top 10 German largest companies.

Table 8. Mandates of bankers in the 100 largest German firms (% for 1998, 2001 and 2005)

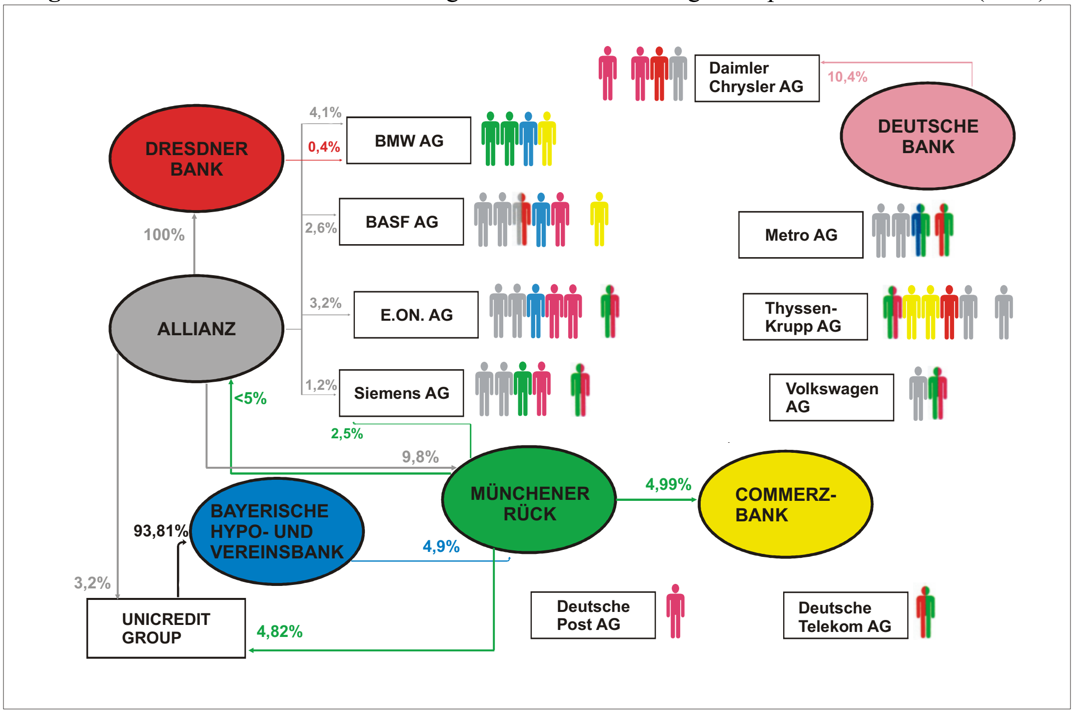
Firms ranked between the positions	Total nr of banks/insurances' members					
	1998		2001		2005	
	Members	of which Presidents	Members	of which Presidents	Members	of which Presidents
0-10	43.2%	33.3%	33.3%	26.7%	34.6%	28.0%
11-20	4.2%	11.1%	10.1%	20.0%	12.3%	16.0%
21-30	6.8%	11.1%	5.8%	10.0%	6.9%	12.0%
31-40	19.5%	22.2%	18.5%	10.0%	16.9%	16.0%
41-50	11.0%	11.1%	11.1%	13.3%	10.0%	16.0%
51-60	2.5%	0.0%	2.6%	3.3%	1.5%	0.0%
61-70	5.9%	5.6%	5.8%	6.7%	6.9%	8.0%
71-80	2.5%	0.0%	4.8%	3.3%	5.4%	4.0%
81-90	3.4%	5.6%	2.6%	3.3%	0.8%	0.0%
91-100	0.8%	0.0%	4.8%	3.3%	4.6%	0.0%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: Own calculations.

Such an evidence needs to be better explained.

Looking at figure 2, showing the equity and personal linkages among the 6 financial institutions and the 10 largest German companies in 2005, one can immediately notice that the huge presence of banks/insurances' members seated on the firms' supervisory boards is not supported by a corresponding huge amount of capital controlled by the same financial institutions.

Figure 2. Network of cross shareholdings and mandates among the top 10 German firms (2005)



Source: own calculations.

Once we settle this, we try to demonstrate, for the panel of German companies investigated, that bank-firm relationship relies not only on patrimonial linkages but also on personal relationships. Therefore is understood, that we consider the presence of own representatives in the supervisory boards of other companies as signal of the opportunity to exert power and influence. As the supervisory board's members are, except the seats reserved to the worker's representative [88] (normally the half of the whole board), nominated at the annual general meeting of shareholders, we expect, theoretically a certain correspondence between the representatives of shareholders in the Aufsichtsrat and the stock hold by the same shareholders (Gorton and Schmid 1996, Böhm 1992, Edwards and Fischer 1994, Seger 1997). In other words, if a company holds a stock proportion of 10% of another company, we theoretically expect to find in the supervisory board (composed of e.g. 20 members) of the second one, one member of the above mention shareholder's company (corresponding to the 10% of the member of the board which are representative of the shareholders)[89].

Specifically, what we are going to test is the research hypothesis nr.1 we set, under which we assert that bank-firm relationship relies not only on patrimonial linkages, but also on personal relationships. In other words, we implicitly are going to test that shareholdings cannot, at least completely, explain the considerable number of seats hold by financial institutions in the supervisory boards of firms. In order to do that, we carry out the following study on the data collected.

For each year (1998, 2001 and 2005), we express the relation between **y** and **x** with the following equation:

$$y_i = \alpha + \beta x_i$$

with:

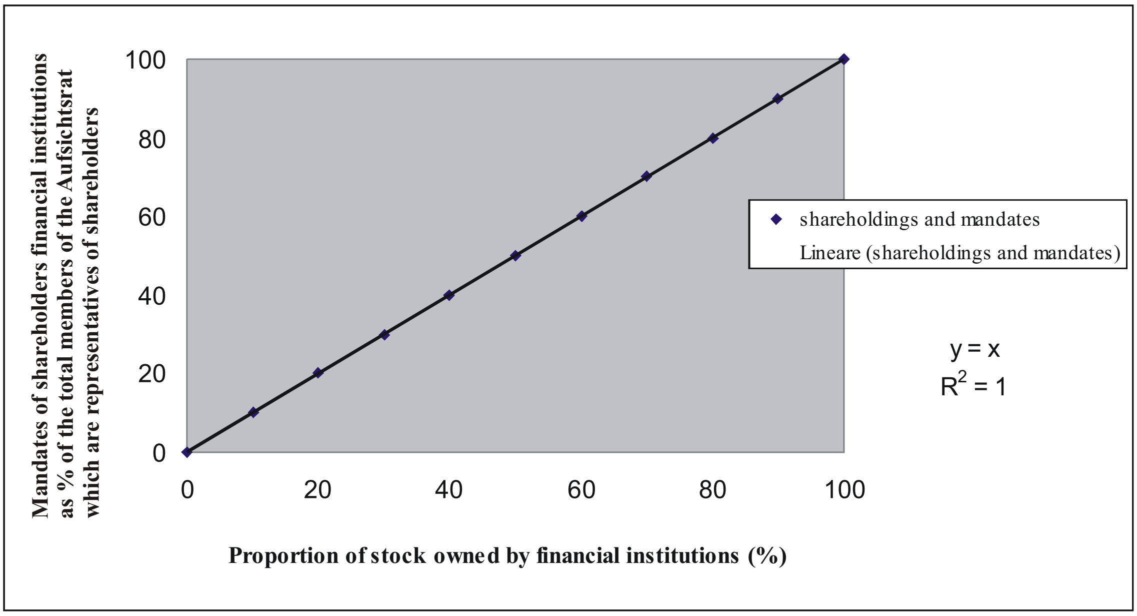
y_i: being the % of mandates of shareholder financial institutions on the total number of member of the Aufsichtsrat which are representatives of shareholders, for firm ***i(i=1…31)***

x_i: being the proportion of stock owned by financial institutions for firm ***i(i=1…31)***

Therefore if we theoretically expect a certain correspondence between the representatives of shareholders in the Aufsichtsrat and the stock hold by the same shareholders, the situation should be represented by the following graph and the indicated equation:

[88] The total number of the member of supervisory board varies from a minimum of 3 to a maximum of 21, depending on the extent of share capital. Various laws determine the proportion of employee representation on the supervisory board, and distinguish three regimes of co-determination (see note 6).

[89] Shareholders can appoint the half of the supervisory board as the other half is by law reserved to worker's representatives (e.g. in a board of 21 members they appoint 10 members).



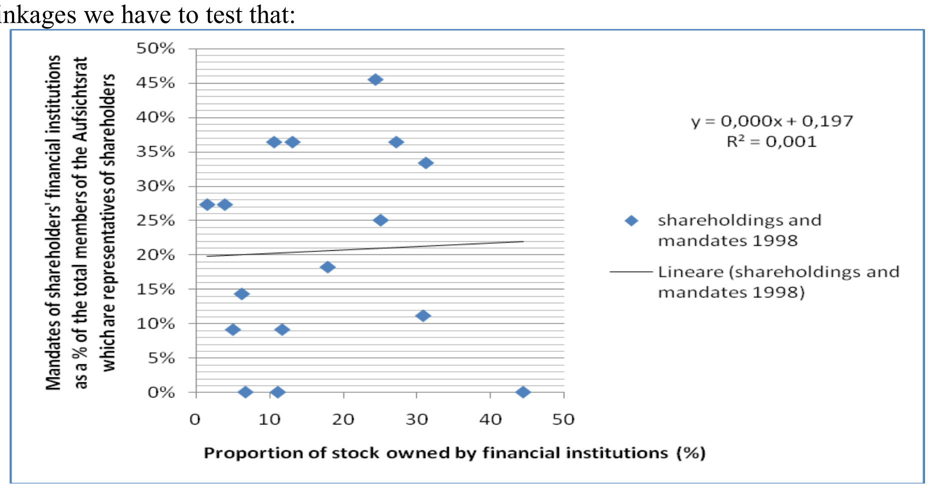
where: $\alpha = 0$
$\beta = 1$

Therefore to check the research hypothesis by which the bank-firm relationship relies, for the panel of German companies investigated, not only on patrimonial linkages we have to test that:

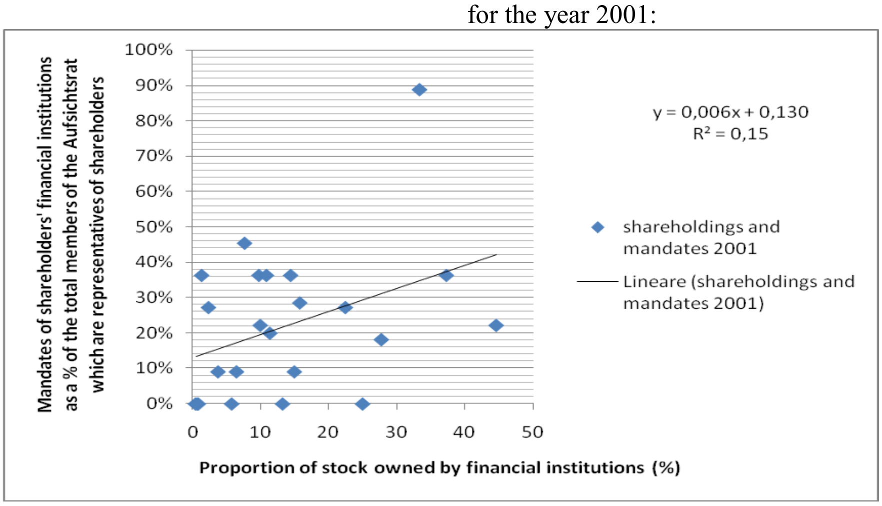
$\alpha \neq 0$ or
$\beta \neq 1$

What we obtain analysing the data collected for the panel of firms investigated, is:

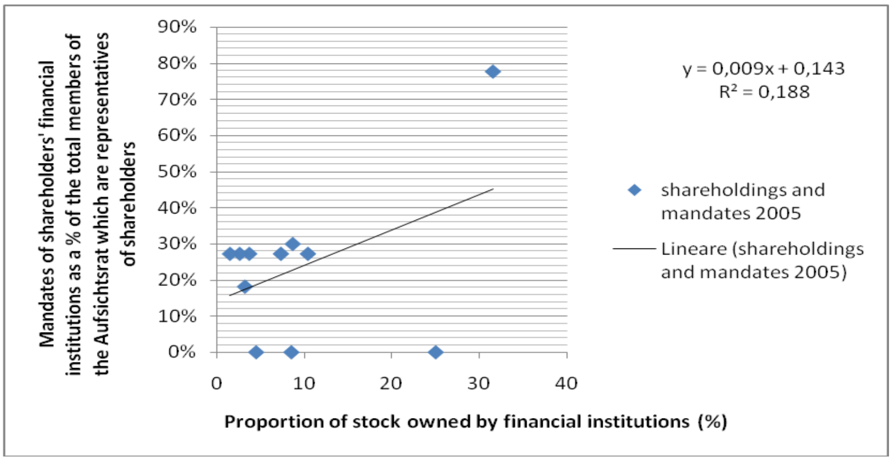
For the year 1998:



for the year 2001:



and for the year 2005:



For the 3 considered years, **α** ≠ 0 and **β** ≠ 1; moreover $\mathbf{R^2}$ is closer to 0 than 1 showing how the points (expression of a couple of observations: shareholdings and mandates) are not flatten on the straight line interpolating our observations; this means that ***y*** do not follows the ***x*** when it varies. In other words the proportion of stock owned by financial institutions can explain only partially the percentage of mandates of shareholders financial institutions on the total number of members of the Aufsichtsrat which are representatives of shareholders.

Moreover, what comes out from our research is that, if shareholdings of financial institutions could only partially explain the seats that shareholders financial institutions hold in the supervisory board, how could they explain the mandates that non-shareholder financial institutions hold in the supervisory boards of the firms investigated.

In fact, in the analysed panel we find:

- companies which, although are only marginally participated by financial institutions, show in their supervisory boards, a considerable presence of banks' representatives;
- companies in whose supervisory boards seat members of non-shareholders financial institutions;
- companies in whose supervisory boards seat more members of non-shareholders financial institutions than members of shareholders financial institutions.

Some examples can help to clarify what above outlined.

In 2001, on the supervisory board of BASF, there were two members appointed by Allianz, which held the 10.9% of the share capital, and two members, one of which was also chairman, of Deutsche Bank, which was not a BASF shareholder. In 2002, although the Allianz shareholding came down to 6.1%, its two members have been confirmed; Deutsche Bank's representatives came down to one, the chairman became a member expressed by Commerzbank, which held no direct stocks participation in BASF. Moreover there was another member appointed by Bayerische Hypo-und Vereinsbank, which had no patrimonial linkages with the company in question. Therefore as regards 2002, we noticed that non-shareholdings' financial institutions, control 19.5% of BASF's supervisory board, to which another 9.5% controlled by Allianz is to be added. As a consequence the main financial institutions, with a stock participation of 6.5% (which theoretically do not give the right to appoint any member), consisted of five (including also the chairman) out of the ten members representatives of the shareholders.

In 2001, Bayer had Allianz among its shareholders, which held a stock participation of 5.8%. In its Aufsichtsrat, as regards 2001, there wasn't any member of Allianz, while there were four (including the chairman) which were representing other non-shareholders' financial institutions (Commerzbank, Deutsche Bank, Münchener Rück). Nevertheless these financial institutions were equity linked[90] with Allianz directly (Deutsche Bank and Münchener Rück) and indirectly (Commerzbank had among its shareholders Münchener Rück, which was directly linked with Allianz by a considerable cross-shareholding).

BMW's share capital, in 2001, was participated by Allianz (6.5%) and by Dresdner Bank (5%): the percentage of members of these two institutions among the shareholders' representatives of Aufsichtsrat, was 10%, lined up with the proportion of stock owned. What it has to be noticed is that the percentage of mandates representatives of non-shareholders' financial institutions was higher (19.5%) than the percentage of members of shareholders financial institutions. In 2002, Dresdner Bank sold the stock participation owned and Allianz shareholding decreased to 5.2%. As in 2002, Allianz had totally acquired Dresdner Bank, we considered

[90] Analysing the data collected from the annual reports 2001 of the financial institutions considered came out that: Allianz owned a direct shareholding of 4.5% in Deutsche Bank, a 78.5% in Dresdner Bank, a 25% in Münchener Rück. On the other hand, Allianz had among its shareholders: Deutsche Bank (7.4%), Dresdner Bank (9.2%) and Münchener Rück (25%). Moreover it was indirectly linked with Commerzbank through the shareholding of 10.4% that Münchener Rück held in this bank.

the Dresdner's representatives as members appointed by Allianz. For 2002, the position of the members of Allianz on the supervisory board was unchanged. At the same time, the position of non-shareholders' financial institutions appeared to be reinforced (raising up to 23.5%). Analysing the situation from the point of view of the shareholdings, the control exertable by financial institutions appears as not particularly remarkable (11.5% in 2001 and 5.2% in 2002); while taking into consideration the control they are able to exert on corporate governance through the control of the supervisory board, their position appears to be noticeable (28.5% in 2001 and 35% in 2002).

Moreover, what is to be pointed out from the three examples above described, is that the chairmen of the Aufsichtsrat have been appointed by the financial institutions, which are not shareholders of the three companies.

These three examples are emblematic of the widespread phenomenon in the German system by which the main financial institutions are able to exert influence and control on the main German industrial firms. In fact, analysing[91] the aggregated data of the panel under evaluation, we notice that:

- as regards 1998, the six financial institutions, holding directly on average the 2.7% of the share capital (altogether considered) of the industrial companies of the panel, appointed the 3.3% of the part of the Aufsichtsrat reserved to the shareholders' representatives. To this percentage we can add another 6.5% of members that represent non-shareholders' financial institutions. Summarizing, the main financial institutions owing on average a 2.7% stock proportion of the industrial firms considered, express the 9.8% of the seats reserved to the shareholders' representatives on the supervisory boards (in other words nearly the 20% of the total number of members of the Aufsichtsrat). Therefore, they are able to exert a considerable influence and control on the boards of these firms.
- as regards 2001, the six financial institutions, holding directly on average the 3.2% of the share capital (altogether considered) of the industrial companies of the panel, appointed the 5.1% of the part of the Aufsichtsrat reserved to the shareholders' representatives. To this percentage we can add another 10% of members that are representatives of non-shareholders' financial institutions. To summarize, the main financial institutions owing on average a 3.2% stock proportion of the industrial firms considered, express the 15.1% of the seats reserved to the shareholders' representatives on the supervisory boards (in other words nearly the 30% of the total number of members of the Aufsichtsrat). Therefore they are able to exert a considerable influence and control on the boards of these firms.
- repeating the same calculations for 2005, we noticed that: the six financial institutions, holding altogether the 1.1% of the share capital of all industrial firms, express the 12.4% of the members on the supervisory board which are shareholders' representatives (of which 2.6% are representatives of shareholders' financial institutions and 9.8% of non-shareholder financial institutions). In other words they can express nearly the 25% of the total members of the Aufischtsrat[92].

To summarize, for the 3 considered years, the proportion of voting rights, which the six financial institutions can exert in the supervisory boards of the industrial firms considered, is clearly higher (with a multiplier set between 4 and 5)[93] than the proportion of stocks they directly own. Therefore, also considering the results of the statistic test above carried out, does not seem to be the shareholdings to determine the proportion of voting rights that the financial institutions are able to express in the supervisory boards of the industrial firms considered.

The evidence resulting from the test and from these last calculations showing a weak correspondence between shareholdings and mandates, require an explanation. In particular, we try to verify if these results are to be attributed to proxy voting's phenomenon, that we could not analyse, or to other factors, that are peculiar of the German institutional model (see note 22).

The fact that financial institutions can express a higher proportion of members in the supervisory boards than the one they are expected to control according to their shareholdings, can be justify by the exercise of proxy voting. As already said our study could not quantify this aspect because banks are not obliged to disclose the votes casted on behalf of their

[91] To analyse aggregated data of the panel, we calculate the percentage of share capital owned by financial institutions as a mean of all shareholdings they owned in the firms of the panel. The percentage referred to the proportion of seats of representatives of the financial institutions on supervisory boards has been calculated as a mean of the number of seats they hold (taking into consideration the double vote that the chairman can exert, as though there was an additional member on the board) on the total amount of member representatives of shareholders of different boards.

[92] Our results are lined up to what was obtained by Charkham (1995) and Andreani (2003), who assert that analysis carried out on different samples and in different years show as a result that banks' representatives seated on the supervisory boards of industrial firms are about 20% of all seats of the Aufsichtsrat.

[93] This multiplier has been calculated as a ratio between the proportion of stock owned by the financial institutions and the proportion of voting rights they can express (through their representatives) on the part of the Aufsichtsrat which is expression of shareholders' representatives (instead, considering the last proportion on the total number of the members of the supervisory board, the same multiplier will be set from 4 and 5).

clients[94].

Nevertheless we assert that this aspect, by its own, cannot explain the founded out misalignments. This on basis of two considerations:

- On the one hand, a study carried out by Edwards and Nibler (2000) of the University of Cambridge, on the German model of corporate governance and specifically on the aspect of ownership concentration, provides empirical evidence of the poor relevance of the phenomenon of proxy voting. Their research takes into consideration 156 companies among the main German industrial firms for turnover of 1992, aiming at finding any correspondence between proxy voting and the considerable presence of banks' representatives on the supervisory boards of German firms. The regression analysis they carried out explains this relation only partially: they conclude that noticeable presence of banks representatives cannot be interpreted exclusively as a reflection of the control that financial institutions exert on voting rights at annual general meetings. Moreover, as other authors point out (Westermann 1996), the practice of delegating voting rights to banks without specific instructions is bound to reappraise (Martin 2004), also considering the recent law disposals (KonTraG and AktG reform). As a consequence, as regards the years 1998-2005, Depotstimmrechte should be of less importance in comparison to what can be noticed in a study carried out at the beginning of the nineties.
- On the other hand, the weak correspondence we noticed between mandates and shareholdings regards not only banks but also insurance companies. For example, considering the composition of the supervisory boards of Metro, Thyssen-Krupp and Volkswagen, we noticed how in their boards seat representatives of Allianz and Münchener Rück, which do not hold any stock proportion in these firms. As Allianz and Münchener Rück are insurance companies, the presence of their representatives on these supervisory boards cannot be explained by proxy votes, because only banks can be delegated by their client to exert these rights on their behalf.

Taking into consideration what has been said above, we assert that the explanation of the considerable presence of representatives of financial institutions on the supervisory boards of other companies is not to be found in proxy voting, but elsewhere.

In our opinion, the strong and stable ties, both patrimonial and personal, which traditionally characterize the relationships among the six main German financial institutions, have a dominant role in explaining the composition of the supervisory boards of industrial firms. This network of relationships among financial institutions is reflected on the industrial sector, showing the considerable influence the financial sector is able to exert on the latter. These assertions need to be clarified.

On the one hand, it's necessary to specify that, when we talk about linkages, we do not refer exclusively to the equity ones, and in particular to the cross-shareholdings which traditionally and still characterize the German system. Obviously the cross-shareholdings help to explain the phenomenon described (considerable presence of banks' representatives on the supervisory boards of other companies), but under this point of view we noticed how the presence of representatives of non-shareholders' companies could be explained by other equity linkages they have with other shareholders of the company in question.

Moreover, we have to point out the considerable role that personal relationships have among members of the supervisory board of these institutions. The habit of sharing the seats on the boards of other companies with representatives of other financial institutions, and of keeping at the top organs of the company members, who have participated in the company management for a long time[95] (Hopt and Prigge 1998), has led to the establishment of significant personal relationships among managers which are part of a close network (Pfannschmidt 1993, Leimkühuler 1996). These linkages persist with time, independently of the existence of a cross-shareholding. For example, companies such as Volkswagen, Daimler Chrysler and Thyssenkrupp, maintain the composition of their supervisory board unaltered, having banks' representatives seated on them, also after the shareholders' financial institutions have sold their equity participations.

On the other hand, to emphasise the control exerted by the main financial institutions, taken as a whole; the network of relationships rather than single positions of one financial institution is to be pointed out. The German bank-firm relationship is based on a network of tightly joined financial institutions, which together exert a considerable influence on industrial companies. In fact, as table 6 shows, a single financial institution rarely is in the position to exert a dominant role of control on a company.

The fact that this potential exertable influence will become effective depends on the eventuality that these financial institutes express a common position. In our opinion the presence on the supervisory boards

[94] Banks do not have to report their delegated voting rights as, according to § 135 V and § 128 II, the banks have to consult shareholders when casting votes on their behalf and have to follow their instructions. Therefore, theoretically, banks cannot exert them on discretionary basis.

[95] This fact is confirmed also in a study carried out by Korn-Ferry International (1996), which states that, in almost 43% of the companies, at least one member of the board of management (normally the managing director), after retiring from the role filled on that board, became a member (often the chairman) of the supervisory board.

of most of the analysed firms of representatives of these non-shareholders' institutions, which are indirectly linked to shareholders' institutions, seems to be a sign that this common position has been found in reality.

The fact that the main financial institutions express a common position of considerable importance does not mean that they necessarily exert control on industrial firms. What we would like to point out is that the German banking system, according to the German culture marked by co-decision and consensus-research (Albert 1991, Onetti 2001), represents, as a whole, an important interlocutor for German firms. Nevertheless German companies, also taking into consideration the positions expressed by these stakeholders, make their strategic and management decisions essentially in autonomy.

5. Conclusion

One of the main traditional features that the researchers generally attribute to the German national capitalism model is the system of relationships between financial institutions and between these and the main industrial companies.

This system has supported and led the German industrialization, contributing to create and maintain a stable industrial basis (Velo 1996). The system of cross-shareholdings, guaranteed to firms stable ownership and continuity in corporate management. At the same time, it allowed financial institutions to gain a substantial control's power on industrial companies and led to the creation of a network of personal relationships, not always clear, among a restricted number of managers of different companies. Moreover cross-holdings served as restraints of competition in the market for corporate control.

The recent changes, we noticed occurred in the German model, indicate a certain trend towards a market-oriented system.

In particular, some important functions of banks in the corporate governance of firms are changing. The main traditional mean of control they have on industrial system (through shareholdings) is loosing its importance. German banks, in order to face global competition in a financial market becoming more and more wide, integrated and competitive, are selling their shareholdings in the industry. Nevertheless, the process of reduction of their equity portfolio does not seem to be stood by a reappraisal of the control they are able to exert through their representatives in the supervisory board of the German industrial companies analysed, which is in our opinion still relevant.

The study carried out prove that bank-firm relationship do not only rely, for the panel of firms investigated, on patrimonial linkages. In other words the proportion of stock owned by financial institutions (2.7% in 1998 and 1.1% in 2005) can explain only partially the considerable and slightly increasing percentage of bankers seated on the supervisory boards of the firms in the panel (20% in 1998 and 25% in 2005). Moreover, it has been shown that bankers are mostly represented on the supervisory boards of the top 10 German firms, showing the important role that banks and insurance companies maintains in the corporate governance of such firms.

Limits of our empirical research are various. To mention someone:

- The fact that we could not take into consideration the proxy votes, as already said, which could help to explain the non correspondence between the proportions of stocks owned by financial institutions and the percentage of members they can appoint on the supervisory boards of the firms analysed;
- The sample analysed refers to big German companies, the *Mittelstand* has not been taken into consideration in the present study, but conscious of the importance to add such a comparison to the analysed data to provide a much more complete picture of German corporate governance, we can say that this will be one of our future research interests.

Concluding, is our opinion that the explanation of the considerable presence of banks representatives in the supervisory boards of other companies, is to be found in the personal linkages that are the peculiar feature of the German bank-industry relationship. This type of relationship, despite many regulatory and structural changes occurred in the German model, won't change, at least in the short time, because it is expression of the culture of co-decision and co-responsibility deeply rooted in the German insitutional system of governance (Shonfield 1965, Albert 1991, de Jong 1997, Warglien 1997, Hacketal et al. 2003).

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