

## CIRCUMSTANCES RELATING TO INTERLOCKING DIRECTORATES IN ITALY: AN EXPLORATORY STUDY

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### **Abstract**

Despite a large body of research in the management, accounting, economics, and finance literatures, the relationship between board composition and firm performance is still controversial and ripe for debate (for a recent study, see Boone et al., 2004). Utilizing the theoretical approach of Zahra and Pearce (1989) that identifies the three key roles of the board as oversight, strategy, and service, we examine the effects of having board interlocks between an industrial firm and of financial services firm, and firm characteristics. Using publicly available data on all listed Italian firms for the year 2001, we find that for industrial firms, there is a positive relationship between the number of board interlocks with a bank and current year return on assets, however, the opposite is true for financial services firms. Finally, we find no relationship between interlocking directorates with banks and firm capital structure.

**Keywords:** board of directors, corporate governance, Italy

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### **1. Introduction**

Optimal board composition has been a matter of debate for the past thirty years. Despite a large body of research in the management, accounting, economics, and finance literatures, the relationship between board composition and firm performance is still controversial and ripe for debate (for a recent study, see Boone et al., 2004). Since corporate governance is central to the efficient functioning of capital markets, the need to understand the structure and composition of the board of directors creates a fruitful avenue for research. According to agency theory (Jensen and Meckling, 1976; Fama and Jensen, 1983) the board performs two main functions: oversight and setting CEO pay. Other theories such as stewardship theory (Davis et al., 1997; Muth and Donaldson, 1998) emphasize the strategic function of boards, and resource dependence theory (Pfeffer, 1972; Pfeffer and Salancik, 1978) views boards as boundary spanners. To this date, none of those theoretical perspectives has received definitive empirical validation. The relationship between board characteristics and firm performance remains a controversial topic in financial markets, regulatory bodies, and academic

research: Studies have found either no results or contradictory findings when examining the relationship between board composition and firm performance (Baysinger and Butler, 1985; Bhagat and Black, 2002; Chaganti et al., 1985; Daily and Dalton, 1992, 1993, 1994; Dalton et al., 1998; Ezzamel and Watson, 1993; Kesner et al., 1986; Pearce and Zahra, 1992; Peng, 2004; Rosenstein and Wyatt, 1990; Schellenger et al., 1989). Hence, at least in academic circles, the superiority of any theoretical approach as well as its empirical validity is unclear (Raheja, 2004; Boone et al., 2004; Linck et al., 2005).

Utilizing the theoretical approach of Zahra and Pearce (1989) that identifies the three key roles of the board as oversight, strategy, and service, we examine the relationship between interlocking directorates (when board of director members of one firm are also board members on another firm) and firm performance. Our study is motivated partly by the desire to contribute to the governance-performance debate and partly to understand how corporate governance facilitates relationships between banks and industrial firms. We specifically examine the effects of having board interlocks between an industrial firm and a bank (financial services firm), and we hypothesize the following:

Industrial firms having board interlocks with banks have higher levels of debt financing due to the resource-picking effect provided by interlocking with a bank. Additionally, we also hypothesize that interlocks between industrial firms and financial institutions provide synergistic benefits for both entities: Firms are able to obtain cheaper financing, improving their financial position, and banks are better able to monitor firms and reduce information asymmetries. Therefore, we expect interlocks between banks and industrial firms to have a positive performance effect for both entities. Using publicly available data on more than 200 Italian firms, we use a multivariate OLS regression model to test these relationships. Results indicate that for industrial firms, there is a positive relationship between the number of board interlocks with a bank and current year return on assets, indicating that both the monitoring effect of banks and a facilitated access to capital have a positive effect on firm performance. However, for banks, there is a marginally negative relationship between the number of board interlocks with an industrial firm and return on equity. This surprising result indicates that industrial firms use their connections to banks to extract rents to the detriment of the financial institutions. Finally, we find no relationship between the number of interlocks between industrial firms and banks and industrial firms' capital structure.

This paper contributes to the existing debate regarding corporate governance and firm performance. We find that board interlocks have differential effects on performance predicated upon the specific nature of the interlocking relationship. This study also adds to the literature examining relationships between industrial firms and financial institutions in general, and specifically, board interlock as a means to such relationships. Finally, we also provide an analysis of the role of banks in the underdeveloped Italian capital markets for which we collect data on all publicly available firms in CONSOB (the Italian SEC). This paper is organized as follows: Section 2 discusses the theoretical framework and presents the hypotheses; Section 3 discusses the specific institutional background of Italy. Section 4 discusses the sample selection and variables used, and Section 5 presents the results followed by the discussion and conclusion.

## **2. Theoretical Framework**

### **2.1. The Board of Directors: Roles and Composition**

Modern governance theories have three primary assumptions regarding the board of directors. First, each director within the board has an individual function of providing skills, knowledge, expertise, and connections to the external environment.

Second, the board of directors performs different tasks simultaneously. Third, the board of directors performs tasks according to the strategic alternatives facing the company (Rindova, 1999). Consequently, there is a large variability as to what each individual member can contribute to the firm (Sullivan, 1990). This board diversity combined with what the executive team contributes in terms of decision-making abilities produces a "mosaic" of management approaches to strategic choices (Markarian and Parbonetti, 2005).

In order to further understand the board of director and its composition as well as its effect on firm decision making, we have to re-examine the underlying theories regarding board functions. Extant systems have adopted the agency theory influence view that boards have a binary composition of being independent or entrenched because most policy research has looked at boards in terms size, power structure, and independence. Such a view of the firm is useful if we are analyzing the board in terms of its monitoring activity, but since the board concurrently performs control, strategic, and service functions (Zahra and Pearce, 1989), modern views of governance need to examine boards in an organic, rather than a binary, perspective. In this study, we examine the relationship between board composition and firm characteristics, such as performance and capital structure, from the perspective that each board member brings different capabilities to the firm. While previous research has examined the relationship between board structure and firm characteristics, we argue that each director within the board contributes to the firm in terms of the specific capabilities and resources that he or she can contribute. Therefore, the firm's performance and strategic choices with respect to the firm's internal and external environments are affected by the contribution of each board member (see Branson, 2003; Gillan et al., 2003; Hillman et al., 2000; Lehn et al., 2004; Zahra and Pearce, 1989).

In the theoretical development advanced by Zahra and Pearce (1989), which assimilates the agency, resource-based, and legalistic perspectives of corporate governance, the structure and composition of the board of directors represent a function of the firm's external (industry, competitive environment, legal) and internal (life cycle, CEO style, size, resources) contingencies whereby boards perform three basic functions: service, strategy, and oversight (control). Strategic decision making has been identified as a primary role of board members (Bavly, 1985; Estes, 1980; Kreiken, 1985; Harrison, 1987; Rosenstein, 1987; Schmidt and Bauer, 2006; Tashakori and Boulton, 1985; Waldo, 1985; Zahra and Pearce, 1989). The oversight function relates to monitoring managers and protecting shareholders (Carpenter, 1988; Chapin, 1986; Ewing, 1979; Linck et al., 2005; Loudon, 1982; Mattar and Ball, 1985;

Mueller, 1979; Vance, 1983; Zahra and Pearce, 1989). Finally, the service role relates to strengthening the ties with the external environment, enhancing strategic bonds with key entities (Carpenter, 1988; Leibowitz, 1978; Louden, 1982; Swaminathan and Moorman, 2003; Zahra and Pearce, 1989; Vance, 1983). Based on the three roles performed by board members, the next sections examine the role played by directors who are board members of a firm and a bank at the same time: the service and oversight functions of board members in monitoring of lending relationships (Booth and Deli, 1999).

## **2.2. Bank-Firm Relationships and the Strategic/Service Function**

As discussed in Section 2.1, board functions are affected by the contributions of individual board members. Therefore, the skills, expertise, and resources contributed by each board member affect the firm's strategic decision making. One such characteristic is whether a board member in an industrial firm is also a board member in a firm in the banking industry. A board member from the banking industry would provide different resources to the firm as compared to those of a politician, a scientist, or an executive from a competing firm. For example, if the host firm is a relatively small technologically intensive firm, board members who are university scientists can provide resources regarding the latest advances in the technology domain; board members who are politicians can provide the necessary connections to reduce the cost of business in the firm's geographic location. Finally, a board member from the banking industry provides resources regarding the firm's capital structure and could provide cheaper access to financing.

Academic and anecdotal evidence suggests the strategic and service functions are among the most important roles of board members (see Johnson et al., 1996; Jennings and Lumpkin, 1992).

It is well recognized that outside directors play an important advisory role (Baysinger and Hoskisson, 1990; Fama and Jensen, 1983; Rosenstein and Wyatt, 1990; Hillman et al., 2000; Hillman, 2003; Rindova, 1999; Terry, 1992; Vance, 1978). The service function involves environmental scanning to provide the necessary information regarding the external environment (Smircich and Stubbart, 1985) and helps firms assess characteristics of strategic issues (Jackson and Dutton, 1988). The service role enhances company reputation and facilitates important strategic connections, reducing the costs of doing business. As for the strategic function, Andrews (1980) argues that board members participate in the strategic decision-making process because they possess the necessary requisite

judgment and because it improves their oversight function. The strategic management literature has identified two processes for acquiring competitive advantages: resource picking and capability building (Makadok, 2001). The resource-picking process enhances a firm's ability to obtain resources and information from the environment. A competitive advantage will exist if the resource is obtained at a price lower than that available in an independent arm's-length transaction. One way to enhance resource picking is to have interlocking directorates (Burt, 1983; Pennings, 1980), providing valuable links and sources of expertise in building a competitive advantage.

Interlocking directorates is one means of establishing closer ties between a bank and a firm (Byrd and Mizruchi, 2005; Booth and Deli, 1999; Dooley, 1969; Fligstein and Brantley, 1992; Kroszner and Strahan, 2001; Pfeffer, 1972; Stearns and Mizruchi, 1993). When it comes to bank-firm relationships, the presence of bank representatives on the board of directors enhances the resource-picking process. Pfeffer (1972) and Pfeffer and Salancik (1978) argue that boards of directors act as boundary spanners. Boards of directors are vehicles through which firms absorb important external resources (Pfeffer, 1972). Kesner (1988: 68) argues that "outsiders often help an organization secure scarce resources through external associations." Pfeffer (1972) finds a positive correlation between the proportion of directors that represents financial institutions and leverage and interprets such a relation to be coherent with the idea that banks would provide capital when they have representation on the board of directors. A different interpretation of Pfeffer's (1972) finding is that the connections between banks and firms can reduce the cost of borrowing thanks to a better information flow between the banks and the firms (James, 1987). As reported by Mace (1971: 132), bankers believe that board membership formalizes the relationship between their banks and industrial companies. Booth and Deli (1999) provide empirical evidence that support the notion that outside directors from the banking industry provide debt market expertise, while Hoshi et al. (1991) document the potential benefits that arise from the connections between banks and firms. They analyze Japanese firms that are members of keiretsu and compare them with Japanese firms that are not. They find that keiretsu firms have higher debt levels than nonkeiretsu firms and that investment is less sensitive to liquidity in keiretsu firms than for independent firms. These findings suggest that firms that are inherently bound in business relationships with banking entities have an easier access to capital and that a larger part of their financing is done through their close ties with debt providers. In this study, we examine the expertise related to debt markets and its effect on

firm capital structure by investigating the potential benefits of interlocking directorships in providing debt market expertise. This strategic/service role consists of (1) the provision of necessary connections as well as information and the ability to access capital through connection with the banking industry and (2) the ability to evaluate alternative debt contracts and pricing arrangement. If board members belonging to the banking sector sit on industrial firms' boards and provide the firms with the necessary financial resources, then we expect the following:

*H1: The number of interlocking directorates that a firm has with banks positively affects the amount of debt financing.*

### **2.3. Bank-Firm Relationships and the Monitoring Function**

In Section 2.2, we argued that the presence of interlocking directorates with banks affects the firm's capital structure and financing decisions. In this section, we examine whether such a relationship affects the performance of both the firm and the lending institution. As advanced by agency theory and assumed in current governance trends, boards that have a majority of independent directors adequately monitor top management (Dedman, 2002; Hopt and Leyens, 2004; Johnson et al., 1996; Klein, 2002). Board independence has been associated with a reduced likelihood of financial misstatement (Dechow et al., 1996), a more comprehensive audit (Carcello et al., 2002), and lower levels of earnings management (Klein, 2002). In general, independent directors preserve shareholder interests by using their expertise to enhance the comprehension, creativity, and soundness of a firm's decisions (Ginsberg, 1994; Rindova 1999). These relationships pertain to board independence per se; however, they do not address the type of board members occupying seats on the board.

In a bank-firm relationship setting, Rosenstein and Wyatt (1990) find results that are consistent with the notion that outside directors contribute in a monitoring function. They examine the market response to the appointment of a board member with a financial background and find that there is a positive abnormal return associated with such an appointment, indicating that the market perceives that such appointments are in shareholder interests. Pfeffer (1972) finds that the connections between banks and firms can reduce the cost of borrowing thanks to a better information flow between the banks and the firms (James, 1987). Hoski et al. (1991) suggest that the close ties occurring within the keiretsu benefit the firms because banks have the incentive to monitor the firms, thus reducing information problems (Myers and Majluf, 1984) and

incentive problems (Myers, 1977). Hoski et al. (1991) also find that close bank ties reduce the cost of financial distress, and Gilson et al. (1990) find that financially distressed firms with higher leverage are more likely to reorganize outside of bankruptcy courts. These findings combined suggest that closer ties to banks provide easier and cheaper access to capital, increase monitoring, and reduce the likelihood of distress, thereby positively affecting the firm's performance.

An interlocking directorate facilitates the relationships between a bank and a firm when representatives from the banking industry are independent members of the board of directors of industrial firms, have access to inside information, and simultaneously provide executives the necessary resources to access capital. Additionally, interlocking directorates may also have indirect consequences because they may serve as a certification form signalling the creditworthiness of the firm, thus helping firms secure cheap capital from other banks or investors (Fama, 1985; Kracaw and Zenner, 1998). In sum, so long as firms need capital for growth and survival, there is a positive expectation from having lenders on the board of directors (Booth and Deli, 1999), which leads to our second hypothesis:

*H2: The number of interlocking directorates with banks positively affects firms' performance.*

Sharing one (or more) directors with a firm permits the financial institution to access proprietary information. Links between firms and lending institutions could reduce contracting costs as do the links within a keiretsu (Booth and Deli, 1999). Interlocking directorates that occur between firms and banks permit firms to economize on the cost of monitoring as a result of greater access to information (Kroszner and Strahan, 2001; Williamson, 1988). This easy flow of information improves a bank's evaluation of the creditworthiness of the firm, facilitating the lending process (Kracaw and Zenner, 1998; Kroszner and Strahan, 2001). As a consequence, we argue that close ties between banks and firms provide benefits not only to the firm but also to the bank, leading to our third hypothesis:

*H3: The number of interlocking directorates with firms positively affects banks' performance.*

### **3. Institutional Background: Corporate Governance in Italy**

The Italian system of corporate governance is characterized by an underdeveloped capital market and weak legal protection of small shareholders (La Porta et al., 1999). Companies, even though public, typically belong to a pyramidal group structure where the "top" group generally controls a number

of subsidiaries (Brioschi et al., 1990). Such hierarchical groups control over 56 percent of firms in the manufacturing industry in excess of 200 employees (Bianco et al., 1996). In general, such ownership structures offer ample opportunities for expropriating small shareholders (Bebchuk et al., 1999) when there is a marked separation of control rights from cash flow rights by means of a pyramidal group and cross-ownership ties. Furthermore, Zingales (1994) documents that the benefits associated with control are larger in Italy than elsewhere. Another well recognized characteristic of the Italian corporate governance system is a strong ownership concentration; Brunello et al. (2003: 1029) document that “in more than half of listed firms one shareholder owns the absolute majority of common shares.” During the 1990–2000 period, the average share ownership of the largest shareholder remained almost unchanged at slightly less than 50 percent (CONSOB, 2001) and of the second largest shareholder at between 8 to 10 percent (La Porta et al., 1999; Brunello et al., 2003).

These characteristics make the Italian corporate governance system more similar to the German and Japanese system than to the U.K./U.S. (so called *Anglo-Saxon*) governance model (Shleifer and Vishny, 1997). Italy differs from the German and Japanese systems, however, because banks’ monitoring activities seem to be ineffective. Brunello et al. (2003) raise concern about the ability of banks to monitor insiders. Thus, coupled with a weak external market for corporate control, there seems to be inadequate monitoring of insiders on behalf of minority shareholders. The Italian financial system relies on multiple loans from the same lending institution, but unlike German banks, Italian banks are legally prohibited from voting the shares that are in their custody (Franks and Mayer, 1998). Thus, Italian banks are at a relative disadvantage when it comes to monitoring firms.

In sum, because of weak legal shareholder protection and ownership concentrated at the top of a pyramidal ownership structure, the Italian capital markets provide for a fruitful setting to examine relationships between banks and industrial firms through board interlocks. This study of a “locked” capitalism dominated by a few families and shareholders renders interlocking directorates between banks and firms as the only way through which banks exert their oversight role over insiders.

## 4. Data and Variables Used

### 4.1. Data

Our sample consists of all companies listed at the Milan Stock Exchange in the year 2002. We use data available through CONSOB that disclose the composition of the board of directors. We classify

each firm as an industrial firm or a financial services firm based on the SIC classification, and we classify as an interlock each board member concurrently holding board membership in an industrial firm and in a financial firm. As such, each firm might have multiple interlocks depending on the number of ties held by each board member. Financial data are computed using data from the annual report. The final sample consists of 204 industrial firms and 50 financial services firms.

### 4.2. Variable Used

For the purposes of our study, we utilize as our main research variable INTERLOCK, which is a measure of the extent of interlocking relationships between an industrial firm and a financial services firm. Furthermore, in order to examine the relations between interlocking directorates and debt policy and between interlocking directorates and performance, we also calculate the debt ratio (DEBRATIO) as long-term debt as a percentage of total capital [ $LTD / (LTD + Equity)$ ] (Byrd and Mizruchi, 2005). Booth and Deli (1999) document that although the association between bankers on the board and bank debt may be strong, the association with nonbank debt may be insignificant. Thus, our measure of aggregate debt maybe be conservatively biased (see Byrd and Mizruchi, 2005). Firm performance is measured using return on asset (ROA), and bank performance is measured using return on equity (ROE). This distinction is due to the difficulties in defining the operating profit of a financial institution. To isolate the relationships between our variables of interest, we also utilize a number of firm-specific variables. First, we control for firm size using the number of employees (EMPLOYEE).<sup>1</sup> Second, consistent with previous studies, we control for the firm’s growth opportunities using the market to book value of equity ratio, MBV (see Booth and Deli, 1999; Smith and Watts, 1992). Third, we consider two governance variables that may represent the monitoring of insiders: the incidence of CEO with the chairmanship role (CHCEO) and the size of the board of directors (NBOD) (see Fama and Jensen, 1983; Hermalin and Weisbach, 1988). For a list of variables used in the study, please see Table 1. [See appendices, Table 1].

## 5. Results

### 5.1. Descriptives and Univariate Analysis

Table 2 provides the descriptive statistics. Upon examining them, we can make the following key

<sup>1</sup> Using total assets instead of the number of employees qualitatively doesn’t alter the results

observations regarding industrial firms: On average firms have 0.88 links with banks, and the maximum number of interlocks that a firm has with a bank is 11. 39.7 percent of firms with at least one interlock with a bank, and 18 percent of firms with more than a single interlock. Analyzing the 500 largest U.S. manufacturing firms, Byrd and Mizruchi (2005) find that the board of 37 percent of all firms has at least one banker, although Booth and Deli (1999) find that 43 percent of S&P 500 firms have at least one member representing the financial services industry. Hence, in our data, Italian firms appear to have stronger ties to the financial services industry than do U.S. firms. Looking at firms in the financial service industry, we see that on average banks have 4.82 interlocks with industrial firms, and the maximum number of interlocks that a bank has with an industrial firm is 25. 77.1 percent of banks with at least one interlock, while 60 percent of banks have more than one interlock with an industrial entity. Banks on average have boards made up of 15.44 members, while the board of industrials has on average 9.0 members. Similar to our results, Byrd and Mizruchi (2005) and Booth and Deli (1999) document an average board size of 12.0 members. Finally, banks on average are larger than the industrial firms as evidenced by the fact that they have twice as many employees, consistent with the fact that Italy has underdeveloped capital markets that are dominated by financial institutions. [See appendices, Table 2]. Table 3 presents the Pearson correlation coefficients. Panel A, which examines industrial companies, indicates that the number of interlocks that a firm has with banks depends on both the size of the firm and the board but is negatively correlated with CEO duality and positively related to performance. Contrary to expectations, the debt ratio and the number of interlocks are not correlated. As robustness check, we also calculate the correlation coefficient between the debt ratio and a dummy variable that takes the value of 1 in the case a firm has at least one or more interlocks with a bank (0 otherwise). Our results do not change in this alternate specification; hence, for parsimony, we do not report them in this and following tables.

If the ties between firms and banks serve in supplying debt-market expertise and monitoring lending relationships, then we expect that the number of interlocks between firms and banks to be positively related to a firm's use of debt. However, these results are at the univariate level, and tests in the following section will examine these relationships at the multivariate level, taking into consideration firm specific effects. Panel B of Table 3 reports correlation coefficients regarding banks. Its results show that the number of interlocks that a bank has with firms is not correlated with the research and control variables. [See appendices, Table 3].

## 5.2. Multivariate Analysis

The univariate analysis provides useful insight on the relationship between interlocking directorates and firm debt policy as well as firm performance. However, these univariate tests could be misleading because they fail to account for potential correlations among the independent variables. Therefore, in this section, we utilize an OLS regression model to examine our hypothesized relationships.

Table 4 shows results examining our first hypothesis: The number of board interlocks between an industrial firm and a bank positively affects the total debt held by the firm. Results on INTERLOCK are insignificant, indicating that in our sample firms there is no relationship between board interlock with financial services firms and capital structure. The size of the firm is significantly and positively related to leverage because EMPLOYEE is positive ( $t$ -value = 2.165), signifying that larger firms have more debt, which is consistent with larger and more stable firms being able to attract debt financing. We see that the size of the board is not related to the firm's capital structure. In general, larger firms have both larger boards and more debt financing; hence, the inclusion of firm size in our regressions renders the relationship between board size and leverage insignificant. Finally, the coefficient on MBV is positive and significant, indicating that when we control for size, firms with higher growth opportunities are able to secure debt financing. [See appendices, Table 4].

Table 5 presents results examining our second hypothesis regarding the relationship between interlocking directorates and firm performance. We see that INTERLOCK is positively and significantly related to ROA; this result is significant, controlling for the size of the firm, the size of the board of directors, the power of the CEO, and the firm's growth opportunities. We see from the four control variables that only MBV is significant and that the negative relationship signifies that for firms with larger growth opportunities, profitability is lower, perhaps because such firms hold the promise of future profitability. We see that the adjusted R-squared of 22.6 percent provides the reasonable explanatory power of our regression model. [See appendices, Table 5].

Table 6 reports the results of our third hypothesis. We see that INTERLOCK is negatively related to ROE, indicating that for banks that have a large amount of interlock, there is a negative relationship with respect to profitability. However, this relationship is only marginally significant ( $p < 0.10$ ). We also see that CHCEO is negatively related to ROE, indicating that for firms whose power is concentrated in the hands of the CEO, inadequate monitoring results in lower profitability. MBV is significantly positive, indicating that for Italian

banks with growth prospects, profitability is relatively higher. The R-squared of 13.4 percent again indicates that the regression is of reasonable explanatory power. [See appendices, Table 6].

## **6. Discussion and Conclusion**

Our empirical tests examine three hypotheses in which we find that the number of interlocks between an industrial firm and a financial service firm benefits the former to the detriment of the latter. We also find that such directorates are not related to the amount of debt carried by the industrial firm. The following discussion attempts to explain and reconcile our results with those of other studies in the literature that examine relationships between firms and banks. Kaplan and Minton (1994) argue that there are differential relationships between firms and banks depending on the institutional structure of the firm; in their analysis of poorly performing Japanese firms, they find that bankers are added for monitoring purposes, but this is not the case for U.S. firms. Gilson (1990) argues that during financial distress, bankers are added to the board in a monitoring capacity although Booth and Deli (1999) argue that bankers on boards do not monitor debt owned by firms. In sum, the studies just cited have contradictory findings regarding the role of bankers in monitoring firm debt. This could explain our results on H1 and H3: Positions on firm boards do not facilitate the lending process, and information asymmetries do not appear to be reduced. Also, such positions do not seem to be increasing the amount of total debt held by the firm. If anything, these results indicate that close relationships between banks and firms are detrimental to the firm. A similar argument can be found in La Porta et al. (2001) and Laeven (2001), who examine Russian and Mexican banks before their financial collapse and find that poor lending practices involving closely affiliated firms represented one of the factors leading to poor performance. These papers that examine the unique institutional environment of Russia and Mexico are relevant to understand the relationships between Italian firms and lending institutions. A possible explanation of our results is that firms interlock with banks in order to extract rents, not to obtain debt-market expertise. For firms based in a country characterized by weak legal protection of investors and a small capital market, interlocks with banks may represent a way to permit firms to acquire capital.

Taking into consideration the history of the Italian banking system and the governance model could provide some insights to our findings. At the beginning of the 1990s, all major Italian banks were owned by the government. During the privatization wave of the 1990s, all major industrial groups tried to establish close ties with banks in order to have an

easy access to capital. Specifically, having a link to a bank allowed a firm to obtain its capital needs without constraints. Since Italian equity markets are insignificant, establishing ties with banks could represent an important benefit for firms. Since banks possibly decide on their investments by considering the needs of the industrial group instead of their portfolio of strategic opportunities, this could potentially explain banks' negative performance with respect to interlocking directorates. It is a widely accepted anecdote that pyramidal groups are able to obtain cheap financing from affiliated lending institutions. This is evidenced by the recent scandals at Parmalat and Cirio, which involved Italian banks as co-conspirators. These scandals highlighted the negative effect of the links between banks and firms on the banks. Although bank involvement led to the eventual revival of Parmalat, this action was not without huge financial costs borne by the affiliated lending institutions. Finally, the more recent scandal involving the past governor of the Bank of Italy, Antonio Fazio, highlighted the presence of a little known network of insurance companies and financial institutions. Alternatively, our differential results regarding interlocks on firms and banks could be interpreted as follows: Directors of successful firms are invited to sit on other boards; consequently, a large number of directors of successful industrial firms sit on the boards of poorly performing banks. Another remote possibility is the fact that board members of banks having multiple directorates are busy directors who are not able to monitor the banks properly. Also, contrary to previous empirical studies (Booth and Dely, 1999; Byrd and Mizruchi, 2005; Pfeffer, 1972; Pfeffer and Salancik, 1978), our analysis does not confirm the hypothesis that interlocks between banks and firms serve to supply firms with debt-market expertise and debt financing. These differences with previous studies could be due to the fact that previous studies consider interlocks that occur by means of a bank's executive (CEO, CFO, etc.), while we consider all possible interlocks, therefore diluting the power of our proxy, which is a limitation of our study. Another limitation of our study is that we analyze only a single year of data because the hand collection and classification of data was a tedious process. To strengthen our tests, we must examine a longer time series of data as a way to validate our current findings.

This is the first study that examines interlocking directorates in Italy in a unique setting of weak capital markets where the relationships between banks and firms are paramount to the survival and growth needs of firms. Our results as a whole have a number of interesting implications, including the fact that strong ties between industrial and financial firms in Italy have positive effects on the firms because of the monitoring effect of bankers and their provision of business expertise. However, this relationship is

apparently at the detriment of banks, possibly due to the extraction of cheaper, or riskier, financing. Our findings have important implications to regulators and academics not only in Italy but also to regulators, academics, governance consultants, and politicians interested in understanding the role of banks and corporate governance in underdeveloped capital markets.

## References

1. Adams, R.B. and Ferreira, D. (2003) A Theory of Friendly Boards, Working paper: Stockholm School of Economics.
2. Amit, R.P. and Schoemaker, J.H. (1993) Strategic Asset and Organizational Rent, *Strategic Management Journal*, 14: 33-46.
3. Andrews, K. (1980) Responsibility for Corporate Strategy, *Harvard Business Review*, 104-108.
4. Barney, J.B. (1986) Strategic Factor Markets: Expectations, Luck, and Business Strategy, *Management Science*, 32: 795-801.
5. Bavly, D. (1985) What Is the Board Good For? *Long Range Planning*, 19: 20-26.
6. Baysinger, B.D. and Butler, H. (1985) Corporate Governance and the Board of Directors: Performance Effects of Changes in Board Composition, *Journal of Law, Economics and Organization*, 1: 101-124.
7. Baysinger, B.D. and Hoskisson, R.E. (1990) The Composition of Boards of Directors and Strategic Control: Effects on Corporate Strategy, *Academy of Management Review*, 15: 72-87.
8. Baysinger, B.D. and Zardkoohi, A. (1986) Technology, Residual Claimants and Corporate Control, *Journal of Law, Economics, and Organization*, 2: 339-344.
9. Bebchuk, L., Kraakman, R. and Triantis, G. (1999) Stock Pyramids. Cross-Ownership. and Dual Class Equity: The Creation and agency Costs of Separating Control from Cash Flow Rights. NBER working paper 6951.
10. Becht, M. and Röell, A. (1999) Blockholdings in Europe: An international Comparison, *European Economic Review*, 43: 1049-1056.
11. Becker-Blease, J.R., Goldberg, L.G. and Kaen, F.R. (2004) Mergers and Acquisitions as a Response to the Deregulation of the Electric Power Industry: Value Creation or Value Destruction? Working paper, University of New Hampshire.
12. Bhagat, S. and Black, B. (2002), The Non-Correlation Between Board Independence and Long Term Firm Performance, *Journal of Corporation Law*, 27.
13. Bianco, M., Gola, C. and Signorini, L.F. (1996) Dealing with Separation between Ownership and Control: State, Family, Coalitions and Pyramidal Groups in Italian Corporate Governance. Fondazione Mattei working paper 5-96.
14. Blau, J.R. and McKinley, W. (1979) Idea, Complexity, and Innovation, *Administrative Science Quarterly*, 24: 200-219.
15. Bobker, M.F. (2001) Leveraging Knowledge: Transferring Energy Services to New Markets, *Strategic Planning for Energy and the Environment*, 20: 62-77.
16. Boone, A.L., Field, L.C., Karpoff, J.M. and Raheja, C.G. (2004) The Determinants of Corporate Board Size and Composition: An Empirical Analysis, Working paper: Penn State University.
17. Booth, J. R. and Deli, D.N. (1999) On Executives of Financial Institutions as Outside Directors, *Journal of Corporate Finance*, 5: 227-250.
18. Boyd, B.K. and Fulk, J. (1996) Executive Scanning and Perceived Uncertainty: A Multidimensional Model, *Journal of Management*, 22: 1-21.
19. Branson, D.M. (2001) The Very Uncertain Prospect of "Global" Convergence in Corporate Governance, *Cornell International Law Journal*, 34: 321.
20. Brioschi, F. et al. (1990) Gruppi di Imprese e Mercato Finanziario, *Nuova Italia Scientifica*, Rome.
21. Brunello, G., Graziano, C. and Parigi, B.M. (2003) CEO Turnover in Insider-Dominated Boards: The Italian Case, *Journal of Banking & Finance*, 27.
22. Buchholtz, A.K., Amason, A.C. and Rutherford, M. A. (2005) The Impact of Board Monitoring and Involvement on Top Management Team Affective Conflict, *Journal of Managerial Issues*, 17: 405-422.
23. Burt, R.S. (1983) Corporate Profits and Cooptation, Academic Press: New York.
24. Bushman, R., Chen, Q., Engel, E. and Smith, A. (2004) Financial Accounting Information, Organizational Complexity and Corporate Governance Systems, *Journal of Accounting and Economics*, 37: 167-201.
25. Byrd, D.T. and Mizruchi, M.S. (2005) Bankers on the Board and the Debt Ratio of Firms, *Journal of Corporate Finance*, 11: 129-173.
26. Carcello, J.V., Hermanson, D.R., Neal, T.L. and Riley R.A. (2002) Board Characteristics and Audit Fees, *Contemporary Accounting Research*, 19: 365-384.
27. Carpenter, R.N. (1988) Cooperative Governance, Part II: Directors Responsibilities, *Directors & Boards*, 29: 3-6.
28. Chaganti, R.S., Mahajan, V. and Sharma, S. (1985) Corporate Board Size, Composition and Corporate Failures in Retailing Industry, *Journal of Management Studies*, 22: 400-417.
29. Chapin, D.H. (1986) Internal Controls and the "Prudent Man," *Directors & Boards*, 10: 25-27.
30. Coles, J., Daniel, N. and Naveen, L. (2005) Boards: Does One-Size Fit All? Working paper: Arizona State University.
31. CONSOB (2001) Annual Report, Rome.
32. Daft, R.L. and Lengel, R.H. (1986) Organizational Information Requirement, Media Richness and Structural Design, *Management Science*, 32: 554-571.
33. Daft, R.L. and Weick, K.E. (1984) Toward a Model of Organizations as Interpretation Systems, *Academy of Management Review*, 9: 284-295.
34. Daily, C.M. and Dalton, D.R. (1992) The Relationship between Governance Structure and Corporate Performance in Entrepreneurial Firms, *Journal of Business Venturing*, 7: 375-386.
35. Daily C.M. and Dalton, D.R. (1993) Boards of Directors, Leadership, and Structure: Control and Performance Implications, *Entrepreneurship Theory and Practice*, 17: 65-81.
36. Daily, C.M. and Dalton, D.R. (1994) Outsider Directors Revisited: Prescriptions for CEOs and Directors, *Journal of Small Business Strategy*, 5.



37. Dalton, D.R., Daily, C.M., Ellstrand, A.E. and Johnson, J.L. (1998) Meta-Analytic Reviews of Board Composition, Leadership Structure and Financial Performance, *Strategic Management Journal*, 19.
38. Davis J.H., Schoorman, F.D. and Donaldson, L. (1997) Toward a Stewardship Theory of Management, *Academy of Management Review*, 22.
39. Dechow, P.M., Sloan, R.G. and Sweeney, A.P. (1996) Causes and Consequences of Earnings Manipulation: An Analysis of Firms Subject to Enforcement Actions by the SEC, *Contemporary Accounting Research*, 13.
40. Dedman E. B. (2002) The Cadbury Committee Recommendations on Corporate Governance—A Review of Compliance and Performance Impacts, *International Journal of Management Review*, 4.
41. Dick, A.A. (2003), Nationwide Branching and Its Impact on Market Structure, Quality and Bank Performance, FEDS Working paper 2003-35.
42. Dooley, P.C. (1969) The Interlocking Directorate, *The American Economic Review*, 59: 314-323.
43. Elliott, G. (2002) Organizational Complexity: A New Perspective, *Industrial Management*, 44: 8-12.
44. Estes, R.M. (1980) Corporate Governance in the Courts, *Harvard Business Review*, 51: 107-114.
45. Ezzamel, M.A. and Watson, R. (1993) Organizational Form, Ownership Structure and Corporate Performance: a Contextual Empirical Analysis of UK Companies, *British Journal of Management*, 4.
46. Ewing, H.G. (1979) The Corporate Board of Directors—Duties and Responsibilities, *Public Relations Quarterly*, 24: 7-9
47. Fama, E.F. (1985) What's Different about Banks, *Journal of Monetary Economics*, 15: 355-387.
48. Fama, E.F. and Jensen, M.C. (1983) Separation of Ownership and Control, *Journal of Law and Economics*, 26: 301-325.
49. Fligstein, N. and Brantley, P. (1992) Bank Control, Owner Control, or Organizational Dynamics: Who Controls the Large Modern Corporation? *The American Journal of Sociology*, 98: 280-307.
50. Franks, J. and Mayer, C. (1998) Bank Control, Takeovers and Corporate Governance in Germany, *Journal of Banking and Finance*, 22: 1385-1403.
51. Fredrickson, J.W. (1986) The Strategic Decision Process and Organizational Structure: A Critical Replication, *Academy of Management Journal*, 23.
52. Gillan, S., Hartzel, J. and Starks, L. (2003) Industries, Investment Opportunities, and Corporate Governance Structures, Working paper: Centre for Corporate Governance University of Delaware.
53. Gilson, S. (1990) Bankruptcy, Boards, Banks, and Blockholders: Evidence on Changes in Corporate Ownership and Control When Firms Default, *Journal of Financial Economics*, 27: 241-262.
54. Gilson, S., Kose, J. and Lang, L. (1990) Troubled Debt Restructurings: An Empirical Study of Private Reorganization of Firms in Default, *Journal of Financial Economics*, 27: 315-354.
55. Ginsberg, A. (1994) Minding the Competition: From Mapping to Mastery, *Strategic Management Journal*, 15: 153-175.
56. Gulati, R. and Westphal, J. D. (1999) Cooperative or Controlling? The Effects of CEO-Board Relations and the Content of Interlocks on the Formation of Joint Ventures, *Administrative Science Quarterly*, 44.
57. Hamel, G. and Prahalad, C.K. (1990) The Core Competence of Corporation, *Harvard Business Review*, 75: 56-73.
58. Harrison, J.R. (1987) The Strategic Use of Corporate Board Committees, *California Management Review*, 30: 109-125.
59. Henderson, A.D. and Fredrickson, J.W. (1996) Information-Processing Demands as a Determinant of CEO Compensation, *The Academy of Management Journal*, 39: 575-606.
60. Hermalin, B. and Weisbach, M. 1988. The Determinants of Board Composition, *Rand Journal of Economics*, 19: 589-606.
61. Hermalin, B. and Weisbach, M. (2003) Board of Directors as an Endogenously Determined Institution: A Survey of the Economic Literature, *Economic Policy Review*, 9: 7-28.
62. Hermalin, B. and Weisbach, M. (1998) Endogenously Chosen Boards of Directors and Their Monitoring of the CEO, *American Economic Review*, 88: 96-118
63. Hillman, A.J. (2005) Politicians on the Board of Directors: Do Connections Affect the Bottom Line? *Journal of Management*, 31: 464-481.
64. Hillman A.J., Cannella, A.A. and Paetzold, R.L. (2000) The Resource Dependence Role of Corporate Directors: Strategic Adaptation of Board Composition in Response to Environmental Change, *Journal of Management Studies*, 37: 136-152.
65. Hillman, A.J. and Dalziel, T. (2003) Boards of Directors and Firm Performance: Integrating Agency and Resource Dependence Perspectives, *Academy of Management Review*, 28: 383-396.
66. Hillman, A.J., Zardkoohi, A. and Bierman, L. (1999) Corporate Political Strategies and Firm Performance: Indications of Firm-Specific Benefits from Personal Service in the US Government, *Strategic Management Journal*, 20: 67-81.
67. Hopt, K. J. and Leyens, P. C. (2004), Board Models in Europe. Recent Development of Internal Corporate Governance Structures in Germany, The United Kingdom, France and Italy, European Corporate Governance Institute, Law Working paper 18/2004.
68. Hoshi, T., Kashyap, A. and Scharfstein, D. (1991) Corporate Structure, Liquidity, and Investment: Evidence from Japanese Industrial Groups, *Quarterly Journal of Economics*, 106: 33-60.
69. Jackson, S.E. and Dutton, J.E. (1988) Discerning Threats and Opportunities, *Administrative Science Quarterly*, 33: 370-387.
70. James, C. (1987) Some Evidence on the Uniqueness of Bank Loans, *Journal of Financial Economics*, 19.
71. Jennings, D.F. and Lumpkin, J.R. (1992) Insights between Environmental Scanning Activities and Porter's Generic Strategies: An Empirical Analysis, *Journal of Management*, 18: 791-803.
72. Jensen, M.C. and Meckling, W.H. (1976) Agency Cost and the Theory of the Firm, *Journal of Financial Economics*, 3: 305-360.
73. Johnson, J.L., Daily, C.M. and Ellestrand, A.E. (1996) Boards of Directors: A Review and Research Agenda, *Journal of Management*, 22: 409-438.
74. Kaplan, S.N. and Minton, B.A. (1994). Appointments of Outsiders to Japanese Boards: Determinants and Implications for Managers, *Journal of Financial Economics*, 36: 225-258.

75. Karpoff, J.M., Malatesta, P.H. and Walkling, R.A. (1996) Corporate Governance and Shareholders Initiatives: Empirical Evidence, *Journal of Financial Economics*, 42, 365-395.
76. Kesner, I. (1988) Directors' Characteristics and Committee Membership: An Investigation of Type, Occupation, Tenure, and Gender, *Academy of Management Journal*, 31: 66-84.
77. Kesner, I.F., Victor, B. and Lamont, B. (1986) Board Composition and the Commission of Illegal Acts: An Investigation of Fortune 500 Companies, *Academy of Management Review*, 29: 879-899.
78. Khanna, T. and Palepu, K. (2000) Is Group Affiliation Profitable in Emerging Markets? An Analysis of Diversified Indian Business Groups, *Journal of Finance*; 55(2): 867-891.
79. Klein, A. (1998) Firm Performance and Board Committee Structure, *Journal of Law and Economics*, 41: 137-165.
80. Klein A. (2002) Audit Committee, Board of Director Characteristics and Earnings Management, *Journal of Accounting and Economics*, 33, 375-400.
81. Kogut, B. (2000) The Network as Knowledge: Generative Rules and the Emergence of Structure, *Strategic Management Journal*, 21: 405-425.
82. Korn/Ferry International (1996) Board of Directors, 23<sup>rd</sup> Annual Study: Board Meeting in Session, Korn/Ferry International: New York.
83. Kracaw, W. and Zenner, M. (1998) Bankers in the Boardroom: Good News or Bad News? Working paper: Kenan-Flagler Business School, University of North Carolina.
84. Kreiken, J. (1985) The Board's Role in Strategic Planning and Resource Allocation, in E.P. Mattor and M. Ball (Eds.), *Handbook for Corporate Directors*, McGraw-Hill: New York.
85. Kroszner, R.S. and Strahan, P.E. (1998) Bankers on Boards: Monitoring, Financing, and Lender Liability. Working paper: University of Chicago.
86. Kroszner, R.S. and Strahan, P.E. (2001) Throwing Good Money after Bad? Board Connections and Conflicts in Bank Lending, NBER Working Paper 8694.
87. Kurke, L.B. and Aldrich, H.E. (1983) Mintzberg Was Right. A Replication and Extension of the Nature of Managerial Work, *Management Science*, 29: 975-984.
88. Laeven, L. (2001) Insider Lending and Bank Ownership: The Case of Russia. Working paper: World Bank Group.
89. Lang, M.H. and Lundholm, R.J. (1996) Corporate Disclosure Policy and Analyst Behavior, *The Accounting Review*, 71: 467-492.
90. La Porta, R., Lopez-de-Silanes, F. and Zarrripa (2001) Insider Lending in Mexico, Working paper: Harvard University.
91. La Porta, R., Lopez-de-Silanes, F. and Shleifer, A. (1999) Corporate Ownership around the World, *Journal of Finance*, 54: 471-517.
92. Lehn, K., Patro, S. and Zhao, M. (2004) Determinants of the Size and Structure of Corporate Boards: 1935-2000, Working paper: University of Pittsburgh.
93. Leibowitz, A. (1978) Does the Corporation Discourage Individual Responsibility, in M.B. Johnson (Ed.), *The Attack on Corporate America: The Corporate Issues Sourcebook*, McGraw-Hill: New York.
94. Linck, J.S., Netter, J.M. and Yang, T. (2005) The Determinants of Board Structure, Working paper, Department of Banking and Finance, University of Georgia.
95. Loudon, J.K. (1982) *The Director: A Professional Guide to Effective Board Work*, Amacom: New York.
96. Lowendahl, B. and Revang, O. (1998) Challenges to Existing Strategy Theory in a Post-Industrial Society, *Strategic Management Journal*, 19: 752-773.
97. Mace, M.L. (1971) *Directors, Myth and Reality*. Harvard Business School Press: Boston.
98. Mahon, J. and Murray, E. (1981) Strategic Planning for Regulated Companies, *Strategic Management Journal*, 2: 251-262.
99. Makadok, R. (2001) Toward a Synthesis of the Resource-Based and Dynamic-Capability of Rent Creation, *Strategic Management Journal*, 22.
100. Markarian G. and Parbonetti, A. (2005) Firm Complexity and Board of Director Composition, Working paper, University of Padova.
101. Markarian, G., Parbonetti, A. and Previts, G.J. (2005) The Convergence of Disclosure and Governance Practices in the World's Largest Firms, Working paper, Weatherhead School of Management, Case Western Reserve University.
102. Marsh, S. (1998) Creating Barriers for Foreign Competitors: A Study of the Impact of Anti-Dumping Actions on the Performance of US Firms, *Strategic Management Journal*, 19: 25-37.
103. Mattar, E. and Ball, M. (1985) *Handbook for Corporate Directors*, McGraw-Hill: New York.
104. Maug, E (1997) Boards of Directors and Capital Structure: Alternative Forms of Corporate Restructuring, *Journal of Corporate Finance*, 3.
105. Mayers, D. and Smith, C.W. Jr. (1982) On the Corporate Demand for Insurance, *Journal of Business*, 55: 281-296.
106. Mayers, D., Shivdasani, A. and Smith, C.W. Jr. (1997) Board Composition and Corporate Control: Evidence from the Insurance Industry, *Journal of Business*, 70: 33-62.
107. Milliken, F. (1987) Three Types of Perceived Uncertainty about the Environment: State, Effect, and Response Uncertainty, *Academy of Management Review*, 12: 133-143.
108. Milliken, F. and Vollrath, D. (1991) Strategic Decision Making Tasks and Group Effectiveness: Insights from Theory and Research on Small Group Performance, *Human Relations*, 44: 1229-1253.
109. Moldoveanu, M. and Bauer, R.M. (2004) Organizational Complexity and Organizational Structuration, *Institute of Management Sciences*, 15.
110. Mueller, R.K. (1979), *Board Compass*, D.C. Heath: Lexington, MA.
111. Muth, M.M. and Donaldson, L. (1998) Stewardship Theory and Board Structure: A Contingency Approach, *Corporate Governance: An International Review*, 6: 5-28.
112. Myers, S. (1977) Determinants of Corporate Borrowing, *Journal of Financial Economics*, 5.
113. Myers, S. and Majluf, N. (1984) Corporate Financing and Investment Decisions When Firms Have Information That Investors Do Not Have, *Journal of Financial Economics*, 13: 187-221.

114. Nadler, D. and Tushman, M.L. (1992) Designing Organizations That Have Good Fit: A Framework for Understanding New Architectures, in D. Nadler, M.S.Gestrain, and R.B. Shaw (Eds.) *Organizational Architecture*, Jossey-Bass: San Francisco, CA.
115. Nolle, D.E. (1994) Banking Industry Consolidation: Past Changes and Implications for the Future, Working paper, The Jerome Levy Economics Institute.
116. Oliver, A.L. (2001) Strategic Alliances and the Learning Life-Cycle of Biotechnology Firms, *Organization Studies*, 22: 467-489.
117. Pearce, J. and Zahra, S. (1992) Board Composition from a Strategic Contingency Perspective, *Journal of Management Studies*, 29: 411-438.
118. Peng, M.W. (2004) Outside Directors and Firm Performance during Institutional Transitions, *Strategic Management Journal*, 25: 453-471.
119. Pennings, J. (1980) *Interlocking Directorates*, Jossey-Bass: San Francisco.
120. Pfeffer, J. (1972) Size and Composition of Corporate Boards of Directors: the Organization and Its Environment, *Administrative Science Quarterly*, 17.
121. Pfeffer J. and Salancik, G. R. (1978) *The External Control of Organizations: A Resource Dependence Perspective*, Harper & Row: New York.
122. Prevost, A.K., Rao, R.P. and Hossain, M. (2002) Board Composition in New Zealand: An Agency Perspective, *Journal of Business Finance & Accounting*, 29: 731-760.
123. Raheja, C. (2004) Determinants of Board Size and Composition: A theory of Corporate Boards, *Journal of Financial and Quantitative Analysis*, 40: 283-306.
124. Rindova, V.P. (1999) What Corporate Boards Have to do with Strategy: A Cognitive Perspective, *Journal of Management Studies*, 36: 953-975.
125. Rosenstein, J. (1987) Why Don't US Boards Get More Involved in Strategy? *Long Range Planning*, 20.
126. Rosenstein, S. and Wyatt, J.G. (1990) Outside Directors, Board Independence, and Shareholder Wealth, *Journal of Financial Economics*, 26.
127. Sanyal, P. and Cohen, L.R. (2004) Deregulation, Restructuring and Changing R&D Paradigms in the US Electric Utility Industry, Working paper, Department of Economics, Brandeis University.
128. Schmidt, S.L. and Bauer, M. (2006) Strategic Governance: How to Assess Board Effectiveness in Guiding Strategy Execution, *Corporate Governance: An International Review*, 14: 13-22.
129. Schellenger, M.H., Wood, D.D. and Tashakori, A. (1989) Board of Director Composition, Shareholder Wealth, and Dividend Policy, *Journal of Management*, 15: 457-467.
130. Shaffer, B. (1995) Firm-Level Responses to Government Regulation: Theoretical and Research Approaches, *Journal of Management*, 21: 495-514.
131. Sharara, N. and Hoke-Witherspoon, A. (1993) The Evolution of the 1992 Shareholder Communication Proxy Rules and Their Impact on Corporate Governance, *The Business Lawyer*, 49, 327-358.
132. Shleifer, A. and Vishny, R. (1997) A Survey of Corporate Governance, *Journal of Finance*, 52.
133. Simon, H.A. (1996) *The Sciences of the Artificial*, MIT Press: Cambridge, MA.
134. Smircich, L. and Stubbart, C. (1985) Strategic Management in an Enacted World, *Academy of Management Review*, 10: 724-736.
135. Smith, M.P. (1996) Shareholder Activism by Institutional Investors: Evidence from CalPERS, *Journal of Finance*, 51, 227-252.
136. Smith, C.W. and Watts, R.L. (1992) The Investment Opportunity Set and Corporate Financing, Dividend, and Compensation Policies, *Journal of Financial Economics*, 32: 263-292.
137. Spencer Stuart (2005) Spencer Stuart US Board Index 2005, Spencer Stuart, accessed at [www.spencerstuart.com/global](http://www.spencerstuart.com/global).
138. Sullivan, J. (1990) Experts, Experts Systems, and Organizations, in M. Masuch (Ed.), *Organization, Management and Expert Systems*, Walter de Gruyter: New York.
139. Swaminathan, V. and Moorman, C. (2003) Value Creation in Hi-Tech Alliances: the Role of Resource Strength, Resource Fit, and Resource Fit, Working paper, Fuqua School of Business, Duke University.
140. Tashakori, A. and Boulton, W. (1985) A Look at the Board's Role in Planning, *The Journal of Business Strategy*, 3: 64-70.
141. Teece D. J., Pisano, G. and Shuen, A. (1997) Dynamic Capabilities and Strategic Management, *Strategic Management Journal*, 18: 509-533.
142. Terry, R. (1992) An Examination of the Role of Boards of Directors in the Enactment of Poison Pill Securities, Doctoral dissertation: University of Utah, Salt Lake City.
143. Thompson, A.A. and Strickland, A.J. (1990) *Strategic Management: Concepts and Cases*, Irwin: Homewood, IL.
144. Vafeas, N. (1999) Board Meeting Frequency and Firm Performance, *Journal of Financial Economics*, 53: 113-142.
145. Vance, S.C. (1978) Corporate Governance: Assessing Corporate Performance by Boardroom Attributes, *Journal of Business Research*, 6: 203-220.
146. Vance, S.C. (1983) *Corporate Leadership: Boards, Directors, and Strategy*, McGraw-Hill: New York.
147. Zahra, S.A. and Pearce, J.A. (1989) Boards of Directors and Financial Performance: A Review and Integrative Model, *Journal of Management*, 15.
148. Zingales, L. (1994) The Value of the Voting Right: A Study of the Milan Stock Exchange Experience, *Review of Financial Studies*, 7: 125-148.
149. Zucker, L. G., Darby, M.R. and Armstrong, J.S. (1999) Intellectual Capital and the Firm: The Technology of Geographically Localized Knowledge Spillovers, NBER Working paper W4946.
150. Waldo, C. N. (1985) *Boards of Directors: Their Changing Roles, Structure, and Information Needs*, Quorum Books: Westport, CT.
151. Waxman, M. (1998) A Legal Framework for Systemic Bank Restructuring, Working paper, World Bank.
152. Williamson, O.E. (1988) Corporate Finance and Corporate Governance, *Journal of Finance*, 63.
153. Yasai-Ardekani, M. and Nystrom, P.C. (1996) Designs for Environmental Scanning Systems: Tests of a Contingency Theory, *Management Science*, 42: 187-204.

Appendices

Table 1. Variables

Variable	Description
INTERLOCK	Number of interlocking directorates between firms and banks
ROE	Ratio of earnings over equity
ROA	Ratio of operating income over total asset
DEBT RATIO	Ratio of long-term debt over long-term debt plus equity [LTD / (LTD + Equity)]
EMPLOYEE	Number of employees
MBV	Ratio of market value over book value of equity
CHCEO	Takes a value of 1 if the CEO is the chairman of the board, 0 otherwise
NBOD	Number of directors

Table 2. Descriptives Statistics on Select Variables

Panel A: Firms			
	N	Mean	Standard Deviation
INTERLOCK	204	0.88	1.600
CHCEO	193	0.56	0.496
Debt ratio	200	0.60	0.223
First	202	52.02	19.05
MBV	193	1.84	3.104
NBOD	193	9	3.077
NE	194	5052.15	16722.459
ROA	199	0.02	0.094
Panel B: Banks			
	N	Mean	Standard Deviation
INTERLOCK	50	4.82	5.833
CHCEO	48	0.81	0.394
First	45	40.45	28.504
MBV	35	1.72	1.365
NBOD	48	15.44	4.505
NE	42	10698.83	17466.726
ROE	45	0.07	0.083

INTERLOCK: Number of interlocking directorates between firms and banks; CHCEO: Takes a value of 1 if the CEO is not the chairman of the board, 0 otherwise; Debt ratio: Ratio of long-term debt over long-term debt plus equity [LTD / (LTD + Equity)]; MBV: Ratio of market value over book value of equity; NBOD: Number of directors; NE: Number of employees; ROA: Ratio of operating income over total asset; ROE: Ratio of earnings over equity

Table 3. Pearson Correlation Coefficients

Panel A: Firms						
Variable	INTERLOCK	EMPLOYEE	ROA	NBOD	CHCEO	MBV
EMPLOYEE	.292***					
ROA	.241***	.071	1			
NBOD	.461***	.201***		1		
CHCEO	-.176**	-.221***	-0.019	-.201***	1	
MBV	0.02	-0.021	-.406***	-0.078	-0.066	1
Debt ratio	0.018	.151*	-.271***	-0.028	-0.054	.231***
Panel B: Banks						
Variable	INTERLOCK	EMPLOYEE	NBOD	CHCEO	MBV	
EMPLOYEE	0.072					
NBOD	0.128		1			
CHCEO	0.002		.335**	1		
	-0.003	-0.162	-0.307	-.365**	1	
ROE	-0.201	0.005	-0.152	-0.206	0.29	

\* Correlation is significant at the 0,05 level. \*\*Correlation is significant at the 0,01 level.

INTERLOCK: Number of interlocking directorates between firms and banks; ROA: Ratio of operating income over total asset; NE: Number of employees; NBOD: Number of directors; CHCEO: Takes a value of 1 if the CEO is not the chairman of the board, 0 otherwise; MBV: Ratio of market value over book value of equity; Debt ratio: Ratio of long-term debt over long-term debt plus equity [LTD / (LTD + Equity)]; ROE: Ratio of earnings over equity.

**Table 4.** OLS Regression Examining the Relationship between Board Interlocks with Banks and the Debt Ratio of Industrial Firms

	Dependent Variable DEBTRATIO
Intercept	0.408
<i>t-value</i>	(9.687)***
INTERLOCK	-0.003
<i>t-value</i>	(-0.246)
EMPLOYEE	0.000
<i>t-value</i>	(2.165)**
NBOD	-0.001
<i>t-value</i>	(-0.259)
CHCEO	-0.003
<i>t-value</i>	(-0.092)
MBV	0.015
<i>t-value</i>	(3.017)***
Number of observations	204.00
R-sqr adj	0.049
Max VIF	1.370

\* Correlation is significant at the 0.1 level.. \*\* Correlation is significant at the 0.05 level. \*\*\* Correlation is significant at the 0.01 level..

*INTERLOCK*: Number of interlocking directorates between firms and banks; *NE*: Number of employees; *NBOD*: Number of directors; *CHCEO*: Takes a value of 1 if the CEO is not the chairman of the board, 0 otherwise; *MBV*: Ratio of market value over book value of equity; *ROA*: Ratio of operating income over total asset; *ROE*: Ratio of earnings over equity; *Debt ratio*: Ratio of long-term debt over long-term debt plus equity [LTD / (LTD + Equity)].

**Table 5.** OLS Regression Examining the Relationship between Board Interlocks with Banks and Industrial Firm Performance

	Dependent Variable ROA
Intercept	0.011
<i>t-value</i>	-0.459
INTERLOCK	0.012
<i>t-value</i>	(2.831)***
EMPLOYEE	0.000
<i>t-value</i>	(0.129)
NBOD	0.002
<i>t-value</i>	(1.007)
CHCEO	0.001
<i>t-value</i>	(0.103)
MBV	-0.013
<i>t-value</i>	(-6.296)***
Number of observations	204
R-sqr adj	0.226
Max VIF	1.362

\* Correlation is significant at the 0.1 level.. \*\* Correlation is significant at the 0.05 level. \*\*\* Correlation is significant at the 0.01 level..

*INTERLOCK*: Number of interlocking directorates between firms and banks; *NE*: Number of employees; *NBOD*: Number of directors; *CHCEO*: Takes a value of 1 if the CEO is not the chairman of the board, 0 otherwise; *MBV*: Ratio of market value over book value of equity; *ROA*: Ratio of operating income over total asset; *ROE*: Ratio of earnings over equity; *Debt ratio*: Ratio of long-term debt over long-term debt plus equity [LTD / (LTD + Equity)].

**Table 6.** OLS Regression Examining the Relationship between Board Interlocks with Industrial Firms and Bank Performance

	Dependent Variable ROE
Intercept	0.070
<i>t-value</i>	-0.969
INTERLOCK	-0.004
<i>t-value</i>	(-1.774)*
EMPLOYEE	0.000
<i>t-value</i>	-0.466
NBOD	0.004
<i>t-value</i>	(0.942)
CHCEO	-0.093
<i>t-value</i>	(-2.193)**
MBV	0.024
<i>t-value</i>	(2.080)**
Number of observations	50
R-sqr adj	0.134
Max VIF	1.711

\* Correlation is significant at the 0.1 level. \*\* Correlation is significant at the 0.05 level. \*\*\* Correlation is significant at the 0.01 level.

*INTERLOCK*: Number of interlocking directorates between firms and banks; *NE*: Number of employees; *NBOD*: Number of directors; *CHCEO*: Takes a value of 1 if the CEO is not the chairman of the board, 0 otherwise; *MBV*: Ratio of market value over book value of equity; *ROA*: Ratio of operating income over total asset; *ROE*: Ratio of earnings over equity; *Debt ratio*: Ratio of long-term debt over long-term debt plus equity [LTD / (LTD + Equity)].