Do Banks Price Independent Directors' Attention?

Henry He Huang
Sy Syms School of Business
Yeshiva University
New York, New York 10033
E-mail: henry.huang@yu.edu

Gerald J. Lobo
C. T. Bauer College of Business
University of Houston
Houston, Texas 77204-6021
E-mail: gjlobo@uh.edu

Chong Wang*
Von Allmen School of Accountancy
Gatton College of Business and Economics
University of Kentucky
Lexington, Kentucky 40506
E-mail: chongwang85@uky.edu

Jian Zhou
School of Accountancy
Shidler College of Business
University of Hawaii at Manoa
Honolulu, HI 96822
E-mail: jianzhou@hawaii.edu

* Corresponding author

We thank Miao Hu, Dengshi Huang, Victor Wei Huang, Zhonggao Lin, Qianqiu Liu, Ghon Rhee, Tiesheng Zhang, Jun Zheng, Hongquan Zhu, Jia-nan Zhou and the workshop participants at Anhui University of Technology, Southwest Jiaotong University, University of Hawaii at Manoa and University of Kentucky for their valuable comments.

Do Banks Price Independent Directors' Attention?

Abstract

Masulis and Mobbs (2014, 2015) find that independent directors with multiple directorships allocate their monitoring effort unequally based on a directorship's relative prestige. We investigate whether bank loan contract terms reflect such unequal allocation of directors' monitoring effort. We find that bank loans of firms with a greater proportion of independent directors for whom the board is among their most prestigious have lower spreads, longer maturities, fewer covenants, lower syndicate concentration, lower likelihood of collateral requirement, lower annual loan fees, and higher bond ratings. Our evidence indicates that independent directors' attention is associated with lower cost of borrowing.

Keywords: multiple directorships, directors' attention, cost of borrowing, bank loan contracting

JEL: G3, G12

Do Banks Price Independent Directors' Attention?

I. Introduction

Bank loans comprise a significant source of corporate financing. According to Bradley and Roberts (2004), the amount of new issuances of private debt, including bank loans, ranges from two to three times that of new issuances of public debt. Consequently, understanding the determinants of the cost of bank loans is economically important. In this study, we examine whether the relative importance of directorships to independent directors who serve on multiple boards is associated with the terms of firms' bank loan contracting.

Prior literature shows that corporate governance is an important determinant of the cost of debt. Specifically, studies demonstrate that higher board quality, greater disclosure quality, and higher institutional ownership are associated with lower cost of debt (Sengupta (1998), Anderson, Mansi, and Reeb (2003), Bhojraj and Sengupta (2003)). These studies focus on traditional board quality measures such as board independence and board size. Recently, a few studies have begun to explore the importance of multiple directorships for governance quality (Huang, Lobo, Wang, and Zhou (2014), Masulis and Mobbs (2014, 2015)). Following these studies, we focus on the differential economic implications of independent directors' unequal prioritization of their time and effort across multiple directorships for bank loan contracting terms.

Multiple directorships are very common among independent directors in U.S. public firms, with greater than fifty percent of the independent directors at S&P 1,500 companies serving on more than one directorship (Masulis and Mobbs (2014)). Although multiple directorships can signal the talent and quality of a director (Shivdasani and

Yermack (1999)), strong board monitoring demands time and energy (Yermack (1996)), and the limited availability of these resources may prevent an independent director with multiple directorships from effectively fulfilling her/his directorial responsibilities (Core, Holthausen, and Larcker (1999), Fich and Shivdasani (2006)). To minimize the potential reputation damage that may result from directorship overload and the ensuing ineffectiveness, independent directors will rationally distribute their time and energy to different directorships based on each directorship's relative importance (and associated prestige) (Masulis and Mobbs (2014)). Using firm size to proxy for the relative importance of a directorship, Masulis and Mobbs (2014) find that independent directors have a better attendance record at relatively more important directorships and are less likely to relinquish their more important director seats when these firms perform poorly. They also report that firms viewed as more important by their independent directors exhibit better performance, as measured by return on assets and Tobin's *q*. These findings are consistent with Masulis and Mobbs' conjecture that firm-size-based reputation incentives motivate independent directors to prioritize their time and energy to more important directorships.

We reason that independent directors' relative attention to multiple directorships can affect a firm's cost of borrowing through several channels. First, creditors, such as banks, use accounting-based numbers to assess firm health and viability. Given that bank loan contracts are closely tied to accounting numbers (Drucker and Puri (2009)), the integrity of accounting numbers and the financial reporting process are important for bank loan contracting. Because board directors can directly monitor firms' accounting practices, board effectiveness is critically important in constraining managers'

opportunistic accounting behavior (Klein (2002), Hermalin and Weisbach (2003), Garcia Lara, Garcia Osma, and Penalva (2009)). Effective boards and audit committees are more diligent and spend more time and energy in fulfilling their directorial responsibilities (Menon and Williams (1994), Vafeas (1999), Xie, Davidson, and DaDalt (2003)).[1] Given that independent directors will unequally distribute their time and effort among their multiple directorships in accordance with each directorship's relative importance (Masulis and Mobbs (2014, 2015)), firms viewed as relatively more important are likely to receive more attention from and monitoring of managerial accounting practices by directors. Consistent with this argument, Huang et al. (2014) find that independent directors are more (less) likely to constrain earnings management when they serve on more (less) prestigious boards. We expect that such unequal monitoring among multiple directorships is also reflected in bank loan contracting.

Second, strong board monitoring improves the borrowing firm's performance and thereby reduces the cost that banks charge for borrowing. Specifically, the prior literature documents a negative relation between firm performance and cost of debt (Graham, Li, and Qiu (2008)). Because firms with a greater proportion of devoted independent directors have better firm performance (Masulis and Mobbs (2015)), we conjecture that these firms obtain bank loans with more favorable terms.

Third, debt holders price the quality of a borrowing firm's governance and will rationally require higher loan rates from firms with more opportunistic managerial behavior (Boubakri and Ghouma (2010)). For example, poor governance increases the risks that rent-seeking managers would engage in irregular activities that endanger the

[1] For example, McMullen and Raghunandan (1996) and Garcia Lara et al. (2009) show that more frequent meetings by boards and audit committees are associated with more conservative accounting and a lower likelihood of earnings restatement.

wealth of the debt holders, resulting in higher cost of debt. Bhojraj and Sengupta (2003), Anderson et al. (2004), and Fields et al. (2012) document that firms with higher quality boards have lower interest rates.[2] Given that boards viewed as more prestigious by their independent directors can more effectively constrain managerial opportunism, we conjecture that the strong corporate governance associated with such boards will be priced favorably by banks and, therefore, lead to lower cost of loans.

We base our empirical tests on a sample of 8,360 firm-year observations of S&P 1,500 firms from 1998 to 2011. We find that firms with a greater proportion of independent directors for whom the board is among their most prestigious have lower loan spreads, longer loan maturities, and fewer loan covenants. Further analysis indicates that the beneficial effect of directorship importance on loan spread is greater when a majority of the board members are independent. This result underscores the importance of independent directors' attention when the board relies on the independent directors to carry out its mission.

To ensure that the differences in loan contract terms are attributable to directors' attention, we also conduct a first difference analysis. We find that differences in the proportion of independent directors who rank the directorship high are associated with differences in bank loan contracting terms. To address the concern that the results may be driven by the determinants of the relative importance of a board (e.g., firm size), we employ propensity-score-matching and find consistent results with this matched sample analysis. Additionally, we obtain consistent results when we match firm-years by firm size instead of propensity score. The results of these tests indicate that the relationship

[2] The board quality measures in Fields et al. (2012) include size, independence, advisory presence, tenure, busyness, gender, share ownership, and base pay.

between independent director attention and cost of borrowing does not merely reflect the differences in firm size and other determinants of directorship importance. Instead, it captures the implications of unequal allocation of attention by independent board directors for the cost of borrowing; firms that receive more attention from their independent directors have lower cost of bank loans.

In additional tests, we extend the effect of directorship importance to audit committee directors and find similar results. Furthermore, we find that boards viewed by independent directors as more important exhibit lower loan syndicate concentration (that is, more diverse lender pools), lower likelihood of collateral requirement, and lower annual loan fees. We also find that directorship importance is negatively related to loan default rate and covenant violation. Lastly, we show that firms valued higher by their directors have higher bond ratings. Overall, we provide robust evidence that a board valued highly by its independent directors is associated with lower cost of borrowing.

We make several important contributions to the literature. First, despite the prevalence of directors serving on multiple boards, few studies have explored the impact of unequal allocation of effort by independent directors on firm behavior, Masulis and Mobbs (2014, 2015) and Huang et al. (2014) being notable exceptions. We provide (indirect) evidence that independent directors pay more attention to more important directorships. We thus contribute to the emerging literature on unequal allocation of effort by independent directors with multiple directorships by linking unequal monitoring to bank loan contracting terms. Our results suggest that when retaining an independent director, a firm should also consider the relative importance (and time and effort) it will receive from the director because, among other effects, this decision has implications for

its cost of borrowing.

Second, we add to the literature linking board governance and cost of debt. Bhojraj and Sengupta (2003), Anderson et al. (2004), and Fields et al. (2012) find that the cost of debt is inversely related to traditional measures of board quality such as board independence, board size, and board meeting frequency. We contribute to this line of research by focusing on the implications of unequal attention of independent directors with multiple directorships for the cost of borrowing, which to date is unexplored in the literature on board governance.

The remainder of the paper is organized as follows. We discuss prior research and develop our hypotheses in Section II, describe the sample selection process and present descriptive statistics in Section III, discuss the results of our main analyses in Section IV, present the results of additional analyses in Section V, and conclude the study in Section VI.

II. Prior Literature and Hypotheses Development

A. Multiple Directorships and Board Effectiveness

Research on multiple directorships has primarily focused on how busy directors are and generally finds that having multiple directorships could make independent directors too busy to effectively monitor all the firms under their supervision. For example, Core et al. (1999) report that busy directors are associated with excessive CEO compensation and lower firm performance. Shivdasani and Yermack (1999) find that CEOs are likely to appoint busy directors who serve on multiple boards, and interpret this phenomenon as CEOs' attempts to reduce monitoring pressure. Fich and Shivdasani (2006) propose that firms with busy boards (i.e., firms with a majority of independent

directors holding three or more directorships) have weaker governance and are associated with lower operating profitability (i.e., ROA) and market valuation (i.e., market-to-book ratio). However, Ferris, Jagannathan, and Pritchard (2003) do not find that busy independent directors shirk their responsibilities to serve on subcommittees, nor do they find an association between multiple directorships and the likelihood of securities litigation.

Given busy directors' time constraints, Masulis and Mobbs (2014) expect that independent directors differentially value each directorship based on its relative importance to their reputation and allocate their time and energy among these boards accordingly. Since firm size is associated with greater visibility, prestige, compensation, and opportunity to attract additional external director appointments (Ferris et al. (2003), Ryan and Wiggins (2004), Adams and Ferreira (2008)), Masulis and Mobbs (2014) use the relative size of each firm where they serve as independent directors to proxy for the relative importance the director places on the directorship and the relative amount of time and effort allocated to the directorship. At the director level, they find that independent directors are more likely to attend the board meetings of their more important directorships and less likely to relinquish these board seats, even when these firms perform poorly. At the firm level, they find that the fraction of independent directors who view the board as relatively more important is positively associated with the sensitivity of CEO departure to poor performance as well as to overall firm performance (i.e., ROA) and valuation (i.e., Tobin's *q*). In a related study, Masulis and Mobbs (2015) find that greater reputation incentives of a board lead to less negative outcomes, such as stock delisting, violation of debt covenants, financial report restatement, options backdating,

securities class action, reduction of cash dividends, and more positive firm outcomes.

B. Multiple Directorships, Accounting Quality, and the Cost of Borrowing

Lenders explicitly rely on financial statement numbers in setting debt covenants and performance pricing provisions (Dichev and Skinner (2002), Li (2010)). Thus, bank loan contracting must reflect the quality of a firm's accounting. Anderson et al. (2004) propose that the reliance of creditors on accounting-based debt covenants indicates that creditors are potentially concerned with board of directors' characteristics that influence the integrity of financial accounting reports. In a sample of S&P 500 firms, they find that the cost of debt is negatively related to board independence and board size, and that fully independent audit committees are associated with a significantly lower interest rate charged by banks. Similarly, the size and meeting frequency of the audit committee are also negatively related to yield spreads. Overall, these results provide market-based evidence that boards and audit committees influence the reliability of financial reports. The importance of accounting numbers in bank loan contracting and the incentives of management to manipulate these numbers make banks rationally sensitive to major changes in governance dimensions that may affect the integrity and reliability of the financial reporting process (Smith (1993)).

Board monitoring, especially by audit committees, is critically important in constraining managers' opportunistic accounting behavior (Beasley (1996), Klein (2002), Xie et al. (2003), Larcker, Richardson, and Tuna (2007), Garcia Lara et al. (2009)). Effective boards and audit committees demand more attention, effort, time, and energy (Vafeas (1999), Xie et al. (2003)). If directors distribute their attention unevenly among multiple directorships according to a directorship's relative importance, then the

monitoring effectiveness of a firm's accounting decisions will vary with the amount of attention given to the directorship. Consistent with this reasoning, Huang et al. (2014) find that independent directors are more (less) likely to constrain earnings management when they serve on more (less) prestigious boards.

Given that the cost of borrowing reflects the accounting quality and the distribution of directors' efforts among multiple directorships has implications for accounting quality, we expect firms viewed as more prestigious by their independent directors to have a lower cost of borrowing.

C. Multiple Directorships, Firm Performance, and the Cost of Borrowing

Strong board monitoring is associated with higher profitability and lower return volatility, which reduce the cost of borrowing charged by banks. Specifically, firms with higher profitability have lower default risk and can obtain loans with lower rates and better terms (Graham et al. (2008)). Prior literature also documents a positive relation between a firm's earnings volatility and cost of debt, consistent with banks benefiting from a stable stream of cash flows that can support bond repayments (Graham et al. (2008)). Firms with a greater proportion of devoted independent directors have better firm performance (i.e., higher ROA) and also have a lower likelihood of violating loan covenants (Masulis and Mobbs (2015)). We therefore conjecture that such firms will enjoy more favorable bank loans terms.

D. Multiple Directorships, Firm Governance, and the Cost of Borrowing

Boubakri and Ghouma (2010) argue that debt holders price the quality of a borrowing firm's governance and will rationally require a higher interest rate from firms with more opportunistic managerial behavior. For example, to extract private benefits,

opportunistic managers may divert cash away from paying debt holders, and this likelihood of managerial opportunism will negatively affect the loan terms. Strong board monitoring of managers also alleviates the risks that rent-seeking managers would engage in fraudulent activities that endanger the wealth of debt holders, or that they would divert assets away from supporting debt cash flow. For example, poor governance could lead to financial fraud (e.g., Enron, WorldCom, Xerox) that could inflict catastrophic damages on debt holders and also damage a firm's disclosure credibility about forecasted future cash flows, resulting in a higher cost of debt. Consistent with this reasoning, Graham et al. (2008) document that financial irregularities are followed by higher interest rates, shorter maturities, and more covenant restrictions by banks.

Specific evidence indicates that board quality impacts the cost of bank debt. Fields et al. (2012) analyze the relation between comprehensive measures of board quality and the cost as well as the non-price terms of bank loans. They show that firms with higher quality boards that have a greater advisory presence borrow at lower interest rates. This relation holds even after controlling for other firm characteristics, such as ownership structure, CEO compensation policy, and shareholder protection, as well as the size and financial condition of the borrower. They also show that board quality and other governance characteristics affect the likelihood of a loan having covenant requirements, but the relations differ by covenant type. When they combine the direct and indirect costs of bank loans, they find that firms with large, independent, experienced, and diverse boards, and with lower institutional ownership, borrow more cheaply. Other studies also present empirical evidence of a negative relation between measures of corporate governance quality, such as disclosure quality, institutional ownership, board

independence, and cost of debt (Sengupta (1998), Anderson et al. (2003), Bhojraj and Sengupta (2003)).

Given the costly renegotiation following default (Davydenko, Strebulaev, and Zhao (2012)) and the costly enforcement of loan contracts (Bolton and Scharfstein (1996)), lenders are willing to extend credit on more favorable terms if they know ex ante that the borrower has strong governance. The resulting lower governance risk that debt holders perceive will be priced favorably in the firm's loan terms (Graham et al. (2008), Boubakri and Ghouma (2010), Qi, Roth, and Wald (2010)). Firms with more attentive directors have better governance quality (Masulis and Mobbs (2014)). When directors view the board as more prestigious, they have stronger incentives to constrain managerial opportunism. As a consequence, we conjecture that the strong corporate governance associated with these boards will lead banks to offer more favorable loan terms, including lower cost loans.

Based on the aforementioned arguments, we propose the following hypothesis:

H1: *Firms with more attentive directors receive more favorable bank loan contract terms.*

III. Main Variables, Data Sources, Sample, and Descriptive Statistics

A. Measurement of Board Importance, Sample Selection, and Data Sources

Following Masulis and Mobbs (2014, 2015), we rank the relative importance of directorships for a director sitting on multiple boards using the size of each firm's equity market capitalization. Among all the directorships a director serves, the directorship with the largest (smallest) firm size is deemed the most (least) important and prestigious. *Percent_Ranked_High* (*Percent_Ranked_Low*) is the percentage of independent directors

for whom the directorship's rank is 10% larger (smaller) than their smallest (largest) directorship, measured by firm market capitalization. We focus on independent directors because they are more effective monitors (Beasley (1996), Klein (2002), Xie et al. (2003), Larcker et al. (2007), Garcia Lara et al. (2009)).

Panel A of Table 1 presents the sample selection procedure. We start by collecting independent director board data from RiskMetrics and merge this data with bank loan information from DealScan for the years 1998 to 2010. To ensure that directorship importance drives loan contract terms, we match the loan contract terms with the preceding year's director data. Our initial sample includes 10,328 firm-year observations with director data available in RiskMetrics, which covers board information for the S&P 1,500 firms. We then exclude all 1,003 observations in the financial services and utilities industries. Next, we drop 274 observations with bridge loans and non-fund-based facilities, such as leases and standby letters of credit. Last, we exclude 691 observations that lack the necessary data to construct the control variables used in our empirical tests. Our final sample comprises 8,360 firm-year observations. We extract financial data from Compustat, and stock return data from CRSP.

Pane B of Table 1 presents the sample distribution by year. The sample size varies widely over time, ranging from a high of 1,187 firms in 2001 to a low of 248 firms in 2008.[3]

B. Descriptive Statistics

Panel C of Table 1 presents the descriptive statistics for our sample. The first part

[3] The main reason for the large drop in our sample after 2007 is that new loans fell by almost 50% during the financial crisis (2007-2009). This is consistent with Ivashina and Scharfstein (2010), who also document a large drop-off. Specifically, the full sample in DealScan decreases significantly, from 6,927 in 2006 to 4,943 in 2007 and 3,843 in 2008.

shows the descriptive statistics for bank loan characteristics. The mean and median of *Loan_Spread* are 175.5 and 150.0 basis points, respectively. The average maturity is 45.41 months. The mean and median loan amounts are $503.9 million and $250.0 million, respectively. The percentage of secured bank loans is 39.4%. The averages of total, general, and financial covenants are 3.84, 2.35, and 1.49, respectively. 48.8% of the sample loans have performance pricing and the average number of lenders per loan is 10.

The second part of Panel C presents the descriptive statistics for board characteristics. Across all boards, 19.3 percent of the independent directorships are classified as having high importance (*Percent_Ranked_High*) and 24.4 percent as having low importance (*Percent_Ranked_Low*). Whereas 9.5 percent of firms are classified as having high importance for the majority of their independent board members (*Majority_Ranked_High*), 12.4 percent of firms are classified as having low importance (*Majority_Ranked_Low*).

The last part of Panel C presents the descriptive statistics for firm characteristics. We do not discuss these statistics in detail for the sake of brevity.

IV. Methodology and Empirical Results

A. Methodology

We estimate the following equation to test the relationships between directorship importance and bank loan contract features:

$$\begin{aligned} Loan\_Contract\_Feature = {} & \beta_0 + \beta_1 Percent\_Ranked\_High + \beta_2 Percent\_Ranked\_Low \\ & + \beta_3 Independent\_Board + \beta_4 Independent\_Director\_Ownership + \beta_5 CEO\_Ownership \\ & + \beta_6 CEO\_Ownership\_Squared + \beta_7 Ln(Loan\_Amount) + \beta_8 Ln(Maturity) \\ & + \beta_9 Performance\ Pricing + \beta_{10} Secured\_Loan + \beta_{11} Ln(Total\_Assets) + \beta_{12} Leverage \\ & + \beta_{13} Return\_on\_Assets + \beta_{14} Operating\_Cash\_Flow\_Volatility + \beta_{15} Asset\_Tangibility \\ & + \beta_{16} Z\_Score + \beta_{17} Tobin's\ Q + \beta_{18} Credit\_Spread + \beta_{19} Term\_Spread + Loan\_Purpose \\ & + Loan\_Type + Industry + Year + \varepsilon \end{aligned} \quad (1)$$

where, *Loan_Contract_Feature* refers to one of the following bank loan characteristics: loan spread, loan maturity, and number of covenants.[4]

Following Masulis and Mobbs (2015), we control for several governance characteristics in our model. Specifically, we include *Independent_Board*, *Independent_Director_Ownership*, *CEO_Ownership*, and *CEO_Ownership_Squared* in Equation (1). Unlike *Percent_Ranked_High* (*Percent_Ranked_Low*) which captures directors' reputation incentives, *Independent_Director_Ownership* captures directors' financial incentives. Drawing on prior studies (Qian and Strahan (2007), Boubakri and Ghouma (2010), and Qi et al. (2010)), we also control for loan characteristics and firm characteristics. We use the natural log of the amount of the loan committed by the lender pool (*Ln(Loan_Amount*)), the natural log of the number of months to maturity (*Ln(Maturity)*), whether the facility has a performance pricing provision (*Performance_Pricing*), and whether the loan is secured (*Secured_Loan*) to capture other loan characteristics besides spread.[5] We control for firm characteristics, including the natural log of book value of assets (*Ln(Total_Assets)*), total liabilities divided by total assets (*Leverage*), income before extraordinary items divided by total assets (*Return_on_Assets*), standard deviation of quarterly cash flows from operations divided by total assets (*Operating_Cash_Flow_Volatility*), property, plant and equipment divided by total assets (*Asset_Tangibility*), Altman's Z-Score (*Z_Score*), and Tobin's Q (*Tobin's Q*), all measured at the beginning of the fiscal year. We control for macroeconomic factors by including the difference in yield between BAA- and AAA-rated corporate

[4] Equation (1) does not include *Ln(Maturity)* as a control variable when the dependent variable, *Loan Contract_Feature*, represents loan maturity.
[5] We also include whether one of the lead arrangers has been a lead arranger before (*Prior_Lead_Lender*) in Table 7, and the number of lenders (*Number_of_Lenders*) and the number of total covenants (*Number_of_Total_Covenants*) in Table 8.

bonds (*Credit_Spread*), and the difference in yield between ten-year and two-year U.S. Treasury bonds, measured one month before the loan becomes active (*Term_Spread*). We include the indicator variables *Loan_Purpose* and *Loan_Type* to control for differences in loan purpose and type,[6] as well as industry and year fixed effects. Appendix A provides detailed descriptions of all the variables used in the model.

B. Relation between Cost of Borrowing and Importance of Directorship

Table 2 Panel A presents the estimation results relating the cost of borrowing, measured using *Ln(Loan_Spread)*, to the relative importance of the directorship. Columns (1) - (3) report the results using *Percent_Ranked_High* and *Percent_Ranked_Low* as measures of directorship importance. The model in Column (1) controls only for board characteristics, the model in Column (2) includes all the control variables except loan characteristics, and the model in Column (3) includes all the control variables. We find similar results in all three columns. Specifically, in Column (3), *Percent_Ranked_High* is significantly negatively related to the cost of borrowing, as indicated by the coefficient β_1, which equals -0.171 with a t-value of -5.46. This coefficient implies that moving from the first quartile (0.000) to the third quartile (0.333) of *Percent_Ranked_High* is associated with a 1.059 basis point reduction in the cost of borrowing.[7] *Percent_Ranked_Low* is significantly positively related to the cost of borrowing; β_2 equals 0.057 with a t-value of 2.43, implying that moving from the first quartile (0.000) to the third quartile (0.375) of *Percent_Ranked_Low* increases the cost of

[6] Specifically, *Loan_Purpose* reflects the primary purpose for the loan, including acquisition line, commercial paper backup, corporate purposes, debt repayment, takeover, working capital, and other purposes, and *Loan_Type* includes 364-day facilities, delay draw term loans, revolvers, and term loans.

[7] It is calculated as follows: exp((0.333 – 0.000)*0.171) = 1.059.

debt by 1.022 basis points.[8] The difference between β_1 and β_2 is highly significant (F = 31.60, p < 0.01). These results show that firms ranked high (low) by directors with multiple directorships are associated with lower (higher) cost of borrowing.[9]

Columns (4) - (6) present regressions analogous to those in Columns (1) - (3), except that we use the variables *Majority_Ranked_High* and *Majority_Ranked_Low* in place of *Percent_Ranked_High* and *Percent_Ranked_Low*. We find consistent evidence with this alternative specification; firms with highly valued boards have lower cost of borrowing. We also find in Panel A that *Independent_Board* is significantly negatively related to *Loan_Spread*, consistent with board independence helping reduce the cost of bank loans.[10]

Table 2 Panel B examines the interaction effect of directorship importance and overall board independence (*Independent_Board*) on cost of borrowing. Column (1) presents the results for *Percent_Ranked_High* and *Percent_Ranked_Low*, and Column (2) presents corresponding results for *Majority_Ranked_High* and *Majority_Ranked_Low*. The results in Column (1) show a significantly negative coefficient on the interaction term *Percent_Ranked_High*Independent_Board* (β_4 = -0.159, t = -2.68, p = 0.01), and the results in Column (2) show a significantly negative coefficient on *Majority_Ranked_High*Independent_Board* (β_4 = -0.103, t = -1.80, p = 0.08). Both these estimates indicate that the negative relation between high independent director attention and cost of borrowing is more pronounced when the majority of the board is independent.

We also find a significantly positive coefficient on the interaction term

[8] It is calculated as follows: exp((0.375 – 0.000)*0.057) = 1.022.
[9] *Ln(Maturity)*, as a control variable, is not significant in this and most of the subsequent tables. This is because we control for the loan type fixed effect, which is highly correlated with loan maturity. Once we drop the loan type fixed effect, the coefficient on *Ln(Maturity)* becomes significant in most regressions.
[10] Please refer to the online Appendix for detailed results of the control variables for Tables 2-5.

*Percent_Ranked_Low*Independent_Board* in Column (1) (β_5 =0.161, t = 2.21, p = 0.03), indicating that the positive relation between low independent director attention and cost of borrowing is also more pronounced when the majority of the board is independent.[11] Although positive, the coefficient on *Majority_Ranked_Low*Independent_Board* is not reliably greater than zero (β_5 = 0.080, t = 1.53, p = 0.134). Overall, these results suggest that when the majority of a board is comprised of independent directors, the effectiveness of the board depends largely on these directors' effort and attention; as a result, these independent directors' attention to the board plays a more important role in reducing the cost of borrowing.[12]

C. Relation between Loan Maturity and Importance of Directorship

Table 3 Panel A presents the results relating loan maturity to the relative importance of multiple directorships. Columns (1) - (3) present the regression results using *Percent_Ranked_High* and *Percent_Ranked_Low* as the measures of importance of multiple directorships. All three columns report similar results. Specifically, in Column (3), *Percent_Ranked_High* is positively related to loan maturity (β_1 = 0.050, t = 2.32, p = 0.02). This coefficient implies that moving from the first quartile (0.000) to the third quartile (0.333) for *Percent_Ranked_High* increases loan maturity by 1.040 months,

[11] The results indicate that the coefficients on *Percent_Ranked_High*, *Percent_Ranked_Low*, *Majority_Ranked_High*, and *Percent_Ranked_Low*, in Columns (1) and (2) of Table 2 Panel B are no longer significant. One explanation for these results is that these coefficients reflect the effect of directorship importance for firms that do not have a majority of independent directors on their boards (i.e., for 16.8% of sample observations). In other words, directorship importance is relevant for bank loan contracting only when the board comprises a majority of independent directors (i.e., for 83.2% of the sample observations).

[12] We also test the interaction effect of directorship importance and having a staggered board. We find (in untabulated results) evidence indicating that lower directorship importance is associated with higher cost of borrowing, especially when the board is staggered. This result suggests that a stronger takeover defense (i.e., staggered board) provides board directors with lower monitoring incentives, especially when independent directors' reputation incentives (i.e., directorship importance) are low.

which represents a 2.24% increase in loan maturity.[13] *Percent_Ranked_Low* is insignificantly negatively related to loan maturity (β_2 = -0.006, t = -0.32, p =0.74). The difference between β_1 and β_2 is significant at the 0.06 level (F = 3.51). These results show that firms ranked high by independent directors with multiple directorships are associated with longer loan maturity than firms ranked low by independent directors with multiple directorships.

We find consistent results in Columns (4) - (6) when we use *Majority_Ranked_High* and *Majority_Ranked_Low*; firms valued highly by independent directors with multiple directorships enjoy longer loan maturity.

Table 3 Panel B present the results using loan maturity instead of log loan maturity. The results are qualitatively similar to the results in Table 3 Panel A.

D. Relation between Number of Covenants and Importance of Directorship

Table 4 Panel A presents the results relating the number of total covenants to the relative importance of multiple directorships. The results in Columns (1) - (3), which report the regression results with *Percent_Ranked_High* and *Percent_Ranked_Low* as the measures of importance of multiple directorships, are similar. For example, in Column (3), *Percent_Ranked_High* is significantly negatively related to the number of total covenants (β_1 = -0.089, t = -2.15, p = 0.03)[14] and *Percent_Ranked_Low* is insignificantly negatively related to the number of total covenants (β_2 = -0.015, t = -0.48, p = 0.63). The results in Columns (4) - (6) with *Majority_Ranked_High* and *Majority_Ranked_Low* are consistent with those in Columns (1) - (3). Both sets of results indicate that firms valued

[13] The loan maturity increase is calculated as follows: exp((0.333 – 0.000)*0.052) = 1.017, and the percentage is calculated as follows: 1.017/45.41= 2.24%.

[14] The marginal effect of *Percent_Ranked_High* is -0.26. That is, for a one unit increase in *Percent_Ranked_High*, the number of total covenants decreases by 0.26.

higher (lower) by independent directors with multiple directorships have fewer (more) total covenants.

Table 4 Panel B presents corresponding results for the number of *general* covenants. We find that firms valued higher (lower) by multiple directorship directors have fewer (more) general covenants in Columns (1) and (4), but not for the models in the other columns.

Table 4 Panel C presents results for the number of *financial* covenants. Except for the model in Column (2), firms valued higher by multiple directorship directors have fewer financial covenants. The results in Table 4 also show that having a majority independent board (*Independent_Board*) is associated with a lower number of total covenants, general covenants, and financial covenants.[15]

V. Additional Analysis

A. First difference analysis

The results reported earlier are based on a levels analysis, which is inherently vulnerable to omitted variables that may bias the coefficient estimates. To alleviate this concern, we conduct a first difference analysis by relating the two-year change (from year t-1 to year t+1) in the loan contract terms to the corresponding two-year change (from year t-2 to year t) in the percentage of independent directors that view the directorship as more or less important (i.e., two-year change in *Percent_Ranked_High* and *Percent_Ranked_Low*).[16] We also limit the sample to observations with non-zero changes in directorship importance from year t-2 to year t. Table 5 presents the results of this first

[15] In addition, in Table 4, we find some evidence that *CEO_Ownership* (*CEO_Ownership_Squared*) is significantly positively (negatively) associated with the number of covenants, but these significant results mostly disappear once loan features and firm characteristics are controlled.

[16] The results are similar if we use annual changes.

difference analysis. We continue to find results consistent with those reported earlier. Specifically, increases (decreases) in *Percent_Ranked_High* are associated with decreases (increases) in loan spread. Furthermore, increases (decreases) in *Percentage_Ranked_Low* are associated with increases (decreases) in the number of total covenants and general covenants. These results provide further evidence that changes in the cost of bank loans can be attributed to changes in the importance of directorships.

B. Propensity-Score-Matched Analysis

Given that we use firm size to proxy for the relative prestige of a firm, and given that prior research indicates that larger firms are likely to have better credit history and, therefore, lower cost of borrowing, our results relating loan characteristics to the relative importance of multiple directorships could be driven by differences in firm size. Although we include total assets (*Ln(Total_Assets)*) in the models to control for this size effect,[17] we also conduct a propensity-score-matched analysis to further alleviate this potential concern.

We discuss the details and present the results of the propensity score matching process in Table 6 Panel A of the online appendix. We find consistent results using the propensity score matched sample. These results are reported in Table 6 Panel B of the online appendix.

C. Relation between Loan Contract Features and Importance of Audit Committee

[17] *Ln(Total_Assets)*, as a measure of size, usually has the same association with the loan contract terms as *Percent_Ranked_High* and *Majority_Ranked_High*. However, in Table 3, loan maturity is negatively associated with *Ln(Total_Assets)* and positively associated with *Percent_Ranked_High* and *Majority_Ranked_High.* This is not inconsistent with the previous literature, which presents mixed evidence on the relation between loan maturity and firm size. For example, when using loan maturity as the dependent variable, Graham et al. (2008) find that the coefficients on size are negative but insignificant. Furthermore, Costello and Wittenberg-Moerman (2011) report a positive and significant coefficient on size in Table 5, but a negative and significant coefficient on size in Table 8.

Directorship

Because monitoring by the audit committee is critically important to ensuring reliability of a firm's accounting information, we also examine the effect of audit committee directorship importance on loan contract features. We define *Audit_Percent_Ranked_High* (*Audit_Percent_Ranked_Low*) as the percentage of independent audit committee members for whom the ranked directorship is 10% larger (smaller) than their smallest (largest) directorship measured by the firm's market capitalization, and *Audit_Majority_Ranked_High* (*Audit_Majority_Ranked_Low*) as an indicator variable that equals one if the majority of independent directors on the audit committee rank the directorship as high (low),[18] and zero otherwise.

The results, presented in Table 7 of the online appendix, are very similar to our main findings for the full board. Together, the results in Panel A and Panel B indicate that greater audit committee directorship importance is associated with lower loan spread, longer maturity, and fewer covenants, suggests that the audit committee plays an important role in reducing the cost of debt, probably because of its importance in monitoring the firm's accounting decisions.

D. Relation between Syndicate Concentration, Lead Arranger Percentage, Collateral Requirement, Annual Loan Fees, and Importance of Directorship

We also examine the relation between relative board importance and the following four additional measures of bank loan contracting: syndicate concentration, lead arranger percentage, collateral requirement, and annual loan fees.

We discuss the details and the results of these tests in Table 8 and 9 in the online appendix. Overall, we find that boards with more motivated directors have lower levels

[18] That is, 10% larger (smaller) than their smallest (largest) directorship by market capitalization of the firm.

of syndicate concentration, lower likelihood of collateral requirement, and lower annual loan fees. The results are consistent with those reported in Tables 2 to 6.

E. Relation between Bond Ratings and Importance of Directorship

We also examine the relation between a firm's bond rating and the relative importance of its directorship. Since bond rating is an important determinant of bond cost, this test also indirectly reflects the relation between directorship importance and bond cost. We obtain bond data from Mergent Fixed Income Securities Database (FISD), and convert the bond ratings to numerical values using the conversion in Becker and Milbourn (2011).[19]

In this model, we include the same controls for governance and firm characteristics as in equation (1). Following prior literature (e.g., Mansi et al. (2011)), we also control for bond maturity (*Ln(Bond Maturity)*), measured as the natural logarithm of the number of days to maturity (maturity date minus offering date).

Table 10 of the online appendix presents the results of estimating the relation between bond rating and directorship importance. *Percent_Ranked_High* is significantly positively associated with *Bond_Rating* in Columns (1) and (2), and *Majority_Ranked_High* has a similar association with *Bond_Rating* in Columns (3) and (4). Further, *Percent_Ranked_Low* (*Majority_Ranked_Low*) has a significantly negative association with *Bond_Rating* in Columns (1) and (2) (Column (3)). These results indicate that firms whose directorships are viewed as more (less) important by their independent directors are associated with higher (lower) bond ratings.

[19] Following Becker and Milbourn (2011), we code AAA as 28, AA+ as 26, AA as 25, AA- as 24, A+ as 23, A as 22, A- as 21, BBB+ as 20, BBB as 19, BBB- as 18, BB+ as 17, BB as 16, BB- as 15, B+ as 14, B as 13, B- as 12, CCC as 11, CC as 7, and C as 4.

F. Directorship Importance and Loan Default Risk and Covenant Violation

We also examine whether the documented negative association between cost of borrowing and directorship importance is related to reduction in the loan default rate and covenant violation. First, we define (-1)*Z_score as default risk and use it as the dependent variable in Equation (1). We find (in untabulated results) that *Percent_Ranked_High* and *Majority_Ranked_High* are significantly negatively associated with default risk, indicating that higher directorship importance is negatively associated with default risk. Second, following the covenants literature (e.g., Chava and Roberts (2008), Demiroglu and James (2010)), we consider breaching the covenant threshold of accounting numbers as a covenant violation. Following Demiroglu and James (2010), we use the current ratio and the debt to earnings-before-interest-tax-depreciation-and-amortization (EBITDA) ratio as the covenant threshold. More specifically, we define *Covenant_Violation* as one if the current ratio is less than the minimum current ratio or the debt-to-EBITDA ratio is greater than the maximum debt-to-EBITDA ratio required by the loan contract, and zero otherwise, and use this variable as the dependent variable in Equation (1). The untabulated results show that *Percent_Ranked_High* is significantly negatively associated with covenant violation, suggesting that directorship importance is associated with a lower likelihood of covenant violation.

G. Robustness Tests

Loan terms such as spread, maturity, and number of covenants are often determined simultaneously. We conduct robustness tests to address this potential endogeneity concern but, for brevity, do not tabulate the results. First, we follow Graham

et al. (2008) and employ two-stage least squares estimation. In the first stage, we regress bank loan maturity on the borrower's total assets maturity.[20] In the second stage, we re-estimate our main model using the fitted values of loan maturity from the first stage as the instrument for loan maturity. The results (untabulated) are consistent with our main findings.

Second, to address the endogeneity concern for cost of borrowing and number of covenants, we follow Costello and Wittenberg-Moerman (2011) and estimate a simultaneous equations model, with *Prior_Ln(Loan_Spread)* as the instrumental variable for the cost of borrowing and *Reputable_Lead_Lender* as the instrumental variable for the number of total covenants. Once again, we find consistent results.

Third, in additional robustness tests, we use other measures of importance (reputation incentives) of a directorship. First, similar to Masulis and Mobbs (2014), we rank directorships using the market value of total assets (i.e., sum of book value of liabilities and market value of equity). Second, we change the threshold of the relative importance of directorships from 10% of a firm's market capitalization to 20% and 50%. We find results under these three alternative measures to be very similar to the primary results using the 10% threshold. We also control for potential nonlinearity in the relation with firm size (*Ln(Total_Assets)*) by including the square of this variable as an additional control variable and find consistent results.

Fourth, to further show that our results are not driven by the firm size effect, we conduct a firm size adjustment factor test as in Masulis and Mobbs (2015) and find that

[20] In the first stage, following Johnson (2003), we measure the total assets maturity as two different components. The first component, current assets maturity, equals current assets divided by cost of goods sold. The second component, long-term assets maturity, equals gross PPE divided by depreciation expense. Total assets maturity equals the weighted sum of these two components.

our main results hold. Specifically, we first randomly reassign each independent director to a firm. Second, we calculate the pseudo attention measure based on the new assignment. Third, we repeat these two steps 100 times and use the mean value of the pseudo attention measure as the size adjustment factor.

Fifth, we control for the direction of performance pricing provisions. Our sample is considerably reduced because only 48.7% of the observations include a performance pricing provision. Following Asquith, Au, Covert, and Pathak (2013), we define *Interest_Increasing_PP* as an indicator variable that equals one if the loan contract contains an interest increasing performance pricing provision, and zero otherwise. We include *Interest_Increasing_PP* in Equation (1) and find results similar to our main results, except for the number of covenants which are no longer significant, possibly due to the reduced sample size. Furthermore, we find some evidence that directorship importance is negatively associated with the likelihood of having an interest-increasing performance pricing provision.

Sixth, because dual-class firms have unique voting features that may affect the reputation incentives of independent directors, we repeat our analyses after excluding these firms and continue to find consistent results.

Seventh, since firms with majority block holders may limit the reputation incentives of independent directors, we re-estimate the previous test after deleting these firms and find that our results are robust.

Eighth, we cluster standard errors at the industry level in all applicable regressions and find that the results remain qualitatively similar.

Ninth, to control for non-linearity, we include a firm size squared term in the main

regressions and still find consistent results.

Tenth, we find consistent results after including both stock return volatility and residual volatility in the main regressions.

VI. Conclusions

In this study, we examine the relation between reputation incentives in the director labor market and bank loan contracting. Previous literature, such as Masulis and Mobbs (2014, 2015) and Huang et al. (2014), finds that independent directors with multiple directorships distribute their effort unequally based on the directorships' relative prestige. Directors with multiple directorships spend more time and effort on their more prestigious boards. We investigate whether bank loan contracting reflects such unequal distribution of monitoring effort. We find that firms with a greater proportion of independent directors for whom the board is one of their most prestigious have bank loans with lower cost, longer maturity, and fewer covenants. These results are robust to various sensitivity tests, including first differences, propensity score matching, firm size matching, and using alternative measures of board importance. We also find similar results at the audit committee level. Furthermore, we find that more important boards are associated with lower loan syndicate concentration, lower likelihood of collateral requirement, and lower annual loan fees. Lastly, we find that directorship importance is also significantly related to bond rating.

To the best of our knowledge, this is the first study to directly link unequal importance of multiple directorships to the cost of borrowing. We provide indirect evidence that independent directors give more attention to more valued boards. By linking the unequal monitoring effort to bank loan contracting, we thus contribute to the

emerging literature on directors' unequal distribution of their effort among multiple directorships (e.g., Huang et al. (2014), Masulis and Mobbs (2014), (2015)). Our results indicate that firms should consider director reputation incentives when appointing independent directors because the importance of the directorship to these directors has implications for loan contract terms, especially loan pricing.

We also contribute to the literature linking board governance to cost of debt (Bhojraj and Sengupta (2003), Anderson et al. (2004), and Fields et al. (2012)) by documenting the implications of unequal distribution of independent directors' effort across multiple boards, an area that has not been previously studied in the cost of borrowing literature. Our study highlights the importance of assembling a board that will receive the most attention from its members.

References

Abdel-Khalik, A. R. "An Empirical Analysis of CEO Risk Aversion and the Propensity to Smooth Earnings Volatility" *Journal of Accounting, Auditing & Finance*, 22 (2007), 201-235.

Adams, R., and D. Ferreira. "Do Directors Perform for Pay?" *Journal of Accounting and Economics*, 46 (2008), 154–171.

Anderson, C.; A. Mansi; and D. Reeb. "Founding Family Ownership and the Agency Cost of Debt." *Journal of Financial Economics*, 68 (2003), 263–283.

Asquith, P.; A. Au; T. Covert; and P. Pathak. "The Market for Borrowing Corporate Bonds." *Journal of Financial Economics*, 107 (2013), 155–182.

Beasley, M. "An Empirical Analysis of the Relation between the Board of Director Composition and Financial Statement Fraud." *The Accounting Review*, 71 (1996), 443–465.

Becker, B., and T. Milbourn. "How did Increased Competition affect Credit Ratings?" *Journal of Financial Economics*, 101 (2011), 493-514.

Bhojraj, S., and P. Sengupta. "Effect of Corporate Governance on Bond Ratings and Yields: The Role of Institutional Investors and the Outside Directors." *Journal of Business*, 76 (2003), 455–475.

Bolton, P., and D. Scharfstein. "Optimal Debt Contracts and the Number of Creditors." *Journal of Political Economy*, 104 (1996), 1–25.

Boone, A.; L. Field; J. Karpoff; and C. Raheja. "The determinants of corporate board size and composition: An empirical analysis", *Journal of Financial Economics* 85 (2007), 67-101.

Boubakri, N., and H. Ghouma. "Control/Ownership Structure, Creditor Rights Protection, and the Cost of Debt Financing: International Evidence." *Journal of Banking and Finance*, 34 (2010), 2481–2499.

Bradley, M., and M. Roberts. "The Structure and Pricing of Corporate Debt Covenants." Working Paper, University of Pennsylvania (2004).

Bushman, R.., and R. Wittenberg-Moerman. "The Role of Bank Reputation in "Certifying" Future Performance Implications of Borrowers' Accounting Numbers." *Journal of Accounting Research*, 50 (2012), 883-930.

Chava, S., and M.R. Roberts, "How does financing impact investment? The role of debt covenants". *Journal of Finance* 63 (2008), 2085–2121.

Core, J. E.; R. W. Holthausen; and D. F. Larcker. "Corporate Governance, Chief Executive Officer Compensation, and Firm Performance." *Journal of Financial Economics*, 51 (1999), 371–406.

Costello, A., and R. Wittenberg-Moerman. "The Impact of Financial Reporting Quality on Debt Contracting: Evidence from Internal Control Weakness Reports." *Journal of Accounting Research*, 49 (2011), 97–136.

Davydenko, S.; I. Strebulaev; and X. Zhao. "A Market-Based Study of the Cost of Default." *Review of Financial Studies*, 25 (2012), 3573-3609.

Demiroglu, C., and C. M. James, "The information content of bank loan covenants". *Review of Financial Studies* 23 (2010), 3700-3737.

Dichev, I., and D. Skinner. "Large-Sample Evidence on the Debt Covenant Hypothesis." *Journal of Accounting and Economics*, 40 (2002), 1091–1123.

Drucker, S., and M. Puri. “On Loan Sales, Loan Contracting and Lending Relationships.” *Review of Financial Studies*, 22 (2009), 2835–2872.
Ferris, S.; M. Jagannathan; and A. Pritchard. “Too Busy to Mind the Business? Monitoring by Directors with Multiple Board Appointments, *Journal of Finance*, 58 (2003), 1087–1111.
Fich, E. M., and A. Shivdasani. “Are Busy Boards Effective Monitors?” *Journal of Finance*, 61 (2006), 689–724.
Fields, P.; D. R. Fraser; and A. Subrahmanyam. “Board Quality and the Cost of Debt Capital: The Case of Bank Loans.” *Journal of Banking and Finance*, 36 (2012), 1536–1547.
Garcia Lara, J. M.; B. Garcia Osma; and F. Penalva. “Accounting Conservatism and Corporate Governance.” *Review of Accounting Studies*, 14 (2009), 161–201.
Graham, J.; S. Li; and J. Qiu. “Corporate Misreporting and Bank Loan Contracting.” *Journal of Financial Economics*, 89 (2008), 44–61.
Hermalin, B., and M. Weisbach. “Boards of Directors as an Endogenously Determined Institution: A Survey of the Economic Literature.” *Economic Policy Review*, 9 (2003), 7–26.
Huang, H.; G. J. Lobo; C. Wang; and J. Zhou. “Attention Please: How Does Directors’ Uneven Attention among Multiple Directorships Affect Firms’ Earnings Management.” Working Paper, Yeshiva University, University of Houston, University of Kentucky, and University of Hawaii at Manoa (2014).
Ivashina, V., and D. Scharfstein. “Bank Lending during the Financial Crisis of 2008.” *Journal of Financial Economics*, 97 (2010), 319–338
Klein, A. “Audit Committee, Board of Director Characteristics, and Earnings Management.” *Journal of Accounting and Economics*, 33 (2002), 375–400.
Larcker, D.; S. Richardson; and A. Tuna. “Corporate Governance, Accounting Outcomes, and Organizational Performance.” *The Accounting Review*, 82 (2007), 963–1008.
Li, N. “Negotiated Measurement Rules in Debt Contracts.” *Journal of Accounting Research*, 48 (2010), 1103–1144.
Mandelker, G. N., and S. G. Rhee. “The Impact of the Degrees of Operating and Financial Leverage on Systematic Risk of Common Stock.” *Journal of Financial and Quantitative Analysis*, 19 (1984), 45-57.
Mansi, S.; W. Maxwell; and D. Miller. “Analyst Forecast Characteristics and the Cost of Debt.” *Review of Accounting Studies*, 16 (2011), 116–142.
Masulis, R. W., and S. Mobbs. “Independent Director Incentives: Where Do Talented Directors Spend Their Limited Time and Energy?” *Journal of Financial Economics*, 111 (2014), 406–429.
Masulis, R. W., and S. Mobbs. “Independent Director Reputation Concerns.” Working Paper, University of New South Wales and University of Alabama (2015).
McMullen, D., and K. Raghunandan. “Enhancing Audit Committee Effectiveness.” *Journal of Accountancy*, 182 (1996), 79–81.
Menon, K., and J. D. Williams. “The Use of Audit Committee for Monitoring.” *Journal of Accounting and Public Policy*, 13 (1994), 121–139.
Qi, Y.; L. Roth; and J. Wald. “Political Rights and the Cost of Debt.” *Journal of Financial Economics*, 95 (2010), 202–226.

Qian, J., and P. Strahan. “How Laws and Institutions Shape Financial Contracts: The Case of Bank Loans.” *Journal of Finance*, 62 (2007), 2803–2834.
Ryan, H., and R. Wiggins. “Whose Is in Whose Pocket? Director Compensation, Board Independence, and Barriers to Effective Monitoring.” *Journal of Financial Economics*, 73 (2004), 497–524.
Sengupta, P. “Corporate Disclosure Quality and the Cost of Debt.” *The Accounting Review*, 73 (1998), 459–474.
Shivdasani, A., and D. Yermack. “CEO Involvement in the Selection of New Board Members: An Empirical Analysis.” *Journal of Finance*, 54 (1999), 1829–1853.
Smith, C. “A Perspective on Accounting-Based Debt Covenant Violations.” *The Accounting Review*, 68 (1993), 289–303.
Sufi, A. “Information Asymmetry and Financing Arrangements: Evidence from Syndicated Loans.” *Journal of Finance*, 62 (2007), 629–668.
Vafeas, N. “Board Meeting Frequency and Firm Performance.” *Journal of Financial Economics*, 53 (1999), 113–142.
Xie, B.; W. N. Davidson; and P. DaDalt. “Earnings Management and Corporate Governance: The Roles of the Board and the Audit Committee.” *Journal of Corporate Finance*, 3 (2003): 295–316.
Yermack, D. “Higher Market Valuation of Companies with a Small Board of Directors.” *Journal of Financial Economics*, 40 (1996), 185–211.

Appendix A

Variable name	Variable definitions and constructions
Board Characteristics	
Percent_Ranked_High	Percentage of independent directors for whom the ranked directorship is 10% larger than their smallest directorship, measured by firm market capitalization. Source: Risk Metrics.
Percent_Ranked_Low	Percentage of independent directors for whom the ranked directorship is 10% smaller than their largest directorship, measured by firm market capitalization. Source: Risk Metrics.
Majority_Ranked_High	Indicator variable that equals 1 if the majority of independent directors classify this as a high ranked directorship (i.e., 10% larger than their smallest directorship by market capitalization of the firm), and 0 otherwise. Source: Risk Metrics.
Majority_Ranked_Low	Indicator variable that equals 1 if the majority of independent directors classify this as a low ranked directorship (i.e., 10% smaller than their largest directorship by firm market capitalization), and 0 otherwise. Source: Risk Metrics.
High_Low_Motivation	Indicator variable that equals 1 if *Majority_Ranked_High* equals1, and 0 if *Majority_Ranked_Low* equals 1.
Independent_Board	Indicator variable that equals 1 if the majority of directors are independent directors, and 0 otherwise. Source: Risk Metrics.
CEO_Ownership	Percentage of common shares outstanding held by the CEO at year-end, including stock options. Source: Risk Metrics.
CEO_Ownership_Squared	Square of *CEO_Ownership*. Source: Risk Metrics.
Independent_Director_Ownership	Indicatorvariable that equals 1 if independent directors' ownership is larger than the sample median, and 0 otherwise. Independent directors' ownership is the percentage of common shares outstanding held by the independent directors at year-end, including stock options. Source: Risk Metrics
Board_Size	Number of directors in the board. Source: Risk Metrics
Percent_Independent_Directors	Percentage of independent director in the boards. Source: Risk Metrics
Audit Committee Characteristics	
Audit_ Percent_Ranked_High	Percentage of independent audit committee members for whom the ranked directorship is 10% larger than their smallest directorship, measured by firm market capitalization. Source: Risk Metrics.
Audit_ Percent_Ranked_Low	Percentage of independent audit committee members for whom the ranked directorship is 10% smaller than their largest directorship, measured by firm market capitalization. Source: Risk Metrics.
Audit_Majority_Ranked_High	Indicator variable that equals 1 if the majority of independent directors in the audit committee classify this as a high ranked directorship (i.e., 10% larger than their smallest directorship by firm market capitalization), and 0 otherwise. Source: Risk Metrics.
Audit_Majority_Ranked_Low	Indicator variable that equals 1 if the majority of independent outside directors in the audit committee classify this as a low ranked directorship (i.e., 10% smaller than their largest directorship by firm market capitalization), and 0 otherwise. Source: Risk Metrics.
Audit_Committee_Fully_Independent	Indicator variable that equals 1 if all audit committee members are independent outside directors, and 0 otherwise. Source: Risk Metrics.
Bank Loan Characteristics	
Loan_Contract_Feature	One of the following bank loan contract features: loan spread, loan

	amount, and the number of covenants.
Loan_Spread	All-in drawn spread of each facility. Source: DealScan
Ln(Loan_Spread)	Natural logarithm of *Loan_Spread*
Loan_Amount	Actual amount (in millions) of the facility committed by the facility's lender pool. Source: DealScan.
Ln(Loan_Amount)	Natural logarithm of (*Loan_Amount*)
Maturity	Number of months to maturity. Source: DealScan.
Ln(Maturity)	Natural logarithm of (*Maturity*)
Secured_Loan	Indicator variable that equals 1 if the facility has secured assets, and 0 otherwise. Source: DealScan.
Number_of_Total_Covenants	Number of total covenants, measured as the sum of Number of general covenants, and Number of financial covenants Number of total covenants. Source: DealScan.
Number_of_General_Covenants	Number of general covenants. Source: DealScan.
Number_of_Financial_Covenants	Number of financial covenants. Source: DealScan.
Performance_Pricing	Indicator variable that equals 1 if the loan contract includes a performance pricing provision, and 0 otherwise. Source: DealScan.
Number_of_Lenders	Natural logarithm of the number of lenders in a loan deal. Sources: DealScan.
Prior_Lead_Lender	Indicator variable that equals 1 if at least one of the lead lender of the current loan syndicate was a lead lender of a previous deal for the same borrower during the past five years, and 0 otherwise. Sources: Deal Scan
Loan_Purpose	Indicator variable that equals 1 for primary loan purposes, including acquisition line, commercial paper backup, corporate purposes, debt repayment, takeover, working capital, and other purposes, and 0 otherwise. Source: DealScan.
Loan_Type	Indicator variable that equals 1 for loan type, including 364-day facility, delay draw term loan, revolver, and term loan, and 0 otherwise. Source: DealScan.
Loan_Syndicate_HHI	Herfindahl index calculated using each syndicate member's share in the loan. Source: DealScan.
Ln(Annual_Loan_Fees)	Natural logarithm of the number of basis points of a facility commitment amount that a borrower is required to pay on an annual basis scaled by the loan amount, regardless of any loan outstanding. Source: DealScan.
Prior_Ln(Loan_Spread)	Natural logarithm of *Loan_Spread* of the most recent deal for the same borrower. Source: DealScan
Reputable_Lead_Lender	Indicator variable that equals one if the loan is syndicated by a reputable lead lender in the syndicated loan market, and 0 otherwise. Following Bushman and Wittenberg-Moerman (2012), we define a lead lender bank as reputable if its market share is larger than 2% in our sample period. The market share is the ratio of total amount of loans syndicated as a lead lender to the total amount of syndicated loans in our sample period. Source: DealScan
Interest_Increasing_PP	Following Asquith et al. (2005), we define *Interest-Increasing PP* as an indicator variable that equals 1 if the loan contract contains an interest increasing performance pricing provision, and 0 otherwise. Source: DealScan
Covenant_Violation	Indicator variable that equals one if the current ratio is less than the minimum current ratio or the debt-to-EBITDA ratio is greater than the maximum debt-to-EBITDA ratio required by the loan contract, and 0 otherwise. Source: DealScan

Firm characteristics	
Ln(Total_Assets)	Natural logarithm of the book value of assets at the beginning of the fiscal year. Source: Compustat.
Leverage	Total liabilities divided by total assets, measured at the beginning of the fiscal year. Source: Compustat.
Operating_Cash_Flow_Volatility	Cash flow volatility, measured as the standard deviation of quarterly cash flows from operations (change in quarterly Compustat data item 108) divided by total assets (Compustat data item 6) over the past five fiscal years. Source: Compustat.
Return_on_Assets	Income before extraordinary items divided by total assets, measured at the beginning of the fiscal year. Source: Compustat.
Asset_Tangibility	Property, plant, and equipment (PP&E) divided by total assets, measured at the beginning of the fiscal year. Source: Compustat.
Z_Score	Modified Altman (1968) Z_Score = (1.2 working capital + 1.4 retained earnings + 3.3EBIT + 0.999 sales)/total assets. We use a modified Z_Score, which does not include the ratio of market value of equity to book value of total debt, measured at the beginning of the fiscal year, because a similar term, market-to-book, is included in the regressions as a separate variable. Source: Compustat.
Tobin's Q	Ratio of market value of equity to book value of equity, measured at the beginning of the fiscal year. Source: Compustat.
Firm_Age	Natural logarithm of the number of years that the firm has been listed on COMPUSTAT. Source: Compustat
Ln(Market_Value)	Natural logarithm of the market value of equity at the beginning of the fiscal year. Source: Compustat.
SQ_Ln(Market_Value)	Square of the natural logarithm of the market value of equity at the beginning of the fiscal year. Source: Compustat.
Macroeconomic Factors	
Credit_Spread	Difference in the yield between BAA-rated and AAA-rated corporate bonds measured one month before the loan becomes active. Source: Federal Reserve Board of Governors.
Term_Spread	Difference in the yield between ten-year and two-year U.S. Treasury bonds measured one month before the loan becomes active. Source: Federal Reserve Board of Governors.
Bond characteristics	
Bond_Rating	Coded as follows (Becker and Milbourn, 2011; Table 2, page 500): AAA as 28, AA+ as 26, AA as 25, AA- as 24, A+ as 23, A as 22, A- as 21, BBB+ as 20, BBB as 19, BBB- as 18, BB+ as 17, BB as 16, BB- as 15, B+ as 14, B as 13, B- as 12, CCC as 11, CC as 7, and C as 4. Source: Mergent Fixed Income Securities Database.
Ln(Bond_Maturity)	Natural logarithm of number of the days to maturity (maturity date minus offering date). Source: Mergent Fixed Income Securities Database.
Industry & Year	
IND	Indicator variable that equals 1 for each Fama-French 48 industry, and 0 otherwise. Source: http://mba.tuck.dartmouth.edu/pages/faculty/ken.french/Data_Library/det_48_ind_port.html
YEAR	Indicator variable that equals 1 for each year, and 0 otherwise.

Table 1: Sample Distribution and Descriptive Statistics

Panel A: Sample Development
The sample consists of 8,360 firm-year observations from 1998 to 2010. Variable definitions are in Appendix A.

	Number of firm years
Total firm-year independent director observations available in Risk Metrics and merged with DealScan	10,328
Less:	
Observations from financial services and utilities industries	(1,003)
Observations with bridge loans and non-fund-based facilities, such as leases and standby letters of credit	(274)
Observations with insufficient data to calculate control variables	(691)
Final sample	8,360

Panel B: Distribution by year

Year	Frequency	Percentage	Cumulative
1998	619	7.400	7.400
1999	676	8.090	15.49
2000	800	9.570	25.06
2001	1,187	14.20	39.26
2002	641	7.670	46.93
2003	702	8.400	55.32
2004	724	8.660	63.98
2005	600	7.180	71.16
2006	710	8.490	79.65
2007	359	4.290	83.95
2008	248	2.970	86.91
2009	398	4.760	91.67
2010	696	8.330	100
Total	8,360	100	

Panel C: Descriptive statistics

Variables	N	Mean	Std.	P25	Median	P75
Bank Loan Characteristics						
Loan_Spread	7979	175.50	150.20	62.50	150.00	250.00
Ln(Loan_Spread)	7979	4.793	0.927	4.135	5.011	5.521
Maturity (in months)	8142	45.41	22.57	24.00	57.00	60.00
Ln(Maturity)	8142	3.624	0.701	3.178	4.043	4.094
Loan_Amount(in millions)	8360	503.90	743.20	100.00	250.00	530.50
Ln(Loan_Amount)	8360	5.488	1.264	4.605	5.521	6.274
Secured_Loan	8360	0.394	0.489	0.000	0.000	1.000
Number_of_Total_Covenants	8360	3.840	3.833	0.000	3.000	6.000
Number_of_General_Covenants	8360	2.351	2.709	0.000	1.000	3.000
Number_of_Financial_Covenants	8360	1.489	1.436	0.000	2.000	2.500
Performance_Pricing	8360	0.488	0.500	0.000	0.000	1.000
Number_of_Lenders	8354	10.03	9.03	4.00	8.00	13.00
Prior_Lead_Lender	8360	0.592	0.491	0.000	1.000	1.000
Board Characteristics						
Percent_Ranked_High	8360	0.193	0.247	0.000	0.111	0.333
Percent_Ranked_Low	8360	0.244	0.282	0.000	0.167	0.375
Majority_Ranked_High	8360	0.095	0.293	0.000	0.000	0.000
Majority_Ranked_Low	8360	0.124	0.330	0.000	0.000	0.000
Independent_Board	8301	0.832	0.374	1.000	1.000	1.000
CEO_Ownership	8360	0.025	0.064	0.001	0.007	0.020
CEO_Ownership_Squared	8360	0.005	0.030	0.000	0.000	0.000
Independent_Director_Ownership	8360	0.520	0.500	0.000	1.000	1.000
Firm characteristics						
Ln(Total_Assets)	8360	7.797	1.454	6.731	7.617	8.792
Leverage	8360	0.588	0.201	0.463	0.580	0.702
Operating_Cash_Flow_Volatility	8360	0.041	0.036	0.015	0.027	0.058
Return_on_Assets	8360	0.034	0.091	0.012	0.046	0.081
Asset_Tangibility	8360	0.576	0.357	0.290	0.510	0.806
Z_Score	8360	3.344	2.575	1.799	2.739	4.144
Tobin's Q	8360	3.042	3.840	1.334	2.127	3.419
Credit_Spread	8360	1.006	0.354	0.810	0.910	1.130
Term_Spread	8360	1.246	1.031	0.180	1.440	2.190

Table 2: Relation between Directorship Importance and Cost of Borrowing

This table presents OLS regression estimation results relating directorship importance to the cost of bank loans. All regressions include *Loan_Purpose*, *Loan_Type*, *Year*, and *Industry* fixed effects. To conserve space, we do not report the coefficient estimates for these variables. The t-statistics reported in parentheses are based on heteroskedasticity robust standard errors. *, **, and *** indicate statistical significance at the 10%, 5%, and 1% level (two-tailed), respectively. *Corporate Gov. Controls* includes *Independent_Board*, *Independent_Director_Ownership*, *CEO_Ownership*, and *CEO_Ownerhsip_Squared. Loan Terms Controls* includes *Ln(Loan_Amount)*, *Ln(Maturity)*, *Performance_Pricing*, *Secured_Loan. Firm and Macroeconomic Controls* includes *Ln(Total_Assets)*, *Leverage*, *Return_on_Assets*, *Operating_Cash_Flow_Volatility*, *Asset_Tangibility*, *Z_Score*, *Tobin's Q*, *Credit_Spread*, and *Term_Spread.* All variables are defined in Appendix A. More details including results for the control variables are available in the online appendix.

Panel A: Directorship Importance and Cost of Bank Loans

	(1) *Ln(Loan_ Spread)*	(2) *Ln(Loan_ Spread)*	(3) *Ln(Loan_ Spread)*	(4) *Ln(Loan_ Spread)*	(5) *Ln(Loan_ Spread)*	(6) *Ln(Loan_ Spread)*
Percent_Ranked_High (β_1)	-0.663***	-0.150***	-0.171***			
	(-17.91)	(-4.42)	(-5.46)			
Percent_Ranked_Low (β_2)	0.363***	0.079***	0.057**			
	(13.39)	(3.21)	(2.43)			
Majority_Ranked_High (β_1)				-0.284***	-0.034	-0.083***
				(-9.71)	(-1.31)	(-3.38)
Majority_Ranked_Low (β_2)				0.264***	0.051**	0.034*
				(11.32)	(2.43)	(1.77)
Corporate Gov. Controls	YES	YES	YES	YES	YES	YES
Loan Terms Controls	NO	NO	YES	NO	NO	YES
Firm and Macroeconomic Controls	NO	YES	YES	NO	YES	YES
Industry/Year/ Loan Purpose/Loan Type	YES	YES	YES	YES	YES	YES
No. of observations	7921	7921	7715	7921	7921	7715
Adjusted R^2	0.546	0.669	0.711	0.525	0.668	0.710
Test of $\beta 1=\beta 2$: F	479.13***	27.78***	31.60***	209.99***	6.28**	13.79***

Panel B: Directorship Importance and Cost of Bank Loans: Implications of Board Independence

	(1) *Ln(Loan_Spread)*	(2) *Ln(Loan_Spread)*
Percent_Ranked_High (β_1)	-0.062	
	(-0.91)	
Percent_Ranked_Low (β_2)	-0.059	
	(-0.86)	
Majority_Ranked_High (β_1)		-0.002
		(-0.03)
Majority_Ranked_Low(β_2)		-0.030
		(-0.50)
Independent_Board (β_3)	-0.068*	-0.059*
	(-1.75)	(-1.81)
Percent_Ranked_High Independent_Board (β_4)*	-0.159**	
	(-2.68)	
Percent_Ranked_ Low Independent_Board (β_5)*	0.161**	
	(2.21)	
*Majority_Ranked_High*Independent_Board (β_4)*		-0.103*
		(-1.80)
*Majority_Ranked_Low*Independent_Board (β_5)*		0.080
		(1.53)
Corporate Gov. Controls	YES	YES
Loan Terms Controls	YES	YES
Firm and Macroeconomic Controls	YES	YES
Industry/Year/ Loan Purpose/Loan Type	YES	YES
No. of observations	7715	7715
Adjusted R^2	0.712	0.711
Test of $\beta 4=\beta 5$: F	18.39***	8.85***

Table 3: Relation between Directorship Importance and Loan Maturity

This table presents OLS regression estimation results in Panel A and Poisson regression estimation results in Panel B relating directorship importance to loan maturity. The dependent variable in Panel A is *Ln(Maturity)* and the dependent variable in Panel B is *Maturity*. All regressions include *Loan_Purpose*, *Loan_Type*, *Year*, and *Industry* fixed effects. To conserve space, we do not report the coefficient estimates for these variables. The t-statistics (Panel A) and z-statistics (Panel B) reported in parentheses are based on heteroskedasticity robust standard errors. *, **, and *** indicate statistical significance at the 10%, 5%, and 1% levels (two-tailed), respectively. *Corporate Gov. Controls* includes *Independent_Board*, *Independent_Director_Ownership*, *CEO_Ownership*, and *CEO_Ownerhsip_Squared. Loan Terms Controls* includes *Ln(Loan_Amount)*, *Ln(Maturity)*, *Performance_Pricing*, *Secured_Loan. Firm and Macroeconomic Controls* includes *Ln(Total_Assets)*, *Leverage*, *Return_on_Assets*, *Operating_Cash_Flow_Volatility*, *Asset_Tangibility*, *Z_Score*, *Tobin's Q*, *Credit_Spread*, and *Term_Spread.* All variables are defined in Appendix A. More details including the results for control variables are available in the online appendix.

Panel A: Directorship Importance and Loan Maturity (*Ln(Maturity)*)

	(1)	(2)	(3)	(4)	(5)	(6)
	Ln(Maturity)	*Ln(Maturity)*	*Ln(Maturity)*	*Ln(Maturity)*	*Ln(Maturity)*	*Ln(Maturity)*
Percent_Ranked_High (β_1)	0.053***	0.048**	0.050**			
	(2.61)	(2.24)	(2.32)			
Percent_Ranked_Low (β_2)	0.002	-0.007	-0.006			
	(0.13)	(-0.40)	(-0.32)			
Majority_Ranked_High (β_1)				0.046***	0.050***	0.047***
				(3.17)	(3.40)	(3.22)
Majority_Ranked_Low (β_2)				-0.009	-0.015	-0.017
				(-0.61)	(-1.01)	(-1.14)
Corporate Gov. Controls	YES	YES	YES	YES	YES	YES
Loan Terms Controls	NO	NO	YES	NO	NO	YES
Firm and Macroeconomic Controls	NO	YES	YES	NO	YES	YES
Industry/Year/ Loan Purpose/Loan Type	YES	YES	YES	YES	YES	YES
No. of observations	8086	8086	8086	8086	8086	8086
Adjusted R^2	0.706	0.716	0.722	0.706	0.716	0.723
Test of $\beta1=\beta2$*: F*	3.15*	3.49*	3.51*	6.55**	8.92***	8.91***

Panel B: Directorship Importance and Loan Maturity (Maturity)

	(1)	(2)	(3)	(4)	(5)	(6)
	Maturity	*Maturity*	*Maturity*	*Maturity*	*Maturity*	*Maturity*
Percent_Ranked_High (β_1)	0.057***	0.046**	0.048***			
	(3.22)	(2.44)	(2.59)			
Percent_Ranked_Low (β_2)	0.006	-0.004	-0.002			
	(0.37)	(-0.25)	(-0.14)			
Majority_Ranked_High (β_1)				0.057***	0.055***	0.053***
				(4.12)	(3.94)	(3.75)
Majority_Ranked_Low (β_2)				-0.002	-0.008	-0.009
				(-0.15)	(-0.65)	(-0.75)
Corporate Gov. Controls	YES	YES	YES	YES	YES	YES
Loan Terms Controls	NO	NO	YES	NO	NO	YES
Firm and Macroeconomic Controls	NO	YES	YES	NO	YES	YES
Industry/Year/ Loan Purpose/Loan Type	YES	YES	YES	YES	YES	YES
No. of observations	8086	8086	8086	8086	8086	8086
Adjusted R^2	0.467	0.476	0.482	0.467	0.476	0.482
Test of $\beta1=\beta2$*:* χ^2	4.60**	3.95**	4.15**	9.71***	11.03***	10.77***

Table 4: Relation between Directorship Importance and Number of Covenants

This table presents the Poisson regression estimation results relating directorship importance to the number of covenants. The dependent variable is *Number_of_Total_Covenants* in Panel A, *Number_of_General_Covenants* in Panel B, and *Number_of_Financial_Covenants* in Panel C. All regressions include *Loan_Purpose*, *Loan_Type*, *Year*, and *Industry* fixed effects. To conserve space, we do not report the coefficient estimates for these variables. The z-statistics reported in parentheses are based on heteroskedasticity robust standard errors. *, **, and *** indicate statistical significance at the 10%, 5%, and 1% levels (two-tailed), respectively. *Corporate Gov. Controls* includes *Independent_Board*, *Independent_Director_Ownership*, *CEO_Ownership*, and *CEO_Ownerhsip_Squared. Loan Terms Controls* includes *Ln(Loan_Amount)*, *Ln(Maturity)*, *Performance_Pricing*, *Secured_Loan. Firm and Macroeconomic Controls* includes *Ln(Total_Assets)*, *Leverage*, *Return_on_Assets*, *Operating_Cash_Flow_Volatility*, *Asset_Tangibility*, *Z_Score*, *Tobin's Q*, *Credit_Spread*, and *Term_Spread.* All variables are defined in Appendix A. More details including results for control variables are available in the online appendix.

Panel A: Directorship Importance and Number of Total Covenants

	(1) *Number_of_ Total_ Covenants*	(2) *Number_of_ Total_ Covenants*	(3) *Number_of_ Total_ Covenants*	(4) *Number_of_ Total_ Covenants*	(5) *Number_of_ Total_ Covenants*	(6) *Number_of_ Total_ Covenants*
Percent_Ranked_High (β_1)	-0.324***	-0.0710	-0.089**			
	(-6.39)	(-1.38)	(-2.15)			
Percent_Ranked_Low (β_2)	0.116***	0.010	-0.015			
	(3.20)	(0.27)	(-0.48)			
Majority_Ranked_High (β_1)				-0.147***	-0.0250	-0.077**
				(-3.41)	(-0.58)	(-2.15)
Majority_Ranked_Low (β_2)				0.087***	0.006	-0.030
				(2.83)	(0.19)	(-1.17)
Corporate Gov. Controls	YES	YES	YES	YES	YES	YES
Loan Terms Controls	NO	NO	YES	NO	NO	YES
Firm and Macroeconomic Controls	NO	YES	YES	NO	YES	YES
Industry/Year/ Loan Purpose/Loan Type	YES	YES	YES	YES	YES	YES
No. of observations	8301	8301	8086	8301	8301	8086
Pseudo R^2	0.164	0.179	0.315	0.162	0.179	0.315
Test of $\beta1=\beta2$: χ^2	52.02***	1.61	2.04	20.08***	0.34	1.12

Panel B: Directorship Importance and Number of General Covenants

	(1) *Number_of_ General_ Covenants*	(2) *Number_of_ General_ Covenants*	(3) *Number_of_ General_ Covenants*	(4) *Number_of_ General_ Covenants*	(5) *Number_of_ General_ Covenants*	(6) *Number_of_ General_ Covenants*
Percent_Ranked_High (β_1)	-0.322***	-0.070	-0.090*			
	(-5.42)	(-1.15)	(-1.83)			
Percent_Ranked_Low (β_2)	0.157***	0.017	-0.020			
	(3.79)	(0.40)	(-0.57)			
Majority_Ranked_High (β_1)				-0.099**	0.024	-0.051
				(-2.00)	(0.49)	(-1.17)
Majority_Ranked_Low (β_2)				0.101***	-0.001	-0.045
				(2.91)	(-0.02)	(-1.52)
Corporate Gov. Controls	YES	YES	YES	YES	YES	YES
Loan Terms Controls	NO	NO	YES	NO	NO	YES
Firm and MacroeconomicControls	NO	YES	YES	NO	YES	YES
Industry/Year/ Loan Purpose/Loan Type	YES	YES	YES	YES	YES	YES
No. of observations	8301	8301	8086	8301	8301	8086
Pseudo R^2	0.160	0.176	0.308	0.158	0.176	0.308
Test of $\beta1=\beta2$: χ^2	45.16***	1.33	1.01	10.97***	0.16	0.34

Panel C: Directorship Importance and Number of Financial Covenants

	(1) *Number_of_ Financial_ Covenants*	(2) *Number_of_ Financial_ Covenants*	(3) *Number_of_ Financial_ Covenants*	(4) *Number_of_ Financial_ Covenants*	(5) *Number_of_ Financial_ Covenants*	(6) *Number_of_ Financial_ Covenants*
Percent_Ranked_High (β_1)	-0.327***	-0.0720	-0.075*			
	(-6.69)	(-1.46)	(-1.79)			
Percent_Ranked_Low (β_2)	0.0500	-0.00300	-0.0100			
	(1.39)	(-0.09)	(-0.31)			
Majority_Ranked_High (β_1)				-0.220***	-0.100**	-0.107***
				(-5.08)	(-2.32)	(-2.85)
Majority_Ranked_Low (β_2)				0.064**	0.0160	-0.00800
				(2.08)	(0.51)	(-0.28)
Corporate Gov. Controls	YES	YES	YES	YES	YES	YES
Loan Terms Controls	NO	NO	YES	NO	NO	YES
Firm and Macroeconomic Controls	NO	YES	YES	NO	YES	YES
Industry/Year/ Loan Purpose/Loan Type	YES	YES	YES	YES	YES	YES
No. of observations	8301	8301	8086	8301	8301	8086
Pseudo R^2	0.160	0.176	0.308	0.158	0.176	0.308
Test of $\beta 1=\beta 2$: χ^2	40.85***	1.27	1.53	29.38***	4.81**	4.56**

Table 5: First Difference Analysis

This table presents OLS regression estimation results relating changes in directorship importance (from year t-2 to year t) to changes in loan contract terms (from year t-1 to year t+1). All regressions include *Loan_Purpose*, *Loan_Type*, *Year*, and *Industry* fixed effects. To conserve space, we do not report the coefficient estimates for these variables. The t-statistics reported in parentheses are based on heteroskedasticity robust standard errors. *, **, and *** indicate statistical significance at the 10%, 5%, and 1% levels (two-tailed), respectively. *Corporate Gov. Controls* includes changes in *Independent_Board*, *Independent_Director_Ownership*, *CEO_Ownership*, and *CEO_Ownerhsip_Squared.* Loan Terms Control includes changes in *Ln(Loan_Amount)*, *Ln(Maturity)*, *Performance_Pricing*, *Secured_Loan. Firm and Macroeconomic Controls* includes changes in *Ln(Total_Assets)*, *Leverage*, *Return_on_Assets*, *Operating_Cash_Flow_Volatility*, *Asset_Tangibility*, *Z_Score*, *Tobin's Q*, *Credit_Spread*, and *Term_Spread.* All variables are defined in Appendix A. More details including the results for control variables are available in the online appendix.

	(1) Δ*Ln(Loan_ Spread)*	(2) Δ*Ln(Maturity)*	(3) Δ*Number_of _Total_ Covenants*	(4) Δ*Number_of _General_ Covenants*	(5) Δ*Number_of _Financial_ Covenants*
Δ*Percent_Ranked_High* (β_1)	-0.256***	0.090	-0.279	-0.127	-0.165
	(-3.10)	(1.09)	(-0.74)	(-0.44)	(-1.03)
Δ*Percent_Ranked_Low* (β_2)	0.046	-0.008	0.879*	0.666**	0.220
	(0.51)	(-0.09)	(1.89)	(1.98)	(1.23)
Corporate Gov. Controls	YES	YES	YES	YES	YES
Loan Terms Controls	YES	YES	YES	YES	YES
Firm and Macroeconomic Controls	YES	YES	YES	YES	YES
Industry/Year/ Loan Purpose/Loan Type	YES	YES	YES	YES	YES
No. of observations	1201	1305	1296	1296	1296
Adjusted R^2	0.457	0.343	0.263	0.207	0.274
Test of $\beta1=\beta2$*: F*	5.68***	0.67	3.99**	3.64*	2.79*