

Does the Purpose of a Loan Matter? Evidence from Bank Loan Contracting

Leann G. Rutherford
Kennesaw State University
Department of Economics, Finance, and Quantitative Analysis

Sugato Chakravarty
Purdue University
Department of Consumer Sciences

Current Version: 1/22/2016

Does the Purpose of a Loan Matter? Evidence from Bank Loan Contracting

Abstract

The objective of this study is to examine the relationship between loan's designated purpose and loan contract agreement composition, as well as to determine the differential impact of corporate governance on the cost of debt for loans of different purposes. Based on our results, we find that both price and non-price loan terms vary significantly by loan purpose. Further, we determine that inclusion of covenants significantly reduces the spread yield, although not uniformly across loans of different purposes. In addition, our results suggest that quality of corporate governance for operations loans borrowers is significantly more influential at reducing both price and non-price terms of loan contracting than for borrowers of restructure loans. Our findings expand extant literature on debt contracting, as well as provide insight to corporate executives on ways to reduce the cost of debt.

Key words: loan purpose, debt contracting, spread yield, commitment fees, loan covenants, corporate governance

JEL Classifications: M41; G21; G34; D22; L25

Does the Purpose of a Loan Matter? Evidence from Bank Loan Contracting

1. Introduction

Private debt financing comprises a large portion of corporate capital makeup.¹ As a result of the heavy corporate reliance on private debt capital, a great deal of research has been devoted to studying how bank loan contracts are determined, including how factors such as borrowers' corporate governance characteristics affect the cost of debt.² However, much of the extant literature on bank loan contracting applies its findings indiscriminately to loans of all purposes without regard to idiosyncrasies in loan structure and design resulting from different designated uses of loan proceeds.³ To help fill the void, we examine the relationship between loan's designated purpose and loan contract agreement composition, as well as determine the differential impact of corporate governance on the cost of debt for loans of different purposes.

Loan contracts are comprised of both price (i.e., spread, fees) and non-price (i.e., covenants) terms, where each component is designed to serve specific function within the loan agreement.⁴ Several studies suggest that loans with particular designated purposes, such as recapitalizations, buyouts, and spinoffs (collectively referred to as restructure loans), have significantly higher spreads than operational loans, such as general corporate expenditures

¹For example, in 2006, U.S. domiciled corporations raised more than \$2,619 billion of new external capital, of which 65% consisted of private bank loans. The data supporting these statistics come from Federal Reserve Bank (www.federalreserve.gov/econresdata/releases/corpsecure/) and the Loan Pricing Corporation.

²See, for example, Asquith, Beatty, and Weber (2005); Bharath, Dahiya, Saunders, and Srinivasan (2011); Demiroglu and James (2010); Dennis, Nandy, and Sharpe (2000); Gorton and Kahn (2000); Kim, Song, and Zhang (2011); Qian and Strahan (2007).

³For example, although studies such as Demiroglu and James (2010), Dichev and Skinner (2002), and Graham, Li, and Qiu (2008), significantly extend the general understanding on the various components of loan contracting, they do not examine whether contract terms are determined differently for loans extended for projects such as LBO or takeover (which undergo significant changes in capital structure) than projects for corporate purposes or working capital.

⁴Specifically, the role of price terms in loan agreement is to compensate lenders for undertaking the risk of loan default (e.g., Bhojraj & Sengupta, 2003); the role of non-price terms is to serve a monitoring function designed to curb borrowers' tendency to engage in risky investment projects and risk-shifting activities (e.g., Chava & Roberts, 2008; Nini, Smith, & Sufi, 2009; Rajan & Winton, 1995).

(Angbazo, Mei, & Saunders, 1998; Hubbard, Kuttner, & Palia, 2002; Saunders & Steffen, 2011). Yet, there exists limited knowledge regarding the relationship between loan proceeds use and the composition of the non-price components of loan contracts. For example, it is unclear whether certain covenants are more prone to appear in loans designated for one specific purpose relative to another. In addition, although extant research suggests that some covenants have a reducing effect on the loan's yield spread⁵, thus far it is unknown if that relationship holds for bank loans of all purposes or if they are differentiated along specific purposes. Therefore, to draw accurate inferences on whether covenants have the same price-reducing effect on loans extended for different purposes, both price and non-price aspects of loan agreements need to be examined.

In a different but related stream of research, the relationship between corporate governance mechanisms and the cost of debt is well established. Extant literature argues that firms with large, independent, experienced, and diverse boards of directors, as well as low institutional ownership and strong anti-takeover governance provisions are able to borrow capital more cheaply.⁶ While many research studies that examine the impact of firms' corporate governance structure on price and non-price aspects of cost of debt include fixed effects to control for loan purpose, they generally imply the relationship affects loans of all purposes uniformly.⁷ However, given that loans formed for different uses are likely to present different monitoring concerns, as well as challenges, to lenders, banks may evaluate what constitutes quality corporate governance components differently for each type of loan purpose.⁸

⁵ According to Reisel (2014) and Wei (2005), covenants restricting issuance of additional capital, as well as curbing investment activities, significantly reduce bond spreads.

⁶ See, for example, Anderson, Mansi, and Reeb (2004), Bradley and Chen (2011), Chen (2012), Cremers, Nair, and Wei (2007), Fields, Fraser, and Subrahmanyam (2012), Francis, Hasan, Koetter, and Wu (2012), and Klock, Mansi, and Maxwell (2005).

⁷ See, for example, Chava, Livdan, and Purnanandam (2009); Ferreira and Matos (2012); Francis et al. (2012); Graham et al. (2008); Wittenberg-Moerman, 2008.

⁸ For example, lenders extending credit for LBO purposes may place more value on advisory and expertise presence within the internal corporate governance structure that will help guide the firm as it undergoes significant changes in

Given the existing gaps in the literature discussed above, the purpose of this study is to address the following research questions: (1) How does the composition of price and non-price loan contracting terms change for loans of different proceed designations? (2) How do loan purpose designations affect bank lenders' preferences in borrowers' corporate governance characteristics when determining spread yield, upfront fees, and covenant restrictions in new loan contracts?

Using a sample of 4,333 commercial loans from the DealScan database for the period between 1998 and 2006, we test the effect of loans' designated purpose on loan contracting terms, and whether lenders use different standards to assess the quality of borrowers' corporate governance for each type of loan purpose. Although several previous studies attribute the significant difference in loan contracting terms to credit risk differential,⁹ several other studies argue that the variance in debt price is not always strictly risk-driven.¹⁰ Therefore, to reduce the effect of credit risk in our analyses, we control for loan and firm-related risk factors. As a result, we conclude that our findings reflect the idiosyncrasies in contract structure based on different loan purposes, not just simple variations in credit risk.

We find that loans designated to finance asset acquisition lines, debt repayment, LBO, spinoff, and takeover purposes incur significantly higher spread yields than loans designated for commercial paper (CP) backup and working capital purposes. We observe that the differential in

its capital structure than on close monitoring of managerial expenditures (e.g., Cumming, Siegel, & Wright, 2007). With that said, loans made for general corporate purposes may benefit better from more protection in a form of board independence from managerial misappropriation of funds and/or asset substitution, but have little need for directors with extensive recapitalization experience (e.g., Armstrong, Guay, & Weber, 2010; Richardson, 2006).

⁹For example, Cumming et al. (2007) and Denis and Denis (1995) suggest that borrowers of restructure loans have a higher probability of default on their debt obligations than borrowers of non-restructure loans.

¹⁰ Angbazo et al. (1998), James (1987), and Lummer and McConnell (1989), state that the purpose of the loan has useful information content beyond the signals about credit-worthiness that are conveyed in loan origination announcements. Specifically, Megginson, Poulsen, and Sinkey (1995) determine that lenders are also able to charge higher rates for providing immediacy to finance loans such as asset acquisition, buyouts, and takeovers.

spread between restructure¹¹ purpose loans and operations¹² purpose loans is much higher than previously suggested in the literature, even in studies that also report higher spread for loans extended for purposes such as recapitalization, acquisition, LBO, and takeover, than loans made for other more general purposes (e.g., Gopalan, Nanda, & Yerramilli, 2011; Hubbard et al., 2002). Specifically, our results indicate that by failing to account for loan purpose, extant research may be understating the spread yield by as much as 122% (157 bps) for loans with spinoff designations and overstating the spread by as much as 26% (34 bps) for loans with CP backup purposes.

Consistent with Berg, Saunders, & Steffen (2013) and Graham et al. (2008), we find that upfront commitment fees vary by as much as 30%. However, we observe that although the reduction in upfront commitment fees is significant for borrowers of operations loans, loans made for restructure purposes do not exhibit a significant relationship with loan fees. These findings concur with extant research suggesting that operations loan borrowers are often able to negotiate larger upfront fee discounts than borrowers of loans designated for restructure purposes as a result of more extensive prior relationships with the lender (Bharath et al., 2011; Ivashina, 2009; Yasuda, 2005).

As implied by Gopalan et al. (2011), we find that overall, loan covenants are more prevalent among restructure purpose loans. For example, an average restructure purpose loan contains an additional covenant requirement, as compared to operations purpose loans. In addition, consistent with the notion that higher levels of information asymmetry exist between

¹¹Restructure projects are comprised of asset acquisition line, debt repayment, LBO, spinoff, and takeover (Ivashina & Scharfstein, 2010).

¹²Operations projects are comprised of commercial paper backup, general corporate purposes, and working capital (Ivashina & Scharfstein, 2010).

borrowers and lenders of loans for restructure projects,¹³ which require more monitoring, we find that propensity of covenant inclusion is much more sensitive to restructure loans than operations loans. This is especially true for collateral requirement and capital raising restrictions, as supported by Nini et al. (2009).

Both theoretical and empirical research suggests that debt covenants have an inverse relationship with spread yield.¹⁴ Accordingly, we observe that while a reduction in the loan spread is similar for both restructure and operations purpose loans in the case of security requirement and dividend issuance restrictions, it differs substantially for financial ratios and the capital-raising sweep covenants. For instance, we find that including more than two financial ratio covenants in loan agreements does not significantly affect the spread in restructure loans, but reduces spread yield by 12% in operation purpose loans. On the contrary, inclusion of the asset sales sweep restriction reduces spread yield by 25% in restructure purpose loans, as compared to only a 13% reduction effect on operations purpose loan spread. Therefore, our results suggest that the impact of covenants on spread yield differs by loan purpose.

Finally, our results indicate that the corporate governance characteristics of restructure loan borrowers tend to have less influence on a loan's contracting terms than those of operations loan borrowers. Most notably, we observe that while board independence, expert directors, female directors, and directors' voting power have a significant impact on debt costs for operations loans, these corporate governance attributes do not significantly affect loans for

¹³ For example, according to Cumming et al. (2007), LBO loans presents lenders with a number of agency problems that are addressed through higher levels of direct and indirect monitoring of the borrowing firm. In addition, Peyer and Shivdasani (2001) suggest that following recapitalization, firm executives are excessively focused on short-term cash generation, and thus more likely to engage in overly risky investments.

¹⁴Specifically, Bradley and Roberts (2015), Jensen and Meckling (1976), and Myers (1977) develop the Agency Theory of Covenants, which explains the underlying reasons for the presence of covenants in debt agreements. Reisel (2014) and Wei (2005) find that covenants restricting the issuance of higher priority claims and investment activities have a lowering effect on bond yields.

restructure purposes. Thus, we conclude that consistent with extant literature, lenders extending loans for restructure purposes do not heavily rely on firms' existing corporate governance for monitoring needs mainly because they are aware that the high probability of technical default on the loan will allow them to exert their own influence on the firm's governance mechanisms.¹⁵ Creditors' reliance on borrowers' existing corporate governance structure for operations purpose loans is also supported by extensive literature stating that quality board of directors and low shareholder control have a reducing effect on firm's cost of debt.¹⁶

The remainder of this paper is organized as follows. Section 2 will discuss background literature and state testable hypotheses. Section 3 will describe the sample, explain variable measures, and present summary statistics. Section 4 will provide results for the multivariate analyses. Section 5 will offer robustness checks and data sensitivity tests. Section 6 will summarize and present our concluding remarks.

2. Background Literature

2.1 Loan purpose

The seminal agency theory helps explain that one of the main reasons firms seek debt capital over equity is to reduce conflict between firm's equity holders and its management (Harris & Raviv, 1991; Jensen & Meckling, 1976). However, the underlying reasons for why firms require the additional capital lie in specific needs of the borrowing firms. For example, a company in need of funds to finance day-to-day operations is likely to apply for a working

¹⁵Baird and Rasmussen (2006), Chava and Roberts (2008), and Roberts and Sufi (2009a), among others, assert that creditors gain significant power over borrowing firm's corporate governance when at least one loan covenant is violated. According to Roberts and Sufi (2009b), covenant violations are most prevalent among firms that are smaller and those with lower credit rating, as similar to our sample of loans designated for restructure purposes.

¹⁶ See, for example, Anderson et al. (2004), Ashbaugh-Skaife, Collins, and LaFond (2006), Bhojraj and Sengupta (2003), Fields et al., (2012).

capital loan, while a firm desiring to refinance existing debt may inquire about a debt repayment loan. Firms borrow additional capital to fund numerous different projects; however, the seven common primary loan designations are asset acquisition line, debt restructuring, leveraged-buyout (LBO), takeover, general corporate purpose, commercial paper (CP) backup, and working capital (e.g., Angbazo et al., 1998; Strahan, 1999). Further, although each loan purpose category is unique in how it is perceived by lenders, they are often classified as either “restructure” or “operations” loans. Specifically, restructure loans are those that increase a firm’s leverage, change ownership, or require other changes that are not essential to day-to-day operations, such as asset acquisition, debt repayment, LBO, spinoff, stock buyback, and takeover (Eckbo & Thorburn, 2008; Francois & Missonier-Piera, 2007; Gupta, Singh, & Zebedee, 2008; Ivashina & Scharfstein, 2010). Operations loans, also referred to as non-restructure, real-investment, or general purpose, are used to facilitate predictable investments in physical or working capital (Ivashina & Scharfstein, 2010; Hubbard et al., 2002). Operations loans typically include loans designated for finance projects such as general corporate purposes, commercial paper backup, and working capital.

Extant literature tends to regard loans within the restructure category as riskier by lenders than operations loans, since restructure loans indicate a substantial change in a borrower’s capital structure (e.g., Carey, Post, & Sharpe, 1998; Harjoto, Mullineaux, & Yi, 2006; Wittenberg-Moerman, 2008). For instance, Denis and Denis (1995) report that 31% of LBO firms in their sample encountered financial distress. However, according to Angbazo et al. (1998), James (1987), and Lummer and McConnell (1989), the purpose of the loan offers useful information beyond borrowers’ credit-worthiness. As an example, loan purpose conveys insight about borrowers’ need for immediacy, as in asset acquisition, buyout, and takeover loans (e.g.,

Meggison et al., 1995); investments in negative NPV, as in debt refinancing and recapitalization loans (Angbazo et al., 1998; Denis, 1990); and provision of liquidity, as in CP backup loans (Gatev & Strahan, 2006). Therefore, we expect to gain further understanding beyond the risk structure, discerning the idiosyncratic nature of loans made for various specific purposes.

2.2 Price components of loan contracting

According to the traditional banking theory, credit risk is one of the main determinants of loan pricing (e.g., Freixas and Rochet, 1997). For example, several prior studies cite risk as the reason that loans within the restructure purposes category have significantly higher spread yields than loans within the non-restructure purposes category (e.g., Gopalan et al., 2011; Harjoto et al., 2006; Hubbard et al., 2002; Saunders & Steffen, 2011). However, extant research does not examine the relationship between loan spread and loan purpose in detail, both as individual specific purposes and a group. Further, credit risk is not the sole factor influencing loan spread yields. Loan pricing is also strongly affected by firms' demands for immediacy (e.g, Meggison et al., 1995), securitization (e.g., Benmelech & Bergman, 2009; Booth & Booth, 2009; John, Lynch, & Puri, 2003), quality of corporate governance (e.g., Anderson et al., 2004; Cremers et al., 2007; Fields et al., 2012), as well as the number and tightness of restrictive covenants (Bradley & Roberts, 2015; Matvos, 2013; Murfin, 2012; Reisel, 2014). According to Shleifer and Vishny (1997) and Lehn and Poulsen (1989), buyout firms possess low corporate control, while Peyer and Shivdasani (2001) suggest that recapitalized firms tend to struggle with immediate cash flow. In addition, Cumming et al. (2007) suggest that LBO firms require costly intense monitoring. Given that firms seeking loans within the restructure classification are more likely to need immediate funding, possess lower quality corporate governance attributes, and

require more oversight, we expect that restructure loan contracts will have higher spread than operations loan contracts. Thus, we form our first testable hypothesis:

Hypothesis 1: Loans designated to fund restructure projects (i.e., asset acquisition line, debt repayment, LBO, spinoff, and takeover) will incur higher spread than loans designated to fund operations projects (i.e., general corporate purposes, CP backup, and working capital).

Berg et al. (2013) find that loan fees significantly contribute to the increase in loan price, by as much as 38%. Similar to loan spread yields, Graham et al. (2008) and Ivashina (2009), among others, find that transaction fees on commercial loans tend to increase with the complexity and riskiness of the loan. However, unlike loan spreads, loan fees do not directly compensate lenders for undertaking higher levels of credit risk. Instead, according to Angbazo et al. (1998), loan fees are used to complement loan spreads for syndication, commitment, and cancellation risks. Lower fees are also associated with larger loans, primarily because fees are measured as the percentage of loan amount and larger loans have the benefit of economies of scale (e.g., Berg et al., 2013). Further, Yasuda (2005) finds that relationship banking significantly reduces loan fees, primarily as a result of lower levels of information asymmetry. In addition, Bharath et al. (2011) suggest that borrowers of restructure purpose loans, such as LBOs, typically are less likely to have established relationships with their lenders than borrowers of operations loans, such as CP backup. Specifically, they find that over 88% of firms seeking CP backup loans have an established relationship with the leading lender, compared to only 47% of borrowers applying for LBO loans. Since restructure loans tend to be more complex to administer than operations loans, and restructure firms are less likely to have a prior relationship with the lender, we predict that restructure loans will bear higher fees than operations loans.

Hypothesis 2: Loans designated to fund restructure projects (i.e., asset acquisition line, debt repayment, LBO, spinoff, and takeover) will incur higher loan fees than loans designated to fund operations projects (i.e., general corporate purposes, CP backup, and working capital).

2.3 Loan covenants

To reduce credit risk, as well as mitigate the risk of asset misappropriation, lenders typically include non-price monitoring provisions in their loan agreements in the form of loan covenants that are designed to curb the firm's ability to engage in risky investment projects and risk-shifting activities. Covenants are a powerful component of loan contracting because violation of even one covenant results in a technical default of a loan, allowing lenders to impose additional interventions, not just regarding repayment or renegotiation of the loan, but even gaining corporate control.¹⁷ Firms that are perceived as riskier due to informational opacity generally have loan covenants that are more intense and restrictive (e.g., Bradley & Roberts, 2015; Demiroglu & James, 2010; Dichev & Skinner, 2002). According to Gupta et al. (2008) and Wittenberg-Moerman (2008), borrowers of restructure loans are more likely to suffer from information opacity due to the uncertainty in outcome of the substantial changes in a borrower's capital structure, than borrowers of operations loans. Further, Citron, Robbie, and Wright (1997) find that loans made to finance buyouts contain more covenants, while Gopalan et al. (2011) report that working capital loans have significantly less intense and restrictive covenants than takeover and repayment loans. Therefore, we predict that restructure loan contracting terms will contain more covenant restrictions.

¹⁷According to Baird and Rasmussen (2006, p. 1211), "when a business trips one of the wires in a large loan, the lender is able to exercise de facto control rights – such as replacing the CEO of a company – that shareholders of a public company simply do not have."

Hypothesis 3: Loans designated to fund restructure projects (i.e., asset acquisition line, debt repayment, LBO, spinoff, and takeover) will contain more covenants than loans designated to fund operations projects (i.e., general corporate purposes, CP backup, and working capital).

2.4 Loan spread vs. loan covenants

Some prior research finds that price and non-price components of loan contracting act as complements for one another (e.g, Strahan, 1999; Rajan & Winton, 1995). They claim that riskier borrowers pay higher price premiums and incur more and tighter non-price restrictions. However, such argument contradicts the Agency Theory of Covenants, which attempts to explain the underlying reason for the presence of covenants in debt contracts (e.g., Bradley & Roberts, 2015; Jensen & Mecklin, 1976; Myers, 1977; Smith & Warner, 1979). The theory suggests that in order to reduce the agency conflict (and the associated agency costs) between shareholders and bondholders, covenants are used to restrict the behavior of managers and thus, better align their interests to those of bondholders. Therefore, the theory implies that shareholders are able to benefit from the inclusion of bondholders' covenant restrictions.

More recent empirical research studies, such as Bradley and Roberts (2015) and Demiroglu and James (2010) find that loan contracting terms are determined simultaneously, where borrowers are often given the option to choose from predetermined loan packages featuring different levels of spread yields, fees, and intensity and restrictiveness of covenants. Assuming that the firm is provided with a choice, reason states that a rational borrower will only choose a loan contract with more intense and/or restrictive covenants if price terms of the loan are sufficiently reduced to the level where benefits from inclusion of covenants outweigh the associated costs. Further, the notion that loan covenants have a reducing effect on loan price is

in accord with findings in private loans by Matvos (2013) and in public debt by Reisel (2014) and Wei (2005). Specifically, using a novel statistical approach, they find that covenants restricting the issuance of higher priority claims and investment activities have an inverse relationship with bond yields, especially in the case of high growth firms and firms with low probability of default. Given that restructure loans tend to incur higher spread than operations loans, borrowers of restructure loans have stronger incentive to signal to lenders that they are creditworthy borrowers through acceptance of additional covenant restrictions in order to reduce the spread amount (e.g., Beatty, Ramash, & Weber, 2002; Gopalan et al., 2011; Saunders & Steffen, 2011). Thus, we expect that loans made for restructure purposes will exhibit more sensitivity in their relationship between loan spread and loan covenants than loans made for operations purposes.

Hypothesis 4: Loans designated to fund restructure projects (i.e., asset acquisition line, debt repayment, LBO, spinoff, and takeover) will be more sensitive in their relationship between loan spread and loan covenants than loans designated to fund operations projects (i.e., general corporate purposes, CP backup, and working capital).

2.5 Corporate governance

One of the main ingredients of strong corporate governance recognized by lenders is an effective board of directors, which is charged with the task to provide advice and oversee management's behavior within the firm (Ge, Kim, & Song, 2012). However, the directors are elected by the shareholders of the firm and, therefore, their mission is first and foremost to protect and maximize the shareholders' investments, above other shareholders such as the firms' creditors. Nevertheless, extensive empirical evidence supports that lenders are also able to

benefit from select board qualities. In particular, banks recognize the advantages of utilizing board monitoring in mitigating information risk *ex ante* and controlling agency risk *ex post* (e.g., Francis et al., 2012). Further, lenders reward firms with higher-quality boards of directors with more favorable loan contract terms. Specifically, extant research suggests that lenders are more willing to provide loans at a lower cost, as well as often with fewer and less intense covenants, to firms whose boards are large, diverse, more independent, have higher number of busy and experienced directors, and lower directorship ownership (e.g., Anderson et al., 2004; Ashbaugh-Skaife et al., 2006; Bhojraj & Sengupta, 2003; Fields et al., 2012; Francis et al., 2012). In addition, favorable loan terms are extended to firms with low shareholder control, such as low institutional ownership and fewer anti-takeover governance provisions (e.g. Cremers et al., 2007; Ge et al., 2012; Klock et al., 2005).

The existing body of literature offers findings concerning the relationship between corporate governance and the costs of loan contracting with the general assumption that they apply to loans of any designated purpose. However, given that loans formed for different uses are likely to present lenders with diverse and unique concerns and challenges, banks may evaluate the composition of quality corporate governance components differently for each type of loan purpose. For example, Kaplan and Stromberg (2008) argue that the monitoring role of boards in public companies is undermined following restructure projects, such as buyouts, debt restructure, and takeovers, where the firm is acquired by private equity groups. Since, private equity firm partners often have a long experience in restructuring companies, the critical operations decisions are typically made by private equity sponsors, rather than the board of directors. In addition, although Cumming et al. (2007) find that lenders of LBO loans rely on the borrower's corporate governance for monitoring, Gilson (1990) clarifies that following debt

restructure, lenders replace almost 55% of incumbent directors in order to gain more control over the firm. Further, Cornelli and Karakas (2008) show that during firm restructuring periods, expertise typically comes from external sources. Therefore, lenders extending credit for restructure projects are likely to prefer more direct involvement in monitoring the firm's decisions during the transition period rather than outsource to borrower's existing board of directors. Conversely, lenders of the less risky operations loans are likely to be more willing to delegate monitoring duties to effective boards of directors, and thus place a much higher value on effective corporate governance attributes, such as board independence and high levels of expertise to help protect themselves from managerial misappropriation of funds and asset substitution (e.g., Armstrong et al., 2010; Richardson, 2006). Therefore, based on the arguments presented above, we expect that borrowers' corporate governance characteristics will have a stronger influence on contracting terms of operations loans than restructure loans.

Hypothesis 5: Loan contracting terms of loans designated for restructure purposes (i.e., asset acquisition line, debt repayment, LBO, spinoff, and takeover) will exhibit less sensitivity toward borrowing firm's corporate governance characteristics than loan contracting terms of loans designated for operations purposes (i.e., general corporate purposes, CP backup, and working capital).

3. Data description and variables

3.1. Data sources and sample selection criteria

For our sample, we obtain the terms of bank loan agreements from DealScan, a database created and marketed by Loan Pricing Corporation (LPC). The database contains detailed loan information for U.S. and foreign commercial loans made to corporations and government entities

during the period between January 1998 and December 2006. According to LPC, approximately half of the loan data are from SEC filings (13Ds, 14Ds, 13Es, 10Ks, 10Qs, 8Ks, and registration statements). The other half are obtained from contacts within the credit history and from borrowers, lenders, and the credit industry at large. Non-SEC filing sources of data have become relatively important in the later years of DealScan.

For the purpose of the current study, we focus on dollar-denominated bank loans of non-financial U.S. firms that have financial information in Compustat for the fiscal year preceding the loan agreement, as well as the board of directors' characteristics data in the RiskMetrics database. As suggested by Demiroglu and James (2010), we exclude short-term loans because, for such types of loans, the loan renewal or rollover process serves as a substitute for covenants in controlling moral hazard. The resulting overall loan sample is comprised of 4,333 loans representing 2,756 firm-years for 923 unique borrowers.

We recognize that as with other research studying the impact of corporate governance composition, there may be some concern regarding potential simultaneity and/or endogeneity issues.¹⁸ We attempt to minimize these concerns through careful construction of our sample.¹⁹ Specifically, we lag our measurement of corporate governance variables by one year before we assess the association between governance variables and credit terms. As a result, our corporate governance measures are from the period between January 1997 and December 2005, while loan contracting details are from January 1998 to December 2006. A similar lagging technique is applied by Dittmar and Mahrt-Smith (2007) and Fields et al. (2012). Since firms' governance typically is slow to change, the potential for loan costs to affect these governance characteristics

¹⁸ Hermalin and Weisbach (2003, p.8) observe that empirical studies of corporate governance are complicated by the fact that "almost all variables of interest are endogenous."

¹⁹ We will conduct additional procedures designed to mitigate and correct potential endogeneity issues in Section 5 of this study.

is small; however, when firms are experiencing financial difficulties, changes within governance structure are implemented quicker (i.e., Gilson, 1990).

3.2. *Measures of loan purpose*

We determine the loan purpose for each facility based on the Specific Purpose category available within DealScan. Of the 28 purposes available, we narrow down to eight specific purposes with the highest frequency. Consequently, our study examines the following loan purposes: acquisition line, CP backup, corporate purposes, debt repayment, LBO, spinoff, takeover, and working capital. In addition, following the precedence set in several other studies, we further categorize these loan purposes into restructure and operations loans (i.e., Gupta, et al., 2008; Hubbard et al., 2002; Ivashina & Schafstein, 2010). Specifically, restructure loans are composed of acquisition line, debt repayment, LBO, spinoff, and takeover; while operations loans are comprised of CP backup, corporate purposes, and working capital. We code restructure loans as 1 and operations loans as 0.

3.3. *Measures of bank loan characteristics*

In accordance with previous research on loan contracting, we examine loan terms as both price and non-price components.²⁰ Price components consist of *spread* and *commitment fees*. *Spread* is the interest rate that the borrower pays on its loan. It is measured using the All-in-Spread-Drawn category within DealScan that represents the borrowing cost per each dollar of the loan drawn. *Spread* is calculated as a basis point markup over the 6-month LIBOR, plus any recurring fees associated with the lending facility. *Commitment fees* are also referred to as

²⁰ See, for example, Bradley and Roberts (2015); Bharath et al. (2011); Chava et al. (2009); Demiroglu and James (2010); Fields et al. (2012); Francis et al. (2012); Ivashina (2009).

upfront transaction fees that compensate the lead lender for underwriting, dispensing, and monitoring costs related to the undrawn funds of the loan. This variable is determined using the Commitment Fees category within DealScan, where it is reported in basis points.²¹ For the purpose of utilizing *spread* and *commitment fees* in our multivariate analyses, both variables are transposed with natural log.

Non-price components of loan contracting are measured using the loan covenant intensity index, adapted from Bradley and Roberts (2015). The loan covenant intensity index, hereafter referred to as the *covenant index*, is an aggregate measure of covenant structure, comprised of the six most commonly used covenant indicators within commercial loans that are available in DealScan.²² The impact of each of the covenants within the index is the same by assigning one point to each covenant. The specific covenant restrictions included in the index are: secured debt, dividend restriction, more than two financial ratios, asset sweep, debt sweep, and equity sweep. The covenant index measure is criticized for its lack of assessment of covenant tightness and strictness, especially with recent developments of alternative measures, such as the contract strictness measure by Murfin (2012) that captures the ex ante probability of a forced renegotiation between lender and borrower. However, the Murfin covenant strictness measure uses only financial ratio covenants. Since the covenant intensity index assesses the effects of both financial and non-financial aspects of loan contracting, it is an appropriate measure for addressing the needs of this study. Further, we retest our loan covenant analyses using the

²¹ According to Berg et al. (2013), there are over 10 different types of loan fees that can appear in bank loan contracts. However, many of these fees are included in the standard all-in-spread-drawn measure of loan price. Further, the Dealscan database available to us contains specific loan fee categories only for annual fees (included in all-in-spread-drawn) and commitment fees.

²² Bradley and Roberts' (2015) decision on which covenants to include in the index largely depended on covenant categories that have been identified in the literature as the most prevalent in commercial loans (e.g., Billet, King, & Mauer, 2007; Paglia & Mullineaux, 2006; and Smith & Warner, 1979).

Murfin approach as the dependent variable instead of the covenant index in the robustness section, and determine that the results are not significantly different.

Other bank loan characteristics included in our study are *loan size*, *loan maturity*, *syndicated*, *number of lenders*, and *investment grade*. *Loan size* is the tranche amount corresponding to individual loan purpose, scaled back by the total assets of the firm. *Loan maturity* of the loan is reported in natural log months. *Syndicated* represents the percentage of loans financed by syndicates of lenders, versus sole lenders or other arrangements. *Number of lenders* is the natural log of the number of lenders that have a direct stake in any particular loan. *Investment grade* is a dummy-coded variable that takes a value of 1 if the firm received credit rating of Baa or higher, and 0 if the firm was rated below Baa.

3.4. Measures of corporate governance characteristics

In accord with extant related literature, we examine the efficacy of a firm's corporate governance through multiple dimensions. Prior research studying which aspects of corporate governance affect firms' terms of loan contracting suggests that we explore both the board of directors and shareholder control avenues.²³ Specifically, the board of directors' characteristics that receive a great deal of research attention are *board size*, *independence*, *busyness*, and board presence of *experts* and *females*. Other board characteristics that we also include are directors' average *tenure* with the firm, number of directors with *international* background, and directors of *ethnic minority*. The shareholder control is examined through *board vote power* and the anti-takeover governance provisions index, *G-index*. All corporate governance variables come from the RiskMetrics database.

²³ See, for example, Asquith et al. (2005); Bharath et al. (2011); Demiroglu and James (2010); Dennis et al. (2000); Gorton and Kahn (2000); Kim et al. (2011); Qian and Strahan (2007).

We measure *board size* as the natural log of the total number of directors serving on the board. To determine *independence*, we start off by reviewing directors' affiliations with a given firm and dividing them into two categories: insider versus independent. Directors who are coded as "employees" or "linked" by RiskMetrics are classified as insiders, while those who are coded as "independent" by RiskMetrics are also classified as independent by us. We calculate *independence* as the number of independent directors divided by the total number of directors on board. We define busy directors as those who serve on the board of at least three major for-profit firms.²⁴ *Busyness* is measured as the ratio of busy directors to total number of directors on board. To study the impact of directors' level of expertise on loan terms, we utilize directors' employment category available in RiskMetrics. We classify directors employed in accounting, investor/financial services, academics, attorney/counsel, consultant, and medical sectors as experts with potentially valuable unique knowledge that they can use to advise the firm.²⁵ To measure *experts*, we apply the natural log to the total number of experts serving on the board of directors. Board *tenure* is calculated as the sum of the number of years that the current directors served on the board, divided by the number of directors. To study the impact of board of directors' diversity on loan contracting, we examine the role of female, internationality, and ethnic minority. *Females* is the proportion of female directors to board size. *International* is based on directors' country of employment available in RiskMetrics. For directors for whom the information is reported, if the country of employment is U.S., then we code that director as 0,

²⁴ This definition is consistent with the U.S. Council of Institutional Investors' Corporate Governance Policies (2009). Unlike many existing studies on busy boards, this definition does not require director independence. However, we wanted to capture the overall effect of director busyness, as well as avoid the potential multicollinearity concerns between independent directors and the traditional busy independent directors.

²⁵ We also tested our models with expertise limited to the financial sector (accounting and investor/financial services), which yielded results not significantly different than using the expanded expertise definition. In addition, given the different designations of loans in our sample, the study may benefit from inclusion of broader sources of advice.

otherwise we code international as 1. We add the number of international directors for each firm and divide that value by the total number of directors serving on the board. RiskMetrics also provides information about directors' ethnicity. If the ethnicity category reports racial background as African-American, Asian, or Hispanic, then *ethnic minority* variable is classified as 1, if ethnicity category indicates Caucasian background, then *ethnic minority* is classified as 0. Similar to the *international* variable, we combine the number of directors of ethnic minority for each firm and divide it by board size. *Board vote power* is defined as the percentage of outstanding stock shares held by all directors serving on the board. *G-Index* is a governance index developed and provided in RiskMetrics by Gompers, Ishii, and Metrick (2003), which is composed of 24 anti-takeover governance provisions.

3.5. Measures of financial characteristics

To study firms' financial qualities, we obtain all accounting variables from Compustat for the fiscal year-end for each firm prior to the lending agreement. We measure firm size using the *market capitalization* variable, which is calculated by multiplying the firm's number of outstanding common stock shares as reported in the quarterly SEC filing reports by the price of that stock on the last day of the respective quarter. To study the impact of existing debt on terms of new loan contracting, we calculate *leverage* as the ratio of total debt held by the firm to total assets. *Sales turnover* is measured as firm's total annual sales revenue divided by total assets. *ROA* is determined as a ratio of EBITDA over total assets. *Market to book* is the ratio of book assets minus book equity plus market equity over book assets. *Current ratio* is firm's current assets divided by current liabilities.

3.6. Descriptive statistics

Table 1 presents a general overview of descriptive statistics on loan, corporate governance, and financial characteristics for the main loan purposes analyzed in this study. We observe that almost 97% of loans in our sample have a specific designated purpose, distributed among the eight main loan purposes that we study. Consistent with the existing literature, the price components of a loan contract vary greatly by expected use loans' proceeds.²⁶ Specifically, the spread yield ranges from 50.30 bps for CP backup loans to 354 bps for LBO loans, even though CP backup commitment fees at 32 bps are on par with acquisition line and takeover loans. The covenant index values also vary significantly by loan purpose, ranging from 1.4 covenants for CP backup loans to 4.39 covenants for spinoff loans, with the overall average of 2.73 being comparable to extant covenant index research (e.g., Bradley & Roberts, 2015; Demiroglu & James, 2010; Fields et al., 2012).

The largest mean loan amount of more than \$1.1 billion is made for spinoff purposes, while the smallest mean amount of about \$210 million is made for LBO purposes. Expectantly, given the revolving nature of CP backup loans, these loans have the shortest maturity duration of about 22 months, whereas the average tenor for LBO loans is almost 70 months. Further, over 90% of CP backup loans in our sample are made to investment-grade firms, while none of the LBO loans are investment-grade.

Consistent with the literature on the relation between firm size and board of directors' size, LBO loans in our sample are made to small firms with fewer than average number of directors on their boards.²⁷ In addition, we observe that firms of asset acquisition, debt

²⁶ See, for example, Angbazo et al. (1998); Carey et al. (1998); Gopalan et al. (2011); Harjoto et al. (2006); Hubbard et al. (2002); Saunders and Steffen (2011).

²⁷ For example, Boone, Field, Karpoff, and Raheja (2007) and Coles, Daniel, and Naveen (2008) find that for larger and more complex firms, it is more optimal to have larger boards with more outside directors, while for smaller and

repayment, and takeover loans, have lower proportion of independent directors on their boards than firms of CP backup, corporate purposes, and working capital loans. Similarly, with an exception of spinoff loan firms, boards of restructure firms tend to be less busy, which is consistent with extant studies (e.g., Fich & Shivdasani, 2007; Gilson, 1990; Yermack, 2004). The G-Index indicates a relatively low shareholder control of around 10 anti-takeover provisions among spinoff and CP backup firms, but a higher shareholder control among debt repayment firms with about 8.8 provisions.

In Table 2, we provide *t*-test statistics on the differences between restructure and operations loans. As supported in the literature (e.g., Gopalan, et al., 2011; Harjoto, et al., 2006; Hubbard, et al., 2002; Saunders & Steffen, 2011) and suggested in Table 1, the loan spread amount for restructure loans is almost 62 bps higher than for operations loans, which is statistically significant. Similar observations are made for commitment fees, both in bps and the percentage of loans with fees. The covenant index indicates that compared to operations loans, restructure loans contain about one additional covenant restriction than operations loans. Specifically, of the six covenant restrictions included in the index, only the dividend issuance covenant reports higher prevalence among operations loans, while the other five show significantly higher percentages among restructure loans. No significant differences are observed in terms of loan size and the loan amount to assets ratio, as well as the number of lenders involved in extending the loan. However, restructure loans have significantly longer maturity, while a much higher proportion of operations loans is investment-grade.

simpler firms, it is more optimal to have smaller boards with fewer outside directors. In addition, Cornelli and Karakas (2008) find that firms following LBO restructure drastically reduce their board size to increase efficiency of the board of directors.

Compared to operations loans firms, firms requesting restructure loans have significantly fewer members on the board of directors, as well as boards that are less independent and less busy. Further boards of restructure loan firms have fewer financial and non-financial experts, international directors, and directors of ethnic minority. We do not find significant differences in director tenure. However, directors in operations loan firms are on average slightly older, while directors in restructure loan firms hold higher stock ownership. According to the G-Index, restructure loan firms have slightly lower number of anti-takeover provisions in place.

Based on the total assets and market value of equity indicators, operations loan firms are significantly larger. Further, even though based on the sales to total assets ratio, operations loan firms have a slightly better sales turnover, restructure loan firms appear to post significantly more favorable ROA and current ratios. However, firms of restructure loans have higher debt ratios, both long-term and leverage. The market to book ratio is not significantly different between the two groups of loans.

4. Results

To test the effects of loan purpose and corporate governance attributes on debt contracting terms, we utilize ordinary least square (OLS) regression for both linear dependent variables, such as spread yield and loan fees, and discrete outcome variables, such as covenant index. We recognize that Poisson maximum likelihood estimation is a more appropriate tool for analyzing non-linear dependent variables. However, after comparing outcome results using both OLS and Poisson estimations, we determine that the produced outputs are not significantly different. Since OLS allows for more extensive interpretation, we present OLS results. In our analyses, we use robust standard errors adjusted for clustering at the firm level, since loans made

to the same firm are more likely correlated. Further, we include year and industry dummy variables to control for possible time and industry effects.

4.1. Loan purpose and debt contracting terms

Table 3 presents multivariate statistics results relating price and non-price debt contracting terms to loan purpose, as well as the corporate governance and firm financials controls. In column 1, we examine the OLS output of loan purpose categories on loan spread. We find that acquisition line, debt repayment, LBO, spinoff, and takeover loan purposes have an increasing effect on spread, while CP backup and working capital have a decreasing effect on the dependent variable. Specifically, loans with spinoff purpose pay around 122% higher spread than loans with a different designated purpose; compared to the mean loan spread value for the comparison category “other” (129.26 bps), loans made for spinoff purposes pay over 150 bps more. On the contrary, spread for loans with CP backup purpose is about 26% lower than for non-CP backup purposes, which is around 34 bps less than the average spread value. Incidentally, the average spread for “other” category of loan designations is similar in value of the overall mean for all loan purposes, which is 121.69 bps. These results accord with prior research suggesting that lenders charge significantly higher interest rates for loans that demand immediacy, such as asset acquisition lines, buyouts, and takeovers (e.g., Megginson et al., 1995; Saunders & Schumacher, 2000), as well as for loans that are perceived by lenders as negative NPV investments, such as debt repayment and recapitalization (e.g., Angbazo et al., 1998; Denis, 1990). Further, extant literature supports lower spread yields for loans with shorter maturity duration and higher credit rating, such as CP backup and working capital loans (e.g., Gottesman & Roberts, 2015; Graham et al., 2008).

Similar to loan spread, commitment fees in column 2 are also affected by loan purpose distinction. However, we observe statistical and economical significance only among operations loans – CP backup, corporate purposes, and working capital. Our results indicate that borrowers of CP backup loans pay about 30% (8 bps) less in commitment fees. Our findings are consistent with extant research claiming that borrowers of loans such as CP backup pay lower commitment fees as a result of previously established relationship with the leading bank (e.g., Bharath et al, 2011; Yasuda, 2005).

Next, we consider the impact of individual loan purpose categories on non-price aspects of debt contracting terms. Column 3 of Table 3 reveals that coefficients for acquisition line, LBO, spinoff, and takeover loan purposes have a positive and statistically significant relationship with covenant index, while the coefficients for CP backup, corporate purposes, and working capital loan purposes are not significantly different from zero. Economically, we observe that loans with LBO and spinoff designations contain about two additional covenants, as compared to the average covenant index value of 2.73 out of the maximum value of six. These findings are in agreement with Citron et al. (1997), Demiroglu and James (2010), and Gopalan et al. (2011), who find that restructure loans, such as acquisition lines, buyouts, and takeovers contain more and tighter covenants.

In columns 4 through 6, we test the relationship between loan purpose and loan contracting terms, where loan purpose categories are dummy-coded as either restructure or operations. Comparable to our previous assessments, these results confirm that compared to loans made for operations purposes, contract agreements of restructure loans are comprised of significantly higher spread yields and commitment fees, as well as higher number of covenant restrictions. Therefore, given that relationships of individual loan purposes with loan contracting

terms are appropriately represented within either the restructure or operations purpose categories, allows us to implement the two general purpose categories in subsequent analyses. Based on the results presented in Table 3, columns 1 through 6, we conclude that loan proceed designation indeed influences the composition of price and non-price loan contracting terms as predicted in Hypotheses 1 through 3. Further, statistics for corporate governance characteristics, loan features, and firm financial standings controls included in this table are consistent with existing loan contracting research (e.g., Anderson et al., 2004; Bradley & Chen, 2011; Chen, 2012; Fields et al., 2012; Francis et al., 2012; Klock et al., 2005).

4.2. Loan purpose and covenant restrictions

To gain a better understanding of the relationship between loan designations and non-price terms of bank loan contracting, we conduct Logit maximum likelihood estimation for each component of the covenant intensity index in Table 4. Column 1 presents the effect loan purpose categories have on the security requirement of a loan. Consistent with the literature, we find acquisition line, LBO, and spinoff loans are more likely to have security requirement included in their loan contracts (e.g., Angbazo et al., 1998; John et al., 2003; Nini et al., 2009). For example, loans with LBO and spinoff designations are 25% and 37% more likely to have security requirement covenant included in their contracts than other loans, respectively.

Column 2 shows that loans of all purposes have positive and statistically significant coefficients, suggesting that when imposing dividend issuance restrictions, banks do not differentiate by expected loan use. This finding is consistent with results in Table 2, where we find that around 90% of both restructure and operations loans have dividend restrictions. Accordingly, Black and Scholes (1973), Black (1976 p. 10), and Smith and Warner (1979) warn

us that “there is no easier way for a company to escape the burden of a debt than to pay out all of its assets in the form of a dividend, and leave the creditors holding an empty shelf.” Therefore, it is logical that banks insist that most loans carry the dividend issuance covenant restriction to protect themselves from borrowers’ potential payout of assets to shareholders.

In column 3 of Table 4, the more than two financial ratios covenant restriction is positively related to all restructure loans (although only LBO is statistically significant) and negatively related to operations loans. In column 4, we group asset sale, debt issue, and equity issue sweep restrictions into one category.²⁸ The results reveal that acquisition line, LBO, spinoff, and takeover loans have positive and statistically significant effect on inclusion of sweep restriction covenants in loan contract. Of the operations loan purposes, coefficients of all categories are negative, although statistically non-significant. These results are in agreement with Campbell (2009), who states that asset acquisition loans tend to have very carefully crafted sweep covenants to ensure that they provide adequate lender protection without putting excessive hardship on the firm. Overall, our findings are supported by literature that loans extended to finance restructure purposes require higher levels of monitoring through covenant restrictions than loans made for operations purposes (e.g., Citron et al., 1997; Cumming et al., 2007).

4.3. Loan purpose and price benefits of covenant restrictions

Table 5 presents our results on price benefits that borrowing firms receive for including covenant restrictions in contract agreements for loans designated to finance restructure and

²⁸ We also perform analyses for each individual sweep category, with similar results. The practice of combining sweep categories into one is also seen in Fields et al. (2012). In addition, Bradley and Roberts (2015) find that most loans contain either all three sweeps covenants, or none at all.

operations purposes. We structure our model and calculate the dependent variable, *Covenant Price Benefit*, based on prior studies, such as Bradley and Roberts (2015) and Reisel (2014). Specifically, we seek to determine the additional benefit that firms receive from including each type of covenant in their loan agreement. We find that although the price benefit of some covenants is similar for both restructure and operations loans, other covenants affect restructure loans differently than operations loans. Specifically, consistent with Matvos (2013), we find that including the security requirement and dividend issuance restrictions reduces spread yields of both restructure and operations purpose loans by about 23% and 10%, respectively. However, the economical significance is greater for restructure loans because these loans, on average, have spreads that are about 58% (62 bps) higher than operations loans. Therefore, a 23% reduction in spread yield for restructure loans equates to about 39 bps, but only 25 bps for operations loans.

Price benefits for inclusion of financial ratios and sweep restrictions vary by loan purpose to a greater extent. The financial ratios restriction has a statistically significant price benefit of almost 12% in operations loans, but only a trivial and statistically non-significant reduction of spread in loans for restructure purposes. However, the asset sale, debt issuance, and equity issuance sweep restrictions are significantly higher and economically considerable for restructure purpose loans than operations purpose loans. For example, inclusion of the asset sale sweep restriction reduces spread yield of restructure loans by about 25% (41 bps), while the same covenant reduces spread yield of operations loans by only 13% (14 bps). Our findings are in general consent with other studies on loan covenant pricing (e.g., Bradley & Roberts, 2015; Matvos, 2013; Reisel, 2014; Wei, 2005). Overall, we observe that restructure loans receive greater price reducing benefits for including additional covenants in loan agreements than

operations loans. However, since the financial ratio restriction offers a greater benefit to operations loans than restructure loans, we conclude partial support for Hypothesis 4.

4.4. Loan purpose, corporate governance attribute, and debt contracting terms

In Table 6, we test if banks apply different guiding principles in determining what constitutes quality corporate governance based on the expected designated use of a loan. Consistent with the literature, we observe that *board size* has a significant negative effect on all contract terms for both restructure and operations samples, thus suggesting that lenders look for larger boards regardless of loan purpose (e.g., Anderson et al., 2004; Fields et al., 2012). Conversely, while board *independence* does not display significant influence on restructure loans, it produces a significant negative effect on loan spread and fees within operations loans. Economically, compared to operations loan firms with no independent directors, those with 50% of independent directors enjoy lower loan spreads and fees by about 9 and 3 bps, respectively. Our finding that board independence has an inverse relationship with loan price in operations loans accords with legislature and empirical research promoting board independence as an important attribute of board efficacy (e.g., Sarbanes and Oxley Act of 2002; Anderson et al., 2004; Rodriguez-Dominguez, Gallego-Alvarez, and Garcia-Sanchez, 2009). However, the non-significant effect of board independence on loan price of restructure loans also extends extant literature. For example, Gilson (1990) finds that following debt restructure, about 55% of board seats are replaced by lenders, thus implying that the pre-existing board structure of firms seeking restructure loans carries little influence over loan terms.

In accord with prior literature, we observe that the effect of board *busyness* does not substantially differ between restructure loans and operations loans, with an exception to having a

lowering effect on commitment fees within the restructure loans sample.²⁹ Although the relationship between board *busyness* and restructure loans fees is statistically significant, economically it translates to only about 0.05% decrease in fees per one-percentage-point increase, or about 2.3% lower commitment fee if the board is comprised of 50% busy directors.

Directors' *tenure* on board represents directorship experience. Similar to Fields et al., (2012), our results in Table 6 suggest that longer directorship *tenure* decreases price components of debt contracting. Further, our finding that higher levels of expertise on the board of directors lead to lower price components of debt contracting for operations loans complements prior research studying the benefits that expert directors bring to the firm.³⁰ However, board expertise does not appear to have a significant impact on the cost of debt for restructure loans. Nonetheless, Cornelli and Karakas (2008) explain that expertise during restructure processes typically comes from private equity firm partners, not the internal board of directors.

Board diversity is associated with higher firm values, improved information transparency, and better oversight of managerial reporting (e.g., Adams & Ferreira, 2009; Carter, Simkins, & Simpson, 2003; Gul, Srinidhi, & Ng, 2011; Srinidhi, Gul, & Tsui, 2011). Our results suggest that female and foreign directors play a more important role in operations purpose loans than in restructure loans. Levi, Li, and Zhang (2013) offer that the ambivalent effect of female directors on restructure loan terms may stem from women's reputation of being less aggressive decision makers. In addition, even though foreign directors improve firms' decision making in international affairs, they are also likely less familiar with domestic rules and regulations, thus

²⁹For example, Francis et al. (2012) find a significant negative relationship between multiple directorship and loan spread; Fields et al. (2012) report a negative, although insignificant, relationship between the percentage of directors with more than four other board appointments and price and non-price costs of debt; Bradley and Chen (2011) argue that firms that allow directors to pursue their own interests enjoy lower cost of debt.

³⁰ For example, Xie, Davidson, and DaDalt (2003) find that expertise on the board of directors leads to lower levels of earnings management, while Agrawal and Chadha (2005) and Beasley (1996) link directorship expertise to lower probability of financial statement fraud.

weakening board's monitoring effectiveness (e.g., Coval & Moskowitz, 2001; Masulis, Wang, & Xie, 2012).

Several recent studies find that high levels of shareholder control are undesirable to lenders because of the increases in credit risk and expropriation, and thus loan contracting terms become less attractive as shareholder control increases (e.g., Chava et al. (2009), Fields et al., 2012; Francis et al., 2012). Our results suggest that even though price terms of operations loans increase as *board vote power* increases, restructure loans are not significantly affected. However, Cremers et al. (2007) find that shareholder control is associated with higher (lower) bond yields if the firm is exposed (protected) from external control mechanisms. Lehn and Poulsen (1989), Peyer and Shivdasani (2001), and Shleifer and Vishny (1997) assert that firm restructure can be viewed as a takeover defense. Therefore, our finding of significant positive relationship between *board vote power* and cost of debt in operations loans is in agreement with extant research.

Overall, we determine that firms' corporate governance structure has a much larger impact on operations purpose loans than on restructure loans. Relying on prior literature, we attribute this phenomenon to weaker influence of restructure firms' boards of directors on decision making process during the course of corporate restructure, as well as lower levels of predictability of successful completion of restructure project.³¹ Therefore, based on our results presented in Table 6, we conclude that Hypothesis 5 is supported.

³¹ For example, Denis and Denis (1995) report that 31% of LBO firms in their sample encountered financial distress, as well as that proceeds from asset sales following recapitalization often fall short of expectations; Peyer and Shivdasani (2001) suggest that following recapitalization, firms more likely to engage in riskier investments to raise cash needed to service debt; Gilson (1990) and Harford (2003) find that following firm restructure, a large number of incumbent directors are replaced by lenders.

5. Robustness and sensitivity tests

Our analyses assume that the specifications and proxies we utilize adequately measure appropriate attributes. To ensure that our findings are not incidental, we perform additional procedures to test for robustness of our tests. Consistent with prior literature, we retest our analyses from Table 3 with alternative measures, mitigate potential endogeneity by utilizing exogenous instrumental variables approach, limit our sample to firms with no loans within the preceding two years, and test loans with a single loan purpose. We find that our results presented in Table 7 do not significantly change due to these tests, thus leading us to conclude that our results are robust and are not incidental.

In our analyses, we utilize the loan covenant intensity index as a proxy for covenant restrictiveness in loan contracts. However, as we stated previously in the discussion of variables section, one of the main limitations of the covenant intensity index is its failure to capture covenant tightness. An alternative approach developed by Murfin (2012) approximates the strictness of a loan contract through the ex ante probability of a forced renegotiation between lender and borrower. The contract strictness measure is based on four elements identified in the literature as important components of propensity for borrower's technical default due to violation of covenant restriction: the number of financial covenants, the initial covenant slack, scaling of contractual slack, and covariance between financial covenants. To calculate contract strictness for each loan deal, we compute multivariate cumulative distribution function for the slack associated with each of the financial ratio covenants during the first quarter of the loan, scaled by variance.³² The cdf follows normal distribution with mean 0 and variance Σ that is estimated as the covariance matrix of financial ratios in the loan. To ensure that our analyses are not missing

³² We are indebted to Justin Murfin for sharing a program used to calculate the loan covenant strictness measure.

important inferences gained from measures of covenant tightness, we retest loan covenant models from Table 3 using the Murfin contract strictness measure as the dependent variable in place of the Bradley and Roberts covenant intensity index measure. Based on the results presented in Table 7, columns 1 and 2, we observe that no significant differences exist between the use of the covenant intensity index in Table 3 and the covenant strictness measure in Table 7. Therefore, we conclude that for the purposes of the current study, the contract strictness measure does not provide additional insights or advantages over the covenant intensity index.

Hermalin and Weisbach (2003) argue that empirical studies that use board structure as predicting variables typically suffer from endogeneity problems. However, our analyses assume that corporate governance characteristics and debt contracting terms are exogenous. As discussed earlier, we minimize endogeneity concern by constructing our sample where the loan cost data for our borrowing firms relate to board and other characteristics from the previous year.³³ Next, consistent with much of the governance literature, we use an instrument for board quality in a two-stage least squares model.³⁴ The approach calls for the use of an instrument for each board characteristic variable. An effective instrumental variable must to be related to the suspected endogenous board structure variable, but unrelated to the error terms of the dependent variable (Wooldridge, 2012). However, identifying instruments that meet those criteria for each of the ten board quality characteristics is a virtually impossible task. Following a method used by Fields et al, (2012), we combine the six negative and statistically significant board quality characteristics from column 4 in Table 3 (*board size, independence, busyness, tenure, female present, and ethnic minority*) into a single board quality index by assigning point values to each

³³ Similar lagging techniques are employed by Dittmar and Mahrt-Smith (2007) and Fields et al. (2012).

³⁴ For example, Bennedsen, Kongsted, and Nielsen (2008); Fields et al. (2012); Gul and Leung (2004); Knyazeva, Knyazeva, and Masulis (2013).

of these variables. Specifically, a value of 1 is assigned to the variable within the index if it is above its cross-sectional median, and 0 otherwise. The resulting board quality index has a range from 0 to 6. Similar to Fields, et al., (2012) we use the distance between the corporate headquarters of the borrowing firms and the nearest medium or large airport hub as an instrument for board quality index.³⁵ Since the distance between headquarters and the nearest airport is a measure of the cost to a potential director in terms of time and effort required to travel to board meetings, it is expected to have an inverse relationship with borrowers' board quality index. We report the second stage of the two-stage least squares model in Table 7, columns 3 and 4.³⁶ Our results show that the board quality index coefficient has a negative and statistically significant effect on loan spread. Therefore, we conclude that our analyses in this study are not substantially affected by endogeneity.

To alleviate the risk of reverse causality in our models, we rerun our analysis by limiting the sample only to firms that had no loans within the last two years.³⁷ The intuition behind this approach is to try to eliminate loans that are part of an ongoing and regular borrowing program that could significantly influence the previous year's board quality. We find that most of the relations from Table 3 are preserved in Table 7, and none of the significant coefficients change signs. Therefore, we conclude that our analyses do not suffer from reverse causality.

The majority of loan deals reported in DealScan are composed of several tranches that can be made for different loan purposes. However, the debt contracting terms often apply to the entire deal, not individual tranches. Given our emphasis on the relation between loan purpose

³⁵ According to Alam, Chen, Ciccotello, and Ryan (2014) and Knyazeva et al. (2013), directors' proximity to the firm affects their effectiveness, and that distance between lenders and borrowers may be an important attribute in loan contracting costs.

³⁶ In the first stage of two-stage least squares model, the distance between borrower's headquarters and the nearest airport hub is negatively and statistically significant at below the 1% level.

³⁷ Similar methods are used by Cheng (2008) and Fields et al. (2012).

and debt contracting terms, a concern arises whether a combination of different loan purpose tranches significantly affects loan terms. To test the legitimacy of this concern, we reduce our sample to include only loans with one tranche, thus loans made to single purpose. We find that most of the relationships from Table 3 are retained in Table 7. Therefore, we conclude that our analyses in Tables 3 through 6 are not distorted by the compounding effect of multiple loan purposes per loan deal.

6. Conclusion

While a great deal of research examines composition and design of loan contracts, most of the existing literature on debt contracting applies its findings indiscriminately to loans of all purposes without addressing the idiosyncratic differences in credit risk and monitoring needs that loans of various specific purposes present. To address this limitation in the literature, our study investigates the relationship between designated purpose of bank loans and contracting terms, as well as tests the differential influence of borrowers' corporate governance on loan terms of different purposes.

We find that both price and non-price cost of debt terms are influenced by designated use of loan proceeds. Specifically, loans made to finance restructure projects (i.e., asset acquisition line, debt repayment, LBO, spinoff, and takeover purposes) are more costly than loans designated for operations projects (i.e., CP backup, general corporate, and working capital purposes). The difference in cost of debt is both statistically and economically significant. For example, as similar to Graham, et al. (2008), Gupta, et al., (2008), and Wittenberg-Moerman (2008), we observe that spread for restructure purpose projects is, on average, about 50% higher than spread for operations purpose projects, which translates into about 60 bps. In addition, an

average restructure purpose loan contains an additional covenant requirement, as compared to operations purpose loans. Further, consistent with Bradley and Roberts (2015) and Reisel (2014), we confirm that loan covenants have a reducing effect on loan spread. Thus, although spread yields for restructure purpose loans are significantly higher than those of operations loans, restructure loans gain greater benefits from inclusion of security requirement, dividend restriction, and sweep restriction covenants. However, inclusion of financial ratio restrictions offers greater price benefits to operations loan.

We also observe that lenders indeed use different standards to assess the quality of borrowers' corporate governance for restructure versus operations loan purposes. In accord with Gilson (1990) and Harford (2003), we find that borrowers' pre-existent corporate governance structure has more influence on loans' contracting terms for operations loans than for restructure loans. Specifically, while board independence, expert directors, female directors, global directors, and directors' voting power have a significant impact on price and /or non-price components of debt cost for operations loans, these corporate governance attributes do not have significant effects on loan agreement terms for restructure purposes loans.

The results of this study indicate that loans' primary designation of proceeds has a much bigger impact on loan contracting terms than previously suggested. Based on our calculations, by failing to account for loan purpose differential, extant literature may be misstating loan spread by as much as 182 bps. In addition, although many prior studies have shown a strong relation between quality of corporate governance and more favorable loan terms, we find that corporate governance efficacy does not play the same alleviating role for loans of all purposes. As with all research, we recognize this study has its limitations which we encourage future research to address. However, by taking a modest step in investigating the effects of loan purposes on debt

contracting, as well as its role in lenders' assessment of borrowers' corporate governance as a factor determining the cost of debt, we strive to enrich the body of knowledge on determinants of bank loan agreement composition.

References

- Adams, R. B., & Ferreira, D. (2009). Women in the boardroom and their impact on governance and performance. *Journal of Financial Economics*, 94(2), 291-309.
- Agrawal, A., & Chadha, S. (2005). Corporate governance and accounting scandals. *Journal of Law and Economics*, 48(2), 371-406.
- Alam, Z. S., Chen, M. A., Ciccotello, C. S., & Ryan, H. E. (2012). Does the location of directors matter? Information acquisition and board decisions. *Journal of Financial and Quantitative Analysis*, 49(1), 131-164.
- Anderson, R. C., Mansi, S. A., & Reeb, D. M. (2004). Board characteristics, accounting report integrity, and the cost of debt. *Journal of Accounting and Economics*, 37(3), 315-342.
- Angbazo, L. A., Mei, J., & Saunders, A. (1998). Credit spreads in the market for highly leveraged transaction loans. *Journal of Banking & Finance*, 22(10), 1249-1282.
- Armstrong, C. S., Guay, W. R., & Weber, J. P. (2010). The role of information and financial reporting in corporate governance and debt contracting. *Journal of Accounting and Economics*, 50(2), 179-234.
- Ashbaugh-Skaife, H., Collins, D. W., & LaFond, R. (2006). The effects of corporate governance on firms' credit ratings. *Journal of Accounting and Economics*, 42(1), 203-243.
- Asquith, P., Beatty, A., & Weber, J. (2005). Performance pricing in bank debt contracts. *Journal of Accounting and Economics*, 40(1), 101-128.
- Baird, D. G., & Rasmussen, R. K. (2006). Private debt and the missing lever of corporate governance. *University of Pennsylvania Law Review*, 1209-1251.
- Beasley, M. S. (1996). An empirical analysis of the relation between the board of director composition and financial statement fraud. *Accounting Review*, 443-465.
- Beatty, A., Ramesh, K., & Weber, J. (2002). The importance of accounting changes in debt contracts: The cost of flexibility in covenant calculations. *Journal of Accounting and Economics*, 33(2), 205-227.
- Benmelech, E., & Bergman, N. K. (2009). Collateral pricing. *Journal of Financial Economics*, 91(3), 339-360.
- Bennedsen, M., Kongsted, H. C., & Nielsen, K. M. (2008). The causal effect of board size in the performance of small and medium-sized firms. *Journal of Banking & Finance*, 32(6), 1098-1109.
- Berg, T., Saunders, A., & Steffen, S. (2013). The total costs of corporate borrowing in the loan market: Don't ignore the fees. *Unpublished working paper, New York University*.
- Bharath, S. T., Dahiya, S., Saunders, A., & Srinivasan, A. (2011). Lending relationships and loan contract terms. *Review of Financial Studies*, 24, 1141-1203.
- Bhojraj, S., & Sengupta, P. (2003). Effect of corporate governance on bond ratings and yields: The role of institutional investors and outside directors. *The Journal of Business*, 76(3), 455-475.
- Billett, M., King, T., Mauer, D., 2007. Growth opportunities and the choice of leverage, debt maturity, and covenants. *Journal of Finance* 62, 697-730.
- Black, F. (1976). The pricing of commodity contracts. *Journal of Financial Economics*, 3(1), 167-179.
- Black, F., & Scholes, M. (1973). The pricing of options and corporate liabilities. *The Journal of Political Economy*, 81(3), 637-654.

- Boone, A. L., Field, L. C., Karpoff, J. M., & Raheja, C. G. (2007). The determinants of corporate board size and composition: An empirical analysis. *Journal of Financial Economics*, 85(1), 66-101.
- Booth, J. R., & Booth, L. C. (2006). Loan collateral decisions and corporate borrowing costs. *Journal of Money, Credit, and Banking*, 38(1), 67-90.
- Bradley, M., & Chen, D. (2011). Corporate governance and the cost of debt: Evidence from director limited liability and indemnification provisions. *Journal of Corporate Finance*, 17(1), 83-107.
- Bradley, M., & Roberts, M. R. (2015). The structure and pricing of corporate debt covenants. *Quarterly Journal of Finance*, 5(2), 155-187.
- Campbell, M. (2009). Acquisitions and their effect on loan covenants. *Commercial Lending Review*, 24, 17.
- Carey, M., Post, M., & Sharpe, S. A. (1998). Does corporate lending by banks and finance companies differ? Evidence on specialization in private debt contracting. *The Journal of Finance*, 53(3), 845-878.
- Carter, D. A., Simkins, B. J., & Simpson, W. G. (2003). Corporate governance, board diversity, and firm value. *Financial Review*, 38(1), 33-53.
- Chava, S., Livdan, D., & Purnanandam, A. (2009). Do shareholder rights affect the cost of bank loans?. *Review of Financial Studies*, 22(8), 2973-3004.
- Chava, S., & Roberts, M. R. (2008). How does financing impact investment? The role of debt covenants. *The Journal of Finance*, 63(5), 2085-2121.
- Chen, D. (2012). Classified boards, the cost of debt, and firm performance. *Journal of Banking & Finance*, 36(12), 3346-3365.
- Cheng, S. (2008). Board size and the variability of corporate performance. *Journal of Financial Economics*, 87(1), 157-176.
- Citron, D., Robbie, K., & Wright, M. (1997). Loan covenants and relationship banking in MBOs. *Accounting and Business Research*, 27(4), 277-294.
- Coles, J. L., Daniel, N. D., & Naveen, L. (2008). Boards: Does one size fit all? *Journal of Financial Economics*, 87(2), 329-356.
- Cornelli, F., & Karakas, O. (2008). Private equity and corporate governance: Do LBOs have more effective boards. *The Global Impact of Private Equity Report*, 65-84.
- Coval, J. D., & Moskowitz, T. J. (2001). The geography of investment: Informed trading and asset prices. *Journal of Political Economy*, 109(4), 811-841.
- Cremers, K. M., Nair, V. B., & Wei, C. (2007). Governance mechanisms and bond prices. *Review of Financial Studies*, 20(5), 1359-1388.
- Cumming, D., Siegel, D. S., & Wright, M. (2007). Private equity, leveraged buyouts and governance. *Journal of Corporate Finance*, 13(4), 439-460.
- Demiroglu, C., & James, C. M. (2010). The information content of bank loan covenants. *Review of Financial Studies*, 23(10), 3700-3737.
- Denis, D. J. (1990). Defensive changes in corporate payout policy: Share repurchases and special dividends. *The Journal of Finance*, 45(5), 1433-1456.
- Denis, D. J., & Denis, D. K. (1995). Performance changes following top management dismissals. *The Journal of Finance*, 50(4), 1029-1057.
- Dennis, S., Nandy, D., & Sharpe, L. G. (2000). The determinants of contract terms in bank revolving credit agreements. *Journal of Financial and Quantitative Analysis*, 35(01), 87-110.

- Dichev, I. D., & Skinner, D. J. (2002). Large-sample evidence on the debt covenant hypothesis. *Journal of Accounting Research*, 40(4), 1091-1123.
- Dittmar, A., & Mahrt-Smith, J. (2007). Corporate governance and the value of cash holdings. *Journal of Financial Economics*, 83(3), 599-634.
- Eckbo, E. B., & Thorburn, S. K. (2008). Automatic bankruptcy auctions and fire-sales. *Journal of Financial Economics*, 89(3), 404-422.
- Ferreira, M. A., & Matos, P. (2012). Universal banks and corporate control: Evidence from the global syndicated loan market. *Review of Financial Studies*, 25(9), 2703-2744.
- Fich, E. M., & Shivdasani, A. (2007). Financial fraud, director reputation, and shareholder wealth. *Journal of Financial Economics*, 86(2), 306-336.
- Fields, P.L., Fraser, D. R., & Subrahmanyam, A. (2012). Board quality and the cost of debt capital: The case of bank loans. *Journal of Banking & Finance*, 36(5), 1536-1547.
- Francis, B., Hasan, I., Koetter, M., & Wu, Q. (2012). Corporate boards and bank loan contracting. *Journal of Financial Research*, 35(4), 521-552.
- François, P., & Missonier-Piera, F. (2007). The agency structure of loan syndicates. *Financial Review*, 42(2), 227-245.
- Freixas, X., & Rochet, J. C. (1997). *Microeconomics of banking* (Vol. 2). Cambridge, MA: MIT press.
- Gatev, E., & Strahan, P. E. (2006). Banks' advantage in hedging liquidity risk: Theory and evidence from the commercial paper market. *The Journal of Finance*, 61(2), 867-892.
- Ge, W., Kim, J. B., & Song, B. Y. (2012). Internal governance, legal institutions and bank loan contracting around the world. *Journal of Corporate Finance*, 18(3), 413-432.
- Gilson, S. C. (1990). Bankruptcy, boards, banks, and blockholders: Evidence on changes in corporate ownership and control when firms default. *Journal of Financial Economics*, 27(2), 355-387.
- Gompers, P., Ishii, J., Metrick, A. (2003). Corporate governance and equity prices. *Quarterly Journal of Economics*, 118, 107-155.
- Gopalan, R., Nanda, V., & Yerramilli, V. (2011). Does poor performance damage the reputation of financial intermediaries? Evidence from the loan syndication market. *The Journal of Finance*, 66(6), 2083-2120.
- Gorton, G., & Kahn, J. (2000). The design of bank loan contracts. *Review of Financial Studies*, 13(2), 331-364.
- Gottesman, A. A., & Roberts, G. S. (2004). Maturity and corporate loan pricing. *Financial Review*, 39(1), 55-77.
- Graham, J. R., Li, S., & Qiu, J. (2008). Corporate misreporting and bank loan contracting. *Journal of Financial Economics*, 89(1), 44-61.
- Gul, F. A., & Leung, S. (2004). Board leadership, outside directors' expertise and voluntary corporate disclosures. *Journal of Accounting and public Policy*, 23(5), 351-379.
- Gul, F. A., Srinidhi, B., & Ng, A. C. (2011). Does board gender diversity improve the informativeness of stock prices?. *Journal of Accounting and Economics*, 51(3), 314-338.
- Gupta, A., Singh, A. K., & Zebedee, A. A. (2008). Liquidity in the pricing of syndicated loans. *Journal of Financial Markets*, 11(4), 339-376.
- Harford, J. (2003). Takeover bids and target directors' incentives: The impact of a bid on directors' wealth and board seats. *Journal of Financial Economics*, 69(1), 51-83.
- Harjoto, M., Mullineaux, D. J., & Yi, H. C. (2006). A comparison of syndicated loan pricing at investment and commercial banks. *Financial Management*, 35(4), 49-70.

- Harris, M., & Raviv, A. (1991). The theory of capital structure. *the Journal of Finance*, 46(1), 297-355.
- Hermalin, B. E., & Weisbach, M. S. (2003). Boards of directors as an endogenously determined institution: A survey of the economic literature. *FRBNY Economic Policy Review* 9, 7-26.
- Hubbard, R. G., Kuttner, K. N., & Palia, D. N. (2002). Are there bank effects in borrowers' costs of funds? Evidence from a matched sample of borrowers and banks. *The Journal of Business*, 75(4), 559-581.
- Ivashina, V. (2009). Asymmetric information effects on loan spreads. *Journal of Financial Economics*, 92(2), 300-319.
- Ivashina, V., & Scharfstein, D. (2010). Bank lending during the financial crisis of 2008. *Journal of Financial economics*, 97(3), 319-338.
- James, C. (1987). Some evidence on the uniqueness of bank loans. *Journal of Financial Economics*, 19(2), 217-235.
- Jensen, M. C., & Meckling, W. H. (1976). Agency costs and the theory of the firm. *Journal of Financial Economics*, 3(4), 305-360.
- John, K., Lynch, A. W., & Puri, M. (2003). Credit ratings, collateral, and loan characteristics: Implications for yield. *The Journal of Business*, 76(3), 371-409.
- Kaplan, S. N., & Strömberg, P. (2008). Leveraged buyouts and private equity. Working Paper. *National Bureau of Economic Research*.
- Kim, J. B., Song, B. Y., & Zhang, L. (2011). Internal control weakness and bank loan contracting: Evidence from SOX Section 404 disclosures. *The Accounting Review*, 86(4), 1157-1188.
- Klock, M. S., Mansi, S. A., & Maxwell, W. F. (2005). Does corporate governance matter to bondholders? *Journal of Financial and Quantitative Analysis*, 40(04), 693-719.
- Knyazeva, A., Knyazeva, D., & Masulis, R. W. (2013). The supply of corporate directors and board independence. *Review of Financial Studies*, 26(6), 1561-1605.
- Lehn, K., & Poulsen, A. (1989). Free cash flow and stockholder gains in going private transactions. *The Journal of Finance*, 44(3), 771-787.
- Levi, M., Li, K., & Zhang, F. (2013). Director gender and mergers and acquisitions. *Journal of Corporate Finance* 28 185-200.
- Lummer, S. L., & McConnell, J. J. (1989). Further evidence on the bank lending process and the capital-market response to bank loan agreements. *Journal of Financial Economics*, 25(1), 99-122.
- Masulis, R. W., Wang, C., & Xie, F. (2012). Globalizing the boardroom—The effects of foreign directors on corporate governance and firm performance. *Journal of Accounting and Economics*, 53(3), 527-554.
- Matvos, G. (2013). Estimating the benefits of contractual completeness. *Review of Financial Studies*, 26(11), 2798-2844.
- Meggison, W. L., Poulsen, A. B., & Sinkey, J. F. (1995). Syndicated loan announcements and the market value of the banking firm. *Journal of Money, Credit and Banking*, 457-475.
- Murfin, J. (2012). The supply-side determinants of loan contract strictness. *The Journal of Finance*, 67(5), 1565-1601.
- Myers, S. C. (1977). Determinants of corporate borrowing. *Journal of financial economics*, 5(2), 147-175.
- Nini, G., Smith, D. C., & Sufi, A. (2009). Creditor control rights and firm investment policy. *Journal of Financial Economics*, 92(3), 400-420.

- Paglia, J. K., & Mullineaux, D. J. (2006). An empirical exploration of financial covenants in large bank loans. *Banks and Bank Systems*, 1, 103-122.
- Peyer, U. C., & Shivdasani, A. (2001). Leverage and internal capital markets: evidence from leveraged recapitalizations. *Journal of Financial Economics*, 59(3), 477-515.
- Qian, J., & Strahan, P. E. (2007). How laws and institutions shape financial contracts: The case of bank loans. *The Journal of Finance*, 62(6), 2803-2834.
- Rajan, R., & Winton, A. (1995). Covenants and collateral as incentives to monitor. *The Journal of Finance*, 50(4), 1113-1146.
- Reisel, N. (2014). On the value of restrictive covenants: Empirical investigation of public bond issues. *Journal of Corporate Finance*, 27, 251-268.
- Richardson, S. (2006). Over-investment of free cash flow. *Review of Accounting Studies*, 11(2-3), 159-189.
- Roberts, M. R., & Sufi, A. (2009a). Financial contracting: A survey of empirical research and future directions. *Annual Review of Financial Economics*, 1(1), 207-226.
- Roberts, M. R., & Sufi, A. (2009b). Renegotiation of financial contracts: Evidence from private credit agreements. *Journal of Financial Economics*, 93(2), 159-184.
- Rodriguez-Dominguez, L., Gallego-Alvarez, I., & Garcia-Sanchez, I. M. (2009). Corporate governance and codes of ethics. *Journal of Business Ethics*, 90(2), 187-202.
- Saunders, A., & Schumacher, L. (2000). The determinants of bank interest rate margins: An international study. *Journal of International Money and Finance*, 19(6), 813-832.
- Saunders, A., & Steffen, S. (2011). The costs of being private: Evidence from the loan market. *Review of Financial Studies*, 24(12), 4091-4122.
- Shleifer, A., & Vishny, R. W. (1997). A survey of corporate governance. *The Journal of Finance*, 52(2), 737-783.
- Smith Jr, C. W., & Warner, J. B. (1979). On financial contracting: An analysis of bond covenants. *Journal of Financial Economics*, 7(2), 117-161.
- Srinidhi, B., Gul, F. A., & Tsui, J. (2011). Female Directors and Earnings Quality. *Contemporary Accounting Research*, 28(5), 1610-1644.
- Strahan, P. E. (1999). Borrower risk and the price and nonprice terms of bank loans. *FRB of New York Staff Report*, (90).
- Wei, C. (2005). Covenant protection, credit spread dynamics and managerial incentives. *Federal Reserve Bank of New York Working Paper*, 42.
- Wittenberg-Moerman, R. (2008). The role of information asymmetry and financial reporting quality in debt trading: Evidence from the secondary loan market. *Journal of Accounting and Economics*, 46(2), 240-260.
- Wooldridge, J. (2012). *Introductory Econometrics: A Modern Approach*, 5th ed. South-Western Cengage Learning, Mason.
- Xie, B., Davidson III, W. N., & DaDalt, P. J. (2003). Earnings management and corporate governance: The role of the board and the audit committee. *Journal of Corporate Finance*, 9(3), 295-316.
- Yasuda, A. (2005). Do bank relationships affect the firm's underwriter choice in the corporate-bond underwriting market? *The Journal of Finance*, 60(3), 1259-1292.
- Yermack, D. (2004). Remuneration, retention, and reputation incentives for outside directors. *The Journal of Finance*, 59(5), 2281-2308.

Table 1: Descriptive statistics

This table provides summary statistics for the data employed in our analyses. The data set contains information for 2,756 firm years of data for firms that obtained 4,333 loans from commercial banks from 1998 through 2006. *All in spread drawn* is a basis point markup over the 6-month LIBOR, including any recurring fees associated with the lending facility; *Commitment fees*, also reported in basis points, are comprised of one-time upfront fees. *Covenant index* is composed of the six most commonly used covenant restrictions – secured debt, dividend issuance restriction, more than two financial ratios, asset sweep, debt sweep, and equity sweep; to circumvent the potential issue of mistakenly including loans with missing data instead of those that truly do not have a particular covenant, we require that loans in our sample have at least one covenant. *Loans with covenants* indicates the percentage of loans with covenant index value of at least one, thus representing presence of at least one covenant restriction. *Secured debt, dividend restriction, >2 ratio restriction, asset sales, debt issue, and equity issue* are covenants that comprise *Covenant index*. *Loan size* is the tranche amount of loan allotted for a specific use designation; *Months to maturity* indicates the lifespan of the loan; *Investment grade* indicates loans of firms with credit rating of Baa or above. *Board size* is the number of directors on the board of directors; *Board independence* is the proportion of independent directors to total number of directors on the board; *Board busyness* is the ratio of busy directors to total number of directors on the board; *Director age* is the average age of directors on the board; *G-Index* is the anti-takeover governance provisions index adopted from Gompers, Ishii, & Metrick (2003). *Total assets* reports the book value of the firms’ aggregate assets; *Market capitalization* represents the market value of equity; *ROA* is the ratio of EBITDA to total assets; *Leverage* is the ratio of total debt held by firm to total assets; *Current ratio* is current assets divided by current liabilities.

	Acquisition line (n=136)	Debt repayment (n=449)	LBO (n=37)	Spinoff (n=32)	Takeover (n=376)	CP backup (n=1,014)	General corporate purposes (n=1,334)	Working capital (n=818)	Other (n=137)	Total sample (n=4,333)
<i>Loan Characteristics</i>										
All in spread drawn (bps)	166.64	161.17	354.05	172.27	157.91	50.30	124.23	146.54	129.26	121.69
Commitment fees (bps)	32.38	39.32	49.09	46.25	33.02	32.26	16.47	31.46	34.35	28.35
Loans with commitment fees	36.03%	38.31%	29.73%	18.75%	28.46%	6.22%	27.74%	44.50%	32.12%	27.83%
Covenant index	3.39	3.14	4.22	4.39	3.63	1.40	2.44	2.64	2.45	2.73
Loans with covenants	63.24%	73.50%	56.25%	71.88%	72.07%	17.85%	46.32%	77.26%	48.91%	51.44%
Loans with secured debt covenant	52.29%	59.46%	92.31%	77.27%	53.15%	11.43%	44.17%	49.04%	46.27%	47.13%
Loans with dividend restriction covenant	83.53%	93.24%	100.0%	100.0%	81.86%	87.43%	90.97%	93.77%	77.61%	90.27%

Loans with > 2 ratio restriction covenant	37.65%	55.41%	7.69%	54.55%	45.15%	17.71%	33.50%	40.10%	40.30%	38.96%
Loans with asset sales covenant	64.71%	46.96%	76.92%	77.27%	60.34%	7.43%	29.89%	35.46%	78.26%	37.50%
Loans with debt issue covenant	49.41%	34.80%	84.62%	81.82%	63.29%	6.86%	23.97%	24.60%	88.46%	30.92%
Loans with equity issue covenant	51.76%	29.05%	30.77%	63.64%	54.01%	6.29%	22.50%	21.41%	61.90%	26.79%
Loan size (\$ millions)	401.58	347.31	209.96	1,170.31	783.12	727.67	484.90	332.36	487.91	524.73
Months to maturity	42.06	48.66	69.95	45.06	44.21	21.65	39.65	41.62	40.69	37.54
Investment grade	36.03%	28.73%	0.00%	34.38%	31.91%	90.53%	57.20%	48.17%	44.52%	56.43%
<i>Governance Characteristics</i>										
Board size	9.09	8.97	7.86	9.91	9.28	11.16	9.90	9.08	9.04	9.82
Board independence	61.54%	58.28%	76.04%	71.44%	60.14%	70.26%	68.31%	66.75%	63.76%	66.45%
Board busyness	19.27%	18.47%	24.63%	41.81%	19.80%	35.34%	25.98%	21.13%	25.76%	25.83%
Director age	59.35	57.50	57.15	60.86	58.99	59.72	59.44	59.23	58.28	59.18
G-Index	9.58	8.85	9.47	10.71	9.38	10.04	9.60	9.55	9.30	9.59
<i>Firm Financial Characteristics</i>										
Total assets (\$ millions)	4,059.11	4,715.91	3,416.38	9,463.93	9,301.00	14,893.35	11,403.38	5,961.35	6,755.18	9,857.31
Market capital. (\$ millions)	4,115.08	5,501.05	1,366.14	19,657.4	6,960.05	19,867.00	9,844.06	4,715.95	11,230.9	10,385.32
ROA (%)	14.47%	14.63%	12.19%	16.52%	16.33%	15.94%	13.97%	13.49%	14.41%	14.65%
Leverage ratio	56.01%	62.27%	63.32%	67.86%	56.67%	64.58%	61.90%	56.95%	57.96%	60.92%
Current ratio	2.01	1.83	1.70	1.33	1.85	1.29	1.66	1.87	2.85	1.69

Table 2: Summary Statistics on Differences between Restructure and Operations Loans

This table provides a summary on T-test statistics differences between loans made for restructure purposes and operations purposes. Restructure purpose category is comprised of asset acquisition line, debt repayment, LBO, spinoff, and takeover loans. Operations purposes category is comprised of CP backup, general corporate purpose, and working capital loans. *All in spread drawn* is a basis point markup over the 6-month LIBOR, including any recurring fees associated with the lending facility; *Commitment fees*, also reported in basis points, are comprised of one-time upfront fees. *Covenant index* is composed of six most commonly used covenant restrictions – secured debt, dividend issuance restriction, more than two financial ratios, asset sweep, debt sweep, and equity sweep; to circumvent the potential issue of mistakenly including loans with missing data instead of those that truly do not have a particular covenant, we require that loans in our sample have at least one covenant. *Loans with covenants* indicates the percentage of loans with covenant index value of at least one, thus representing presence of at least one covenant restriction. *Secured debt, dividend restriction, >2 ratio restriction, asset sales, debt issue, and equity issue* are covenants that comprise *Covenant index*. *Loan size* is the tranche amount of loan allotted for a specific use designation; *Months to maturity* indicates the lifespan of the loan; *Investment grade* indicates loans of firms with credit rating of Baa or above. *Board size* is the number of directors on the board of directors; *Board independence* is the proportion of independent directors to total number of directors on the board; *Board busyness* is the ratio of busy directors to total number of directors on the board; *Director age* is the average age of directors on the board; *G-Index* is the anti-takeover governance provisions index adopted from Gompers, Ishii, & Metrick (2003). *Total assets* reports the book value of the firms' aggregate assets; *Market capitalization* represents the market value of equity; *ROA* is the ratio of EBITDA to total assets; *Leverage* is the ratio of total debt held by firm to total assets; *Current ratio* is current assets divided by current liabilities.

	Restructure	Operations	Diff. (R-O)
<i>Panel A – Bank loan characteristics</i>			
All in spread drawn (bps)	168.0	106.3	61.66 ***
Commitment fees (bps)	36.81	30.30	6.51 ***
Percentage with commitment fees	33.50%	25.81%	7.69% ***
Covenants (for firms with at least one covenant)			
Firms with secured loans (%)	57.89%	42.27%	15.62% ***
Firms with dividend restrictions (%)	88.21%	91.77%	-3.56% **
Firms > 2 ratio restrictions (%)	48.39%	34.47%	13.92% ***
Firms with asset sales sweep (%)	55.74%	29.57%	26.17% ***
Firms with debt issue sweep (%)	49.62%	22.13%	27.49% ***
Firms with equity issue sweep (%)	42.27%	20.00%	22.27% ***
Covenant index (for firms with at least one covenant)	3.42	2.40	1.02 ***
Loan size (\$ millions)	534.2	523.24	10.96
Loan amount to total assets (%)	30.80%	23.44%	7.36%
Months to maturity	46.82	34.39	12.43 ***
Number of lenders	11.88	11.94	-0.06
Investment grade (%)	30.00%	65.54%	-35.54% ***

<i>Panel B – Corporate governance characteristics</i>			
Board size	9.09	10.09	-1.0 ***
Number of independent directors	5.54	7.01	-1.47 ***
Proportion of independent directors (%)	60.43%	68.53%	-8.10 ***
Number of busy directors	1.93	2.95	-1.02 ***
Proportion of busy directors (%)	20.01%	27.72%	-7.71 ***
Proportion of female directors (%)	8.08%	11.03%	-2.95%
Number of financial experts	0.24	0.65	-0.41 ***
Number of non-financial experts	0.33	0.76	-0.43 ***
Number of international directors	0.11	0.20	-0.09 ***
Number of ethnic minority directors	0.32	0.68	-0.36 ***
Director tenure	9.63	8.49	1.14
Director age	58.38	59.48	-1.10 ***
Director stock ownership	7.72%	2.97%	4.75% ***
G-Index	9.22	9.73	-0.51 ***
<i>Panel C – Firm financial characteristics</i>			
Total assets (\$ millions)	6,416.4	11,114.7	-4,698.3 ***
Market value of equity (\$ millions)	5,924.6	11,685.1	-5,750.4 ***
Sales to total assets	1.34	1.81	-0.48 *
Return on total assets (%)	15.22%	14.11%	1.11% ***
Long-term debt to total assets (%)	27.72%	24.92%	2.80% ***
Leverage ratio (%)	61.48%	59.57%	1.91% ***
Market to book ratio	1.85	1.86	-0.01
Current ratio	1.84	1.59	0.25 ***

***, **, and * denote statistical significance at the 1%, 5%, and 10%, respectively.

Table 3: Effect of Loan Purpose on Loan Contracting Terms

This table presents ordinary least squares regression results relating price and non-price components of loan contract terms to loan purpose, corporate governance, loan, and firm financial characteristics. Loan data are extracted from DealScan for firms obtaining loans from 1998 to 2006 that have governance data available from RiskMetrics for the year prior to the loan. Loan purpose section shows the relationship between the expected designated uses of loan proceeds and loan terms. Loan purposes are reported both individually, as well as a binary variable *Restructure*. *Restructure* is coded as 1 if loan purpose is for acquisition line, debt repayment, LBO, spinoff, and takeover; *Restructure* is coded 0 if loan purpose if for CP backup, corporate purposes, and working capital. Corporate governance section is based on data obtained from RiskMetrics, and includes board size, the percentage of directors with no direct ties to the firm (*Independence*), the percentage of directors with three or more board seats at major for-profit firms (*Busyness*), tenure, the number of board members with expertise background (*Expert present*), the percentage of female directors to board size, (*Female presence*), the percentage of directors from outside the U.S. to board size (*International*), the proportion of directors ethnic minority background to board size (*Ethnic minority*), the percent of firm's equity held by members of the board of directors (*Board vote power*), and *G-Index* is a 24-item anti-takeover governance provisions index adopted from Gompers, Ishii, & Metrick (2003). *Loan size* is the natural log of the tranche amount of loan allotted for a specific use designation and *Loan maturity* indicates the natural log of the lifespan of the loan measured in months. Data for firm financial characteristics come from Compustat. *Market capitalization* is the natural log the market value of equity; *Leverage* is the ratio of total debt held by firm to total assets; *Sales turnover* is measured as firm's total annual sales revenue divided by total assets; *ROA* is the ratio of EBITDA to total assets; and *Market to book* is the ratio of book assets minus book equity plus market equity over book assets.

	(1)	(2)	(3)	(4)	(5)	(6)
Dependent variables	Loan Spread	Fees	Covenant Index	Loan Spread	Fees	Covenant Index
Intercept	7.3249*** (0.1805)	5.2044*** (0.3183)	4.7256*** (0.8159)	7.3728*** (0.17556)	5.0675*** (0.3178)	4.4194*** (0.8079)
<i>Loan purpose categories</i>						
Acquisition line	0.3516*** (0.0861)	-0.0995 (0.0939)	1.0557*** (0.2683)			
Debt repayment	0.2561*** (0.0810)	-0.0627 (0.0796)	0.2125 (0.2264)			
LBO	0.7826*** (0.1224)	-0.0501 (0.1841)	2.2609*** (0.2446)			
Spinoff	0.7987*** (0.1906)	0.1969 (0.2195)	1.9223*** (0.3672)			
Takeover	0.5086*** (0.0815)	-0.0829 (0.0844)	0.8599*** (0.2277)			
CP backup	-0.3072*** (0.0771)	-0.3533*** (0.0919)	-0.0336 (0.2191)			
Corporate purposes	0.0531 (0.0768)	-0.1312* (0.0437)	0.1669 (0.1971)			
Working capital	-0.1818** (0.0777)	-0.1563** (0.0446)	0.2040 (0.1966)			
Restructure				0.3963*** (0.0249)	0.3098*** (0.0265)	0.8044*** (0.0856)
<i>Corporate governance characteristics</i>						
Board Size	-0.0220*** (0.0052)	-0.0205*** (0.0050)	-0.0549*** (0.0198)	-0.0245*** (0.0056)	-0.0243*** (0.0051)	-0.0593*** (0.0204)

Independence (%)	-0.0968** (0.0485)	-0.1900*** (0.0591)	-0.3181* (0.1893)	-0.1424** (0.0662)	-0.1705*** (0.0614)	-0.2543** (0.1496)
Busyness (%)	-0.0199*** (0.0043)	-0.0086** (0.0049)	-0.0274 (0.0226)	-0.0216*** (0.0055)	-0.0120** (0.0050)	-0.0326 (0.0222)
Tenure	-0.0161*** (0.0021)	-0.0154*** (0.0037)	-0.0318*** (0.0096)	-0.0210*** (0.0028)	-0.0187*** (0.0030)	-0.0265*** (0.0099)
Expert present	0.0186*** (0.0045)	0.0109*** (0.0057)	0.0021 (0.0203)	0.0314*** (0.0057)	0.0255*** (0.0057)	0.0148 (0.0204)
Female present	-0.0172* (0.0096)	-0.0420*** (0.0125)	-0.0265 (0.0477)	-0.0330** (0.0135)	-0.0407*** (0.0130)	-0.0149 (0.0479)
International	-0.0335** (0.0151)	-0.0079 (0.0185)	-0.0089 (0.0565)	-0.0053 (0.0247)	-0.0098 (0.0192)	-0.0627 (0.0579)
Ethnic minority	-0.0341*** (0.0104)	-0.0524** (0.0222)	-0.1474* (0.0792)	-0.0515*** (0.0135)	-0.0459*** (0.0122)	-0.1701** (0.0807)
Board vote power	0.0244*** (0.0074)	0.0213*** (0.0071)	0.0384 (0.0302)	0.0207*** (0.0076)	0.0244*** (0.0073)	0.0242 (0.0289)
G-Index	-0.0084*** (0.0030)	-0.0161*** (0.0037)	-0.0377*** (0.0144)	-0.0203*** (0.0041)	-0.0159*** (0.0038)	-0.0306** (0.0146)
<i>Loan and firm financial control variables</i>						
Loan size	-0.0770*** (0.0087)	-0.0585*** (0.0154)	-0.0800* (0.0407)	-0.1374*** (0.0128)	-0.1097*** (0.0136)	-0.0623 (0.0503)
Loan maturity	0.0027*** (0.0005)	0.0032*** (0.0006)	0.0163*** (0.0017)	0.0046*** (0.0005)	0.0069*** (0.0004)	0.0179*** (0.0016)
Investment grade	-0.8954*** (0.0186)	-0.7085*** (0.0293)	-1.5501*** (0.0748)	-0.9402 (0.0188)	-0.7246 (0.0291)	-1.6021*** (0.0748)
Market capitalization	-0.2055*** (0.0113)	-0.1319*** (0.0214)	-0.5734*** (0.0599)	-0.3788*** (0.0188)	-0.3015*** (0.0196)	-0.5728*** (0.0610)
Leverage	0.1755*** (0.0121)	0.1487*** (0.0208)	0.5114*** (0.0573)	0.2747*** (0.0169)	0.2142*** (0.0180)	0.4730*** (0.0574)
Sales turnover	-0.0518*** (0.0124)	-0.0903*** (0.0218)	-0.1960*** (0.0584)	-0.0393** (0.0165)	-0.0421** (0.0163)	-0.1638** (0.0587)
ROA	-0.1027*** (0.0164)	-0.0633** (0.0255)	-0.0758 (0.0689)	-0.2828*** (0.0215)	-0.2327*** (0.0234)	-0.1379* (0.0704)
Market to book	-0.0213*** (0.0182)	-0.0597*** (0.0103)	-0.1618*** (0.0470)	-0.0889*** (0.0125)	-0.0507*** (0.0121)	-0.1608*** (0.0467)
Year dummies	Yes	Yes	Yes	Yes	Yes	Yes
Industry dummies	Yes	Yes	Yes	Yes	Yes	Yes
F-value	431.28***	61.97***	---	547.24***	81.65***	---
Adjusted R ²	0.7457	0.6016	0.3971	0.7373	0.6020	0.3902
N	3,816	1,051	1,922	3,729	1,014	1,894

***, **, and * denote statistical significance at the 1%, 5%, and 10%, respectively.

Table 4: Effect of Loan Purpose on Covenant Restrictions

This table presents Logit maximum likelihood estimations relating the individual components of covenant index to loan purpose, corporate governance, loan composition, and firm financial characteristics. The dependent variable *Security Requirement* (columns 1 and 2) is a binary indicator variable with a value of 1 if the loan requires a collateral, and 0 otherwise. The dependent variables *Dividend Issuance Restriction* (columns 3 and 4), *>2 Financial Ratio Restriction* (columns 5 and 6), and *Asset Sale, Debt Issue, or Equity Issue Sweep* (columns 7 and 8) are defined similarly to *Security Requirement*, but they replace the collateral requirement with dividend issue restriction, more than 2 financial ratios restriction, and sweeps requirements. Loan data are extracted from DealScan for firms obtaining loans from 1998 to 2006 that have governance data available from RiskMetrics for the year prior to the loan. Loan purpose section shows the relationship between the expected designated uses of loan proceeds and loan terms. Loan purposes are reported both individually, as well as a binary variable *Restructure*. *Restructure* is coded as 1 if loan purpose is for acquisition line, debt repayment, LBO, spinoff, and takeover; *Restructure* is coded 0 if loan purpose if for CP backup, corporate purposes, and working capital. Corporate governance section is based on data obtained from RiskMetrics, and includes board size, the percentage of directors with no direct ties to the firm (*Independence*), the percentage of directors with three or more board seats at major for-profit firms (*Busyness*), tenure, the number of board members with expertise background (*Expert present*), the percentage of female directors to board size, (*Female presence*), the percentage of directors from outside the U.S. to board size (*International*), the proportion of directors ethnic minority background to board size (*Ethnic minority*), the percent of firm's equity held by members of the board of directors (*Board vote power*), and *G-Index* is a 24-item anti-takeover governance provisions index adopted from Gompers, Ishii, & Metrick (2003). *Loan size* is the natural log of the tranche amount of loan allotted for a specific use designation and *Loan maturity* indicates the natural log of the lifespan of the loan measured in months. Data for firm financial characteristics come from Compustat. *Market capitalization* is the natural log the market value of equity; *Leverage* is the ratio of total debt held by firm to total assets; *Sales turnover* is measured as firm's total annual sales revenue divided by total assets; *ROA* is the ratio of EBITDA to total assets; and *Market to book* is the ratio of book assets minus book equity plus market equity over book assets.

Dependent Variable	Security Requirement	Dividend Issuance Restriction	>2 Financial Ratio Restriction	Asset Sale, Debt Issue, or Equity Issue Sweep
	(1)	(2)	(3)	(4)
Intercept	1.2554*** (0.2461)	1.0705*** (0.1765)	0.4102 (0.2767)	0.7874*** (0.2623)
<i>Loan purpose categories</i>				
Acquisition line	0.1757** (0.0883)	0.1281** (0.0634)	0.0513 (0.0994)	0.3629*** (0.0942)
Debt repayment	0.0985 (0.0796)	0.2045*** (0.0571)	0.0191 (0.0896)	0.0132 (0.0849)
LBO	0.2510*** (0.0881)	0.2064** (0.0899)	0.3516*** (0.0995)	0.3859*** (0.1139)
Spinoff	0.3700*** (0.1011)	0.2857*** (0.0896)	0.1351 (0.1405)	0.3608*** (0.1331)
Takeover	0.1032 (0.0805)	0.1005* (0.0578)	0.0043 (0.0906)	0.2636*** (0.0858)
CP backup	-0.0326 (0.0825)	0.2202*** (0.0592)	-0.0408 (0.0904)	-0.1086 (0.0879)
Corporate purposes	-0.0725 (0.0775)	0.2012*** (0.0555)	-0.0028 (0.0873)	-0.0454 (0.0826)
Working capital	-0.1044	0.2219***	-0.0044	-0.0097

	(0.0776)	(0.0556)	(0.0876)	(0.0827)
<i>Corporate governance characteristics</i>				
Board Size	-0.0094* (0.0053)	-0.0043 (0.0038)	-0.0107* (0.0061)	-0.0136** (0.0059)
Independence (%)	-0.0071 (0.0624)	-0.0614 (0.0447)	0.1141* (0.0701)	-0.0115* (0.0066)
Busyness (%)	-0.0003 (0.0059)	-0.0020 (0.0043)	-0.0184*** (0.0066)	-0.1081 (0.0691)
Tenure	-0.0045* (0.0026)	0.0043** (0.0019)	-0.0001 (0.0029)	-0.0112*** (0.0029)
Expert present	0.0106* (0.0056)	0.0018 (0.0040)	-0.0257*** (0.0062)	0.0021 (0.0063)
Female present	-0.0232* (0.0127)	0.0184** (0.0043)	-0.0500*** (0.0136)	0.0119 (0.0145)
International	0.0758*** (0.0219)	-0.0151 (0.0157)	0.0108 (0.0225)	0.0459* (0.0263)
Ethnic minority	0.0286* (0.0159)	0.0113 (0.0114)	-0.0181 (0.0171)	-0.0026 (0.0176)
Board vote power	-0.0111 (0.0079)	-0.0107* (0.0057)	0.0388*** (0.0086)	0.0038 (0.0089)
G-Index	-0.0123*** (0.0039)	-0.0013 (0.0028)	-0.0102** (0.0045)	-0.0054 (0.0045)
<i>Loan and firm financial control variables</i>				
Loan size	-0.0235*** (0.0117)	-0.0101 (0.0084)	-0.0044 (0.0147)	-0.0077 (0.0148)
Loan maturity	0.0032*** (0.0004)	0.0020*** (0.0003)	0.0027*** (0.0004)	0.0023*** (0.0005)
Investment grade	-0.4596*** (0.0220)	-0.0409*** (0.0158)	-0.1934*** (0.0239)	-0.3598*** (0.0218)
Market capitalization	-0.0638*** (0.0165)	-0.0108 (0.0118)	-0.0446*** (0.0178)	-0.1298*** (0.0178)
Leverage	0.0276* (0.0156)	0.0014 (0.0112)	0.0068 (0.0171)	0.1714*** (0.0175)
Sales turnover	0.0108 (0.0157)	-0.0015 (0.0113)	-0.0027 (0.0178)	-0.0843*** (0.0171)
ROA	-0.0605*** (0.0194)	-0.0082 (0.0139)	0.0105 (0.0235)	0.0170 (0.0208)
Market to book	-0.0188 (0.0135)	-0.0096 (0.0097)	-0.0069 (0.0138)	-0.0456*** (0.0133)
Year dummies	Yes	Yes	Yes	Yes
Industry dummies	Yes	Yes	Yes	Yes
Pseudo- R^2	0.3694	0.0560	0.1685	0.2663
N	1,922	1,922	1,922	1,922

***, **, and * denote statistical significance at the 1%, 5%, and 10%, respectively.

Table 5: Effect of Covenant Inclusion on Loan Price by Loan Purpose

This table presents Ordinary Least Square (OLS) results relating the expected price benefit from inclusion of covenant restrictions on individual components of covenant index, corporate governance, loan composition, and firm financial characteristics. Sample in column 1 is limited to include only loans made for Restructure purposes (acquisition line, debt repayment, LBO, spinoff, and takeover), while sample in column 2 is limited to only loans made for Operations purposes (CP backup, corporate purposes, and working capital). Loan data are extracted from DealScan for firms obtaining loans from 1998 to 2006 that have governance data available from RiskMetrics for the year prior to the loan. Independent variables within the covenant restrictions section include *Security Requirement*, *Dividend Issuance Restriction*, *>2 Financial Ratios Restriction*, and *Asset Sale, Debt Issue, or Equity Issue Sweep Restrictions*. All covenants are calculated as binary indicator variables with a value of 1 if the loan includes a particular covenant, and 0 otherwise; Corporate governance section is based on data obtained from RiskMetrics, and includes board size, the percentage of directors with no direct ties to the firm (*Independence*), the percentage of directors with three or more board seats at major for-profit firms (*Busyness*), tenure, the number of board members with expertise background (*Expert present*), the percentage of female directors to board size, (*Female presence*), the percentage of directors from outside the U.S. to board size (*International*), the proportion of directors ethnic minority background to board size (*Ethnic minority*), the percent of firm's equity held by members of the board of directors (*Board vote power*), and *G-Index* is a 24-item anti-takeover governance provisions index adopted from Gompers, Ishii, & Metrick (2003). *Loan size* is the natural log of the tranche amount of loan allotted for a specific use designation and *Loan maturity* indicates the natural log of the lifespan of the loan measured in months. *Investment grade* indicates loans of firms with credit rating of Baa or above. Data for firm financial characteristics come from Compustat. *Market capitalization* is the natural log the market value of equity; *Leverage* is the ratio of total debt held by firm to total assets; *Sales turnover* is measured as firm's total annual sales revenue divided by total assets; *ROA* is the ratio of EBITDA to total assets; and *Market to book* is the ratio of book assets minus book equity plus market equity over book assets.

Dependent Variable = Covenant price benefit		
	(1)	(2)
	Restructure Purpose Loans	Operations Purpose Loans
Intercept	1.7068*** (0.3893)	1.7963*** (0.2676)
<i>Covenant Restrictions</i>		
Security requirement	0.2298*** (0.0389)	0.2387*** (0.0291)
Dividend issuance restriction	0.0981** (0.0455)	0.1144*** (0.0247)
> 2 financial ratios restriction	0.0191 (0.0318)	0.1151*** (0.0241)
Asset sale sweep restriction	0.2469*** (0.0462)	0.1317*** (0.0412)
Debt issuance sweep restriction	0.0975** (0.0488)	-0.0679 (0.0445)
Equity issuance sweep restriction	0.1963*** (0.0429)	0.1089*** (0.0386)
<i>Corporate governance characteristics</i>		
Board Size	0.0118 (0.0082)	-0.0024 (0.0057)

Independence (%)	-0.0777 (0.0919)	-0.0655 (0.0716)
Busyness (%)	-0.0154* (0.0062)	-0.0108* (0.0060)
Tenure	-0.0119*** (0.0039)	-0.0066** (0.0031)
Expert present	-0.0019 (0.0120)	0.0122** (0.0058)
Female present	-0.0172 (0.0218)	-0.0175 (0.0130)
International	0.03667 (0.0446)	-0.0333* (0.0198)
Ethnic minority	-0.0559** (0.0280)	-0.0001 (0.0145)
Board vote power	0.0034 (0.0115)	-0.0053 (0.0087)
G-Index	-0.0290** (0.0062)	-0.0092** (0.0044)
<i>Loan and firm financial control variables</i>		
Loan size	-0.0805*** (0.0182)	-0.0756*** (0.0133)
Loan maturity	0.0006 (0.0006)	-0.0007 (0.0005)
Investment grade	0.0802** (0.0406)	0.3456*** (0.0286)
Market capitalization	-0.0588** (0.0257)	-0.1987 (0.0183)
Leverage	0.0747*** (0.0251)	0.1274 (0.0178)
Sales turnover	-0.0064 (0.0239)	-0.0028 (0.0178)
ROA	-0.0266 (0.0362)	-0.1365*** (0.0217)
Market to book	-0.0051 (0.0208)	-0.0353* (0.0135)
Year dummies	Yes	Yes
Industry dummies	Yes	Yes
F-value	21.09***	46.14***
Adjusted R ²	0.4301	0.3799
N	640	1,769

***, **, and * denote statistical significance at the 1%, 5%, and 10%, respectively.

Table 6: Effect of Corporate Governance Attributes on Loan Cost by Loan Purpose Categories

This table provides side-by-side multivariate results by loan purpose category. Columns 1 through 3 present ordinary least squares regression results relating price and non-price components of Restructure purpose loan contract terms to corporate governance, loan, and firm financial characteristics, while columns 4 through 6 regress the same variables for Operations purpose loan contract terms. Loan data are extracted from DealScan for firms obtaining loans from 1998 to 2006 that have governance data available from RiskMetrics for the year prior to the loan. The Restructure sample is comprised of loans made for the following designated purposes: acquisition line, debt repayment, LBO, spinoff, and takeover; the Operations sample is comprised of loans with the following primary purposes: CP backup, corporate purposes, and working capital. Corporate governance section is based on data obtained from RiskMetrics, and includes board size, the percentage of directors with no direct ties to the firm (*Independence*), the percentage of directors with three or more board seats at major for-profit firms (*Busyness*), tenure, the number of board members with expertise background (*Expert present*), the percentage of female directors to board size, (*Female presence*), the percentage of directors from outside the U.S. to board size (*International*), the proportion of directors ethnic minority background to board size (*Ethnic minority*), the percent of firm's equity held by members of the board of directors (*Board vote power*), and *G-Index* is a 24-item anti-takeover governance provisions index adopted from Gompers, Ishii, & Metrick (2003). *Loan size* is the natural log of the tranche amount of loan allotted for a specific use designation and *Loan maturity* indicates the natural log of the lifespan of the loan measured in months. Data for firm financial characteristics come from Compustat. *Market capitalization* is the natural log the market value of equity; *Leverage* is the ratio of total debt held by firm to total assets; *Sales turnover* is measured as firm's total annual sales revenue divided by total assets; *ROA* is the ratio of EBITDA to total assets; and *Market to book* is the ratio of book assets minus book equity plus market equity over book assets.

	(1)	(2)	(3)	(4)	(5)	(6)
	Restructure Purpose Loans			Operations Purpose Loans		
Dependent variable	Loan Spread	Fees	Covenant Index	Loan Spread	Fees	Covenant Index
Intercept	7.0590*** (0.5123)	5.5359*** (0.6035)	1.0602 (1.7838)	8.3173*** (0.2792)	5.7982*** (0.2730)	7.5501*** (1.1085)
<i>Corporate governance characteristics</i>						
Board Size	-0.0221** (0.0107)	-0.0283** (0.0132)	-0.1141*** (0.0378)	-0.0249*** (0.0064)	-0.0230*** (0.0056)	-0.0506** (0.0255)
Independence (%)	0.0187 (0.1197)	-0.0410 (0.1224)	0.1807 (0.4317)	-0.1954*** (0.0647)	-0.2126*** (0.0700)	-0.3842 (0.2947)
Busyness (%)	-0.0538*** (0.0135)	-0.0481*** (0.0137)	0.0681 (0.0494)	-0.0135** (0.0061)	-0.0063 (0.0054)	-0.0347 (0.0232)
Tenure	-0.0245*** (0.0055)	-0.0215*** (0.0066)	-0.0026 (0.0178)	-0.0214*** (0.0033)	-0.0185*** (0.0033)	-0.0406*** (0.0117)
Expert present	0.0151 (0.0135)	0.0268 (0.0189)	0.0469 (0.0527)	-0.0333*** (0.0065)	-0.0250*** (0.0060)	-0.0042 (0.0225)
Female present	-0.0427 (0.0276)	-0.0147 (0.0317)	-0.0476 (0.1013)	-0.0306** (0.0153)	-0.0450*** (0.0142)	-0.0396 (0.0535)
International	0.0477 (0.0691)	-0.0349 (0.0645)	0.0274 (0.1910)	-0.0127 (0.0260)	-0.0082 (0.0202)	0.1752** (0.0885)
Ethnic minority	-0.0866** (0.0376)	-0.0038 (0.0390)	-0.2537* (0.1443)	-0.0401*** (0.0144)	-0.0481*** (0.0128)	0.0215 (0.0617)
Board vote power	0.0190 (0.0157)	0.0234 (0.0187)	0.0351 (0.0546)	0.0265*** (0.0089)	0.0267*** (0.0079)	0.0497 (0.0377)
G-Index	-0.0050 (0.0084)	-0.0169* (0.0098)	-0.0552** (0.0267)	-0.0261*** (0.0047)	-0.0172*** (0.0042)	-0.0824*** (0.0171)

<i>Loan and firm financial control variables</i>						
Loan size	-0.0914*** (0.0238)	-0.0857*** (0.0289)	0.0497 (0.0846)	-0.1527*** (0.0152)	-0.1181*** (0.0155)	-0.1220** (0.0606)
Loan maturity	0.0062*** (0.0009)	0.0071*** (0.0011)	0.0250*** (0.0027)	0.0042*** (0.0006)	0.0069*** (0.0005)	0.0152*** (0.0020)
Market capitalization	-0.2303*** (0.0351)	-0.2218*** (0.0433)	-0.3503*** (0.1169)	-0.4129*** (0.0214)	-0.3175*** (0.0217)	-0.6727*** (0.0710)
Investment grade	-0.9692*** (0.0377)	-0.7304*** (0.0633)	-1.4679*** (0.1713)	-0.9266*** (0.0216)	-0.7096*** (0.0361)	-1.6104*** (0.0834)
Leverage	0.2005*** (0.0351)	0.1887*** (0.0441)	0.4030*** (0.1207)	0.2948*** (0.0195)	0.2199*** (0.0197)	0.5366*** (0.0673)
Sales turnover	-0.0499 (0.0327)	-0.0674* (0.0364)	-0.1509 (0.1211)	-0.0370** (0.0140)	-0.0336* (0.0182)	-0.2007*** (0.0642)
ROA	-0.1746*** (0.0519)	-0.1559*** (0.0599)	-0.3560** (0.1567)	-0.2942*** (0.0231)	-0.2396*** (0.0252)	-0.0520 (0.0793)
Market to book	-0.0365 (0.0255)	-0.0127 (0.0268)	-0.1962** (0.0982)	-0.0949*** (0.0141)	-0.0534*** (0.0136)	-0.1719*** (0.0555)
Year dummies	Yes	Yes	Yes	Yes	Yes	Yes
Industry dummies	Yes	Yes	Yes	Yes	Yes	Yes
<i>F</i> -value	101.05***	22.03***	12.97***	422.20***	61.31***	49.01***
Adjusted <i>R</i> ²	0.6884	0.5756	0.2733	0.7246	0.5969	0.4004
<i>N</i>	816	522	574	2,882	2,452	1,295

***, **, and * denote statistical significance at the 1%, 5%, and 10%, respectively.

Table 7: Robustness Checks

This table provides robustness tests results. In columns 1 and 2, we re-test models related to covenant index in Table 3 by substituting the covenant strictness measure developed by Murfin (2012) as the dependent variable. Columns 3 and 4 present the second stage of a two-stage least squares model where loan purpose categories are regressed on loan spread, using an instrumental variables approach to control for the potentially endogenous relation between board quality and loan costs. The instrument used for the board quality index is the distance between the headquarters of borrowing firms and the log of one plus the nearest medium or large airport hub as defined by the FAA in 1998. Analyses in columns 5 and 6 only include loans for firms without loans (found in DealScan) for the preceding 2 years. Analyses in columns 7 and 8 only include loans with a single tranche, so that the loan is made for a single, versus multiple purposes. Analyses in columns 5 through 8 relate loan purpose effects on loan spread. Loan data are extracted from DealScan for firms obtaining loans from 1998 to 2006 that have governance data available from RiskMetrics for the year prior to the loan. Loan purpose section shows the relationship between the expected designated uses of loan proceeds and loan terms. Loan purposes are reported both individually, as well as a binary variable *Restructure*. *Restructure* is coded as 1 if loan purpose is for acquisition line, debt repayment, LBO, spinoff, and takeover; *Restructure* is coded 0 if loan purpose if for CP backup, corporate purposes, and working capital. Corporate governance section is based on data obtained from RiskMetrics. The *board quality index* in the 2SLS analysis is calculated by assigning point values to the statistically significant individual board quality characteristics from Table 3. Other corporate governance variables include board size, the percentage of directors with no direct ties to the firm (*Independence*), the percentage of directors with three or more board seats at major for-profit firms (*Busyness*), tenure, the number of board members with expertise background (*Expert present*), the percentage of female directors to board size, (*Female presence*), the percentage of directors from outside the U.S. to board size (*International*), the proportion of directors ethnic minority background to board size (*Ethnic minority*), the percent of firm’s equity held by members of the board of directors (*Board vote power*), and *G-Index* is a 24-item anti-takeover governance provisions index adopted from Gompers, Ishii, & Metrick (2003). *Loan size* is the natural log of the tranche amount of loan allotted for a specific use designation and *Loan maturity* indicates the natural log of the lifespan of the loan measured in months. Data for firm financial characteristics come from Compustat. *Market capitalization* is the natural log the market value of equity; *Leverage* is the ratio of total debt held by firm to total assets; *Sales turnover* is measured as firm’s total annual sales revenue divided by total assets; *ROA* is the ratio of EBITDA to total assets; and *Market to book* is the ratio of book assets minus book equity plus market equity over book assets.

	Murfin – Covenant Strictness		Two-Stage Least-Square		No loans within last 2 years		Loans with single purpose	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Intercept	1.2296*** (0.1211)	1.2989*** (0.1130)	10.083*** (0.9956)	9.8871*** (0.9499)	10.171*** (1.3425)	10.382*** (1.3004)	10.7019*** (1.5874)	9.0001*** (1.4593)
<i>Loan purpose categories</i>								
Acquisition line	0.1618*** (0.0514)		1.4254*** (0.4324)		1.5464*** (0.3834)		0.7350* (0.4355)	
Debt repayment	0.1096** (0.0473)		0.9319** (0.3779)		1.3839*** (0.3075)		0.0990 (0.3693)	
LBO	0.1979*** (0.0593)		3.2566* (1.8928)		3.7780*** (0.3821)		4.4074*** (0.4103)	

Spinoff	0.2534*** (0.0701)		4.1989*** (0.5912)		4.2070*** (0.5238)		1.8808** (0.8411)	
Takeover	0.1571*** (0.0481)		1.8086*** (0.3809)		2.2097*** (0.3111)		1.0001*** (0.3017)	
CP backup	-0.0352 (0.0483)		-0.3582 (0.3914)		-0.0382 (0.3180)		-1.0773*** (0.3701)	
Corporate purposes	-0.0439 (0.0465)		0.4072 (0.3663)		-0.6819** (0.2959)		-0.4548 (0.3521)	
Working capital	-0.0596 (0.0463)		-0.5178* (0.3016)		-0.8549** (0.2944)		-0.1363* (0.0849)	
Restructure		0.1072*** (0.0109)		1.0458*** (0.1006)		1.1573*** (0.1182)		0.8864*** (0.1304)
<i>Corporate governance characteristics</i>								
Board quality index			-0.1265*** (0.0401)	-0.1084*** (0.0413)				
Board size	-0.0059* (0.0031)	-0.0066** (0.0032)			-0.0930*** (0.0300)	-0.0466 (0.0352)	-0.0336 (0.0275)	-0.0351 (0.0395)
Independence (%)	-0.0073** (0.0028)	-0.0094*** (0.0028)			-0.6355** (0.3311)	-0.1025*** (0.0375)	-0.8749** (0.3979)	-0.1111** (0.0458)
Busyness (%)	-0.0075*** (0.0027)	-0.0073*** (0.0027)			-0.0806** (0.0355)	-0.1228*** (0.0372)	-0.0048 (0.0302)	-0.0139 (0.0319)
Tenure	-0.0028** (0.0012)	-0.0023* (0.0012)			-0.0395*** (0.0134)	-0.0323** (0.0138)	-0.0405*** (0.0141)	-0.0427*** (0.0319)
Expert present	-0.0056** (0.0025)	-0.0032 (0.0024)			-0.0262 (0.0306)	0.0013 (0.0301)	0.0501* (0.0294)	0.0695** (0.0297)
Female present	0.0181*** (0.0063)	0.0172*** (0.0064)			0.0243 (0.0740)	0.0345 (0.0745)	-0.1287** (0.0621)	-0.1434** (0.0632)
International	-0.0529*** (0.0101)	-0.0545*** (0.0103)			0.2485** (0.1228)	0.2836** (0.1230)	0.2298** (0.1129)	0.1732 (0.1239)
Ethnic minority	-0.0188** (0.0076)	-0.0137* (0.0076)			-0.1441* (0.0842)	-0.1946** (0.0872)	0.1039 (0.0779)	0.0703 (0.0780)
Board vote power	0.0061** (0.0030)	0.0047 (0.0035)			-0.0016 (0.0437)	-0.0382 (0.0439)	-0.0559 (0.0476)	-0.0435 (0.0495)
G-Index	-0.0039** (0.0019)	-0.0038** (0.0019)	-0.0815*** (0.0178)	-0.0792*** (0.0182)	-0.0642*** (0.0206)	-0.0543** (0.0211)	-0.0577*** (0.0215)	-0.0552*** (0.0235)
<i>Loan and firm financial characteristics</i>								

Loan size	-0.0207*** (0.0065)	-0.0231*** (0.0066)	-0.2265*** (0.0553)	-0.2182*** (0.0566)	-0.2128*** (0.0618)	-0.2039*** (0.0728)	-0.2037*** (0.0786)	-0.1410* (0.0730)
Loan maturity	0.0016 (0.0020)	0.0031 (0.0019)	0.0198*** (0.0021)	0.0231*** (0.0021)	0.0197*** (0.0025)	0.0224*** (0.0025)	-0.0022 (0.0029)	-0.0001 (0.0029)
Market capitalization	-0.0877*** (0.0083)	-0.0897*** (0.0085)	-0.8752*** (0.0752)	-0.8567*** (0.0776)	-0.8586*** (0.0893)	-0.8479*** (0.0935)	-0.8213*** (0.0987)	-0.8562*** (0.1031)
Leverage	0.0982*** (0.0082)	0.0953*** (0.0083)	0.8169*** (0.0716)	0.7566*** (0.0732)	0.8535*** (0.0883)	0.7761*** (0.0902)	0.4873*** (0.0911)	0.4387*** (0.0933)
Sales turnover	-0.0545*** (0.0074)	-0.0517*** (0.0075)	-0.2762*** (0.0745)	-0.2454*** (0.0768)	-0.2847*** (0.0895)	-0.2392*** (0.0886)	0.0305 (0.0818)	0.0442 (0.0841)
ROA	-0.0611*** (0.0096)	-0.0665*** (0.0098)	-0.2947*** (0.0919)	-0.4109*** (0.0951)	-0.3292*** (0.1121)	-0.4024*** (0.1066)	-0.1223 (0.1022)	-0.2075* (0.1117)
Market to book	-0.0126*** (0.0063)	-0.0131** (0.0065)	-0.2973*** (0.0642)	-0.3014*** (0.0662)	-0.3047*** (0.0729)	-0.3156*** (0.0696)	-0.1779*** (0.0661)	-0.1927*** (0.0686)
Year dummies	Yes							
Industry dummies	Yes							
Adjusted R^2	0.3349	0.3220	0.3193	0.2930	0.3288	0.3032	0.2652	0.2385
N	2,023	1,997	1,822	1,795	1,372	1,356	990	971

***, **, and * denote statistical significance at the 1%, 5%, and 10%, respectively.