# Do lenders influence borrowers' mandatory disclosures? Evidence from redacted credit agreements

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### Abstract

I examine whether lender incentives are related to the redaction or non-disclosure of potentially material information from credit agreements of public firms. Using a novel dataset, I find evidence that when lenders invest more in screening and monitoring the borrower or when lenders earn abnormal profits from the loan, credit agreements are more likely to have potentially material information redacted. Furthermore, consistent with the notion that the withholding of information from credit agreements gives current lenders an information advantage, I find that borrowers with redacted credit agreements are more likely to issue subsequent loans with the same lead arranger. Finally, a detailed analysis of credit agreements suggests that firms often withhold potentially material information without the Security and Exchange Commission's granting a request for confidential treatment.

November 2019

Keywords: Disclosure, Banks, Redacted Credit Agreements JEL Classification: G32, G21, C78, L14

\* I thank David Aboody, Judson Caskey, Andrew Finley, Henry Friedman, Jack Hughes, Thomas Kubick, Brett Trueman, Rodrigo Verdi, Joe Weber, Regina Wittenberg-Moerman and seminar participants at Claremont McKenna College, the University of California, Irvine, and the University of Nebraska, Lincoln for helpful suggestions. I also thank Andrew Strehle (Brown Rudnick LLP), James E. Bedar (Brown Rudnick LLP), and Luis Paz-Galindo (Blue Road Capital) for helpful discussions. Moreover, I thank Gabriella Kernke for excellent research assistance. I gratefully acknowledge the financial support of the UCLA Fink Center for Finance and Investments. All errors are my own.

### **1. Introduction**

Despite lenders' playing a prominent role in supplying capital to corporations, there is little empirical evidence about whether lenders influence mandatory disclosures of the borrower. Given that lenders and shareholders have different payoff functions with respect to the borrower's assets, it is likely that their preferences with respect to the borrower's disclosures are not fully aligned. In this study, I provide evidence that lender incentives to keep material information private influences the withholding of information from credit agreements of public firms. I focus on credit agreements because lenders often negotiate rights to review and make suggestions about what loan-related information should be made public. Borrowers will reasonably consider lenders' demands and potentially request from the Security and Exchange Commission (SEC) confidential treatment for relevant parts of the credit agreement.<sup>1</sup>

Regulation S-K requires all material agreements into which a firm enters to be filed with its 8K, 10K, 10Q, or registration statements. If a contract is definitively material in that all of the firm's auditors, the SEC, and plaintiff's bar conclude that an average investor ought to be informed, then the firm must disclose the contract (Verrecchia and Weber 2006). Loan contracts usually meet this threshold and, thus, need to be disclosed. The SEC does provide firms, however, with an element of discretion by allowing firms to request that proprietary information contained within the contract be withheld. If the SEC grants the firm's request for confidentiality, financial statement users will have no access to the redacted data (although the SEC will). By redacting data, firms are able to avoid disclosing information that they deem proprietary, thereby reducing the overall amount of information that is disclosed to the public.

<sup>&</sup>lt;sup>1</sup> I am grateful for the numerous discussions I have had on this topic with practitioners working in financial institutions and lawyers who specialize in syndicated loan contracts.

My first prediction builds on the idea that lenders seek compensation when they invest in the production of information (Sharpe 1990; Rajan 1992; Petersen and Rajan, 1994). I predict that when lenders invest more in the production of information, credit agreements are more likely to be redacted. Lenders might demand that information be redacted from credit agreements to compensate them for their costly due diligence and monitoring efforts. The redaction of information would protect lenders' profits by making it more difficult for either outside lenders to compete for the borrower or for other borrowers to observe potentially favorable credit terms. Given that larger lending syndicates tend to invest less in diligence and monitoring efforts (Sufi 2007; Ball, Bushman, and Vasvari 2008), I predict that they are less likely to demand that information be redacted from the credit agreement. Borrowers might accede to the request of smaller syndicates to redact information because in return they would benefit from increased monitoring by lenders. This is based on evidence that monitoring private information is most efficiently delegated to a bank rather than collected directly by many investors (Diamond 1984; Diamond 1991; Beatty, Liao, and Weber 2012). That said, I might find no relation between information production and redaction of credit agreements because there might be too much competition for publicly traded borrowers to allow lenders to influence disclosure policy.

My second prediction builds on the idea that lenders will seek to extract additional benefits when they can hold up the borrower because they are in a favorable bargaining situation (e.g., Hart and Moore 1988). I predict that when lenders are extracting abnormal profits from the current loan, their incentives to request the withholding of material information from the agreement increases. By reducing disclosure, banks benefit because neither competing lenders nor other borrowers can observe relevant information. Borrowers might have no choice but to accede to this request due to their low bargaining power. To proxy for abnormal loan profits or higher lender bargaining power, I use excess loan spreads relative to other loans issued by borrowers in the same industry.

To determine whether potentially material information has been excluded or redacted from publicly disclosed credit agreements is non-trivial. While the borrower is required to request authorization from the SEC in order to redact material information, it is *ex-ante* unclear to what extent firms strictly follow guidelines. To provide a detailed analysis, I hand-collect information from a large sample of credit agreements to determine whether and what potentially material information is not being disclosed. In particular, to increase my chances of finding results while keeping hand-collection manageable, I focus in my tests on credit agreements with borrowers who have higher agency problems or conflicts of interest with lenders.<sup>2</sup> These borrowers likely would benefit more from increased monitoring but are also subject to less bargaining power with lenders trying to influence disclosures.

I classify credit agreements as being redacted if any of the following two scenarios applies. First, I classify contracts as being redacted if the SEC grants a firm's request to withhold information from investors in its loan contract filings. By hand-collecting information from the debt contracts, I am able to identify whether the SEC granted the request and what sections of the debt contract have been redacted. Second, I classify contracts as being redacted if some or all fees charged by lenders are detailed in a separate, not disclosed document or fee letter. Based on anecdotal evidence, borrowers do closely follow the SEC directives to disclose when information in the main body of the contract has been redacted. However, this directive is less strictly followed when it comes to ancillary documents of the main contract (e.g., exhibits, schedules, or fee letters).

<sup>&</sup>lt;sup>2</sup> As detailed in the sample selection section, I focus on credit agreements that have a capital expenditure covenant, based on evidence in Nini, Smith and Sufi (2009) that borrowers with this covenant have particularly high agency costs. Credit agreements with this covenant correspond to about 25% of all the contracts available in Dealscan.

These documents often contain potentially material information such as the fees that lenders are charging. Lenders do not want this information to be known to protect profits or so that other customers are not aware of them.

Lenders charge a variety of fees (e.g., commitment fees, letter of credit fees, origination fees, administrative agent fees, monitoring fees, late fees, auditing fees), which can be material. For example, in the loan of Classic Cable Inc. from November 13, 2001, commitment fees equal 2.50% and arrangement fees equal 0.75% of the initial revolving credit commitment. In addition, the contract includes a servicing fee (0.25% to each the administrative agent and the arranger), an anniversary fee (0.50%), an extension fee (0.50%), among other fees. By hand-collecting information from the debt contracts, I am able to identify whether the contract refers to a separate, not disclosed fee document.

I find that almost 73% of the contracts in my sample are redacted. However, surprisingly, less than 1% of the debt contracts stipulate that the SEC has granted the borrower's request to withhold information. Fee information is often withheld without SEC approval. Alternatively, firms might not always consider fee information to be material. That said, certain borrowers in my sample have been granted SEC approval to withhold fee information. For example, in the credit agreement for Viasat Inc. from December 31, 2002, fee information has been redacted with SEC authorization.

For my first prediction, I find a significant negative relation between larger loan syndicates and redacted credit agreements. Contracts with larger syndicates, defined as those in the top quartile of syndicate size, are almost 6% less likely to have potentially material information redacted. This finding is consistent with lenders being less likely to request the withholding of material information when they invest less in the screening and monitory of borrowers. For my second prediction, I find that when lenders earn abnormal profits from the loan, contracts are more likely to be redacted. A one standard deviation increase in abnormal profits is associated with a 2.3% increase in the likelihood that the borrower withholds information from the contract. This finding suggests that lenders use their bargaining power to request the withholding of material information.

I enhance my tests of lender incentives on credit agreement redaction by partitioning the sample into high and low information asymmetry firms. I expect my results to be driven by high information asymmetry firms as they have a greater need for lender monitoring and/or are in a weaker bargaining situation. Following Sufi (2007), I employ the below median number of previous relationships with lenders in the syndicated loan market, non-existence of a credit rating, and below median firm size as indications of high asymmetry. Consistent with lender incentives affecting mandatory disclosures, I find that my results are driven by the high asymmetry sample.

As a robustness check, I conduct analysis by focusing only on contracts where the SEC grants a firm's request for confidential treatment. I do this to provide evidence that my results are not solely driven by the redaction of fee information. I continue to find that larger syndicates are negatively, and abnormal loan profits are positively, related to the incidence of redacted credit agreements. However, only the coefficient on abnormal loan profits is statistically significant.

I also explore consequences of redacting potentially material information from debt agreements. In particular, I investigate whether redacting credit agreements, which is a proxy for lenders' private information about the borrower, increases incumbent lenders' likelihood of arranging the borrower's next loan. Given that all loans in my sample correspond to public borrowers and that they operate in a rich information environment, it is *ex-ante* not clear whether this will be the case. In particular, if competition for borrowers is high and outside lenders are less

likely to face a winner's curse in competing to lend to the borrower, then these borrowers should not face adverse selection. Consistent with the notion that the withholding of information from credit agreements gives current lenders an information advantage, I find that borrowers with redacted credit agreements are more likely to issue subsequent loans with the same lead arranger. In terms of economic magnitude, I find that borrowers with redacted credit agreements have a 7.3% higher likelihood of issuing their next loan with the same lead lender.

The main contribution of the paper is in providing evidence that lender incentives influence mandatory disclosures. Despite lenders being a major source of financing to corporations, little is known about whether lenders shape mandatory corporate disclosures. My findings that lenders play a role in shaping these disclosures and that they benefit from the resulting information advantage add new insights to a larger literature that investigates determinants and consequences of corporate disclosures (see Leuz and Wysocki 2016; Roychowdhury, Shroff, and Verdi 2019; Blankespoor, deHaan, and Marinovic 2019 for recent reviews).

My study also complements prior research that has shown that lenders play a critical role in providing high information asymmetry firms with financing (Fama 1985; Diamond 1991; Rajan 1992; see Armstrong, Guay, and Weber 2010; Christensen, Nikolaev and Wittenberg-Moerman 2016 for recent reviews). Despite lenders making an important contribution to society by reducing information asymmetry through the production of private information, little is known about how lenders are able to gain an information advantage that allows them to recoup their initial investment. My paper contributes to this literature by providing insights into the lending dynamics for a sample of public firms that require significant production of information. I find that lenders are able to protect their private information by requiring the redaction of material information from credit agreements. Furthermore, consistent with the notion that the withholding of information from credit agreements gives current lenders an information advantage, I find that borrowers with redacted credit agreements are more likely to issue subsequent loans with the same lead arranger.

My paper is most closely related to Verrecchia and Weber (2006), who provide initial evidence that firms redact information from their material contract filings and that this decision leads to a deterioration of measures of adverse selection. My findings complement theirs by providing evidence that lender incentives play a role in the redaction of credit agreements. Moreover, my study suggests that information redaction is more prevalent than what can be inferred from requests for confidential treatment granted by the SEC. My study is also related to Vashishtha (2014), who provides evidence that lenders influence voluntary disclosures (management forecasts) following covenant violations, and to Lo (2014), who provides evidence that declines in bank health affect borrowers' forward-looking voluntary disclosures. My contribution to this literature is in providing evidence that lenders shape mandatory disclosure at loan initiation.

The remainder of the paper is organized as follows: Section 2 discusses prior research, institutional background, and empirical predictions. Section 3 presents the data and main variables. Section 4 discusses the empirical results. Section 5 presents additional tests. Section 6 concludes.

## 2. Prior research, institutional background, and empirical predictions

## 2.1. Prior research

In terms of research about redacted disclosures, my study is closest to Verrecchia and Weber (2006). They find that when firms redact information, measures of adverse selection worsen. In particular, the authors provide evidence that when firms redact information, contemporaneous measures of the adverse selection component of the bid-ask spread rise, market depth deteriorates and share turnover falls. They also find that firms are less likely to redact when

they issue long-term debt and are more likely to redact when they are in a competitive industry or experience losses.

In terms of research about how lenders affect disclosures, my study is closest to a number of papers that examine effects on voluntary disclosures. Vashishtha (2014) finds that firms reduce management forecasts following covenant violations. A series of analyses suggest that part of this decline in disclosure reflects a delegation of monitoring to banks by shareholders who consequently demand less disclosure. Lo (2014) examines whether declines in banks' financial health affect their borrowers' voluntary disclosures. Using the emerging-market financial crises in the late 1990s as shocks to the health of certain U.S. banks, Lo finds that affected banks' U.S. borrowers increase both the quantity and informativeness of their management forecasts following these shocks compared to borrowers of unaffected banks. Chen and Vashishtha (2017) use the incidence of conference calls as their main measure of disclosure, and find that borrowers significantly increase disclosure after their lending banks engage in M&As. My study complements these studies by providing evidence that lenders' incentives play a role in shaping borrower's mandatory disclosures.

#### 2.2. Institutional background

Regulation S-K requires all material debt contracts into which a firm enters to be filed with its 8K, 10K, or 10Q. The borrower can, however, make a request to the SEC so that proprietary information contained within the contract be withheld. By redacting data, firms are able to avoid disclosing information that they deem proprietary, thereby reducing the overall amount of information that is disclosed to the public. These requests of confidential treatment are usually approved by the SEC and are relatively inexpensive.<sup>3</sup>

<sup>&</sup>lt;sup>3</sup> External lawyer fees are around \$5,000-\$20,000.

Based on anecdotal evidence, borrowers do closely follow the SEC directives to disclose when information in the main body of the contract has been redacted. However, this directive is less strictly followed when it comes to ancillary documents of the main contracts such as schedules, exhibits, collateral documents, or fee letters. These documents often contain material information that is not disclosed to the public. For example, fee letters detail the fee structure of the contract. Lenders do not want this information to be known to protect profits or so that other customers are not aware of them.

#### 2.3. Main predictions

As mentioned earlier, my first prediction is that the investment made by lenders in information production is related to the likelihood of a redaction of material information in credit agreements. In particular, I expect that larger lending syndicates are less likely to have a redacted credit agreement. The idea is that when the syndicate is large, the lead arranger has fewer incentives to conduct due diligence because it keeps a smaller fraction of the loan. In addition, a larger syndicate reduces the value of information acquisition to any one individual bank (Thakor 1996). Moreover, the presence of multiple lenders in larger syndicates can cause too much competition *ex post* that can discourage investment in the production of information. Shareholders, in turn, would be willing to redact credit agreements if in return they benefit from the increased monitoring that comes from a smaller syndicate.<sup>4</sup>

My second prediction is that when lenders are in a superior bargaining position as evidenced by their ability to extract abnormal profits, their incentives to withhold material

<sup>&</sup>lt;sup>4</sup> For example, lenders often use working capital or liquidity covenants to monitor the borrower. The contract will specify that the firm's working capital not fall below some minimum. If this covenant is violated, the lead lender as delegated monitor can determine whether the shortfall is necessary (*e.g.*, to buy inventory for growing the business) or whether the borrower is in financial trouble. If each shareholder were to monitor the firm's cash balances, then this would be extremely inefficient and costly.

information such as loan fees from loan agreements increases. By reducing disclosure, banks are in a better position to protect their profits from competing lenders or other borrowers.

### 3. Data

#### 3.1. Sample

While the borrower is required to request SEC authorization in order to redact material information, it is ex-ante unclear to what extent firms strictly follow guidelines. To determine whether and what parts of credit agreements have been redacted while keeping hand-collection manageable, I focus on a sample of firms with significant due diligence needs: Nini, *et al.* (2009) suggest that contracts with a capital expenditure covenant are particularly sensitive to information problems. I start with Dealscan observations that I can link to Compustat using the Roberts Dealscan–Compustat link (August 2012 vintage, see Chava and Roberts 2008). I also require sufficient data with loan terms and control variables. Furthermore, I exclude financial (SIC 6000-6999) and regulated firms (4900-4999), consistent with prior research. I also exclude contracts without financial covenant information to ensure that the information collected by Dealscan is reliable.<sup>5</sup> This leaves 11,017 deal packages issued between 1995 and 2012.<sup>6</sup> Of these observations, 2,646 deal packages have a capital expenditure covenant.

Finally, to determine whether loan agreements are redacted, I manually match each of these 2,646 loan packages to the corresponding loan contract from Edgar. Loan contracts are

<sup>&</sup>lt;sup>5</sup> I impose this requirement to ensure that Dealscan has accurately collected all relevant terms of the contract. Contracts that list missing covenant information are often data errors (Beatty et al. 2008).

<sup>&</sup>lt;sup>6</sup> Loan or deal packages are sets of loan facilities from the same lead lender to the same borrower. For example, a single loan package may include two separate facilities, a revolving line of credit, and a term loan. Because all facilities in a loan package are subject to the same covenants, my analysis is at the package level.

usually attached to 8-K, 10-Q, or 10K fillings. I am able to match successfully 83% of these contracts, leading to a sample of 2,204 loan contracts.<sup>7</sup> Table 1 provides the details.

### 3.2. Redacted credit agreements

I classify credit agreements as being redacted if any of the following two scenarios applies. First, I classify contracts as being redacted if the SEC grants a firm's request to withhold information from investors in its loan contract filings (*requests for confidential treatment*). Second, I classify contracts as being redacted if some or all fees charged by lenders are detailed in a separate, not disclosed document or fee letter (*missing fee information*). I elaborate on this next.

#### 3.2.1. Requests for confidential treatment

The first scenario in which I classify a contract as being redacted is where the SEC grants a firm's request to withhold information from investors in its material contract filings, presumably because the information is proprietary. For this purpose, I search debt contracts for the key phrase "Confidential Treatment" or "Redacted."<sup>8</sup> To make sure that the contract has indeed been redacted, I read the relevant contract sections and classify contracts as *Confidential Treatment* if potentially material information has been redacted. These redacted agreements typically leave out information about fees, covenants, patents or bank account information. For my sample, I find that fewer than 1% of all contracts have gotten SEC approval for confidential treatment.

The revolving credit agreement for VIASAT, INC. from December 31, 2002 provides an example of confidential information that has been omitted and filed with the SEC pursuant to a

<sup>&</sup>lt;sup>7</sup> In robustness tests, I also conduct analysis when excluding loan amendments and find similar results.

<sup>&</sup>lt;sup>8</sup> Loan contracts often contain sections marked as "deleted," "reserved," or "intentionally deleted." Conversations with practitioners suggest that these sections are unlikely to be redacted. Rather, contracting parties used them as placeholders when drafting the initial contract. Nevertheless, I do collect information for all contracts that include these terms and provide a robustness test in section 5.3 of the paper.

request for confidential treatment. Here are excerpts of the agreement, with \*\*\* denoting information that has been redacted:

3.1 Principal and Interest... (b) Interest accrued on each Base Rate Loan shall be due and payable on each Monthly Payment Date. ..., the unpaid principal amount of any Base Rate Loan shall bear interest at a fluctuating rate per annum equal to the Base Rate plus \*\*\*%...
3.2 Closing Fee. On the Closing Date, Borrower shall pay to the Administrative Agent, for the ratable benefit of the Lenders, a one-time, non-refundable fee in the amount of \$\*\*\*.
6.12 Leverage Ratio. Permit the Leverage Ratio to be greater than \*\*\* to 1.00 as of December 31, 2002 or greater than \*\*\* to 1.00 as of March 31, 2003 and June 30, 2003.

The loan agreement for Hexcel Corporation from July 9, 2010 provides another example of confidential information that has been omitted and filed with the SEC pursuant to a request for confidential treatment. Here are excerpts of the agreement, with \*\*\*\*\* denoting information that has been redacted:

#### <u>CERTAIN ASSET SALES</u>

1. Hexcel Corporation's land located in Livermore, California, may be sold in one or a series of transactions.

- *2. Hexcel's land and facilities in [\*\*\*\*\*].*
- *3. Unimproved land located in Lodi, New Jersey.*
- 4. The land and manufacturing facility of [\*\*\*\*\*] in [\*\*\*\*\*].
- 5. *Hexcel's equity interest in [\*\*\*\*\*].*

Table 2 provides descriptive statistics about the type of information that has been redacted from the credit agreements. The first four rows relate to terms that are specific to the loan agreement (*i.e.*, covenants, prepayment and other terms, fees and interest rate), whereas the remaining items correspond to information that is specific to the firm such as potential mergers or litigation risk. For example, I find that 42 (16) % of the redacted credit agreements authorized by

the SEC withhold covenant (prepayment) related information. Another 11% redact the fees that the borrower needs to pay lenders. An additional 11% of the contracts redact information related to how future interest rates will be determined (*e.g.*, by not fully disclosing performance pricing provisions).

In terms of firm-specific information, 37 (21) % of the contracts withhold information about items such as bank account references, schedules, or inventory (sale contracts, mergers, or investments). Another 11% of the contracts redact information related to litigation risk, and 5% of the contracts withhold information either about patents or lease terms.

#### 3.2.2. Missing fee information

The second scenario in which I classify a contract as being redacted is where some or all fees charged by lenders are detailed in a separate, undisclosed document or fee letter. Based on anecdotal evidence, borrowers do closely follow the SEC directives to disclose when information in the main body of the contract has been redacted. However, this directive is less strictly followed when it comes to ancillary documents of the main contracts such as fee letters.

Lenders charge a variety of fees, which can be material. For example, in the credit agreement of Pilgrim's Pride Corporation from December 2, 2008 origination fees equal to 2.5% of loan commitments (among other fees). Some of these fees are paid at loan initiation (e.g., origination fees), while others are paid on a regular basis during the life of the contract (e.g., administrative agent fees, monitoring fees, or auditing fees). Moreover, there is some variation about how much fee information is disclosed. Some contracts detail all the relevant fees in a separate document, while others partially disclose fee information (e.g., commitment fees are rarely missing).

Below is an example that corresponds to excerpts from the credit agreement for Moog Incorporated from October 25, 2006. The contract suggests the existence of a side letter with confidential information including lender fees. Even though this information might be material, the contract does not provide evidence that the borrower requested confidential treatment from the SEC.

2.16 <u>Upfront Fees</u>. Borrower shall pay to each of the Lenders on the Closing Date the upfront fees in the amounts determined for each Lender in accordance with the term sheet dated August 18, 2006 contained in the Confidential Information Materials.

For my sample, I find that 72.5% of all contracts have missing fee information. In most cases, these contracts have not gotten SEC approval for confidential treatment.

#### *3.3. Summary Statistics*

Table 3 presents descriptive statistics for the variables in this study. Almost 73% of the contracts have been redacted. However, less than 1% of the loans have been granted a request for confidential treatment by the SEC. This finding suggests that firms do not always consider fee information to be material or that they are not requesting confidential treatment from the SEC. *Large Syndicate*, which is a dummy variable for contracts with syndicate size in the top quartile of the distribution, has a mean value of 28.2%. In untabulated statistics, I find that the median number of lenders is equal to 4 and the 75<sup>th</sup> percentile of the distribution is equal to 8. These values suggest that the syndicates in the sample are relatively concentrated. Industry adjusted loan spreads have by definition a mean of zero. In addition, I find that mean profitability is negative. Moreover, 16.4% of the sample pertain to firms in high tech industries and 24.5% to firms in industries more exposed to litigation risk.

### 4. Empirical analysis

#### 4.1. Econometric specification

As mentioned earlier, I expect that larger syndicates that invest less in the production of information are less likely to require that potentially material information be redacted from the agreement. Moreover, I expect that when lenders are earning abnormal profits from the loan, they are more likely to require that potentially material information be redacted from the agreement. I estimate the following specification: <sup>9</sup>

# $Redacted = \beta_0 + \beta_1 Large Syndicate + \beta_2 Industry Adj. Loan Spread + \beta_3 Controls + \vartheta.$ (1)

Here the outcome variable of interest is *Redacted*, which is a dummy for whether the borrower has been granted confidential treatment of certain information by the SEC or the agreement does not disclose all fee information. The first explanatory variable of interest is *Large Syndicate*, which is equal to one if the size of the loan syndicate is in the top quartile of syndicate size. My prediction is that  $\beta_1$ <0, suggesting that larger syndicates are less likely to have redacted credit agreements. The second explanatory variable of interest is *Industry Adjusted Loan Spread*, which is equal to the loan spread charged to the borrower in excess of the loan spread charged to peers in the same Fama and French 48 industry. My prediction is that  $\beta_2$ >0, suggesting that when lenders are earning abnormal profits because they are in a stronger bargaining position, credit agreements are more likely to be redacted.

I include controls for a number of firm characteristics that might affect the redaction of credit agreements following Verrecchia and Weber (2006). One is the level of competitiveness in a firm's product market. The theoretical literature offers conflicting arguments as to how

<sup>&</sup>lt;sup>9</sup> Consistent with the suggestion in Angrist and Pischke (2009), I use a linear probability model as opposed to a nonlinear limited dependent variable model. This allows for the easy interpretation of the coefficients.

competition affects the firm's decision to disclose proprietary information. Darrough and Stoughton (1990) argue that greater competition fosters greater disclosure as a device to thwart entry into a product market. Alternatively, Verrecchia (1990) argues that greater competition inhibits disclosure in markets comprised of mature competitors (*i.e.*, post-entry). The conflicting theoretical predictions suggest that it is not clear how competition affects a firm's decision to redact material contract information. To proxy for product market competition, I use *Hindex*, which is the rank of the industry's Herfindahl index. The Herfindahl index is calculated as the sum of the squared market share of each publicly traded company in a particular two-digit SIC code. Market share is calculated as the sales of a particular company divided by the total sales of the SIC code.

Another control variable is profitability. Lang and Lundholm (1993) argue that it is not clear how firm performance affects the decision to disclose. Profitable firms may choose not to disclose because disclosure encourages entrance and competition. Alternatively, if there are costs to disclosure, then more profitable firms have stronger incentives to disclose and reduce costs that result from adverse selection. Thus, it is not clear whether profitability is positively or negatively associated with the extent of disclosure. The variable *Profitability* is defined as net income divided by total assets.

I also include firm age as a control variable that might affect credit agreement redaction. However, the effect could go in either direction. On one hand, younger firms have incentives to reduce disclosure about proprietary information. On the other hand, these firms also have incentives to increase disclosure to access capital. *Firm age* is the number of years that the firm has been in the Compustat database. I also control for firm size and growth opportunities, which might affect disclosures. *Size* is calculated as the natural logarithm of total assets. I proxy for growth opportunities using the *Market-to-Book* ratio, which is the ratio of the market value of equity plus the book value of liabilities to the book value of assets. I also control for the number of previous deals that the borrower has closed with members of the syndicated loan market in the past. Firms accessing the syndicated loan market multiple times are better known to the banking community (Sufi 2007), and this could affect incentives to redact information. *# Previous Loans* is calculated at the Dealscan level.

I also control for borrowers operating in high tech industries. These firms might have higher incentives not to redact credit agreements to finance future projects. Alternatively, these firms might want to redact information to keep competitors in the dark. Following Brown, Fazzari, and Petersen (2009), *High Tech* is a dummy equal to one if the borrower is in a hightech industry (SIC codes 283, 357, 366, 367, 382, 384, and 737), and zero otherwise. Furthermore, I would expect that firms in industries more exposed to litigation are more likely to hide information to prevent potential litigation. Following Kim and Skinner (2012), Litigation *Risk* is a dummy equal to one if the borrower is in the biotech (SIC codes 2833–2836 and 8731– 8734), computer (3570–3577 and 7370–7374), electronics (3600–3674), or retail (5200–5961) industry, and zero otherwise. I also control for the firm's business uncertainty or volatility. Cash Flow Volatility is equal to the volatility of cash flows scaled by mean non-cash assets over the previous five years. I control for the size of the loan provided to the borrower. When the loan is larger, lenders might have higher incentives for the borrower not to disclose material information. Moreover, it is essential to control for the size of the loan because it is an important determinant of syndicate size (Saavedra, 2018). Deal Amount is equal to the size of the loan deal and is measured in millions of USD. I also control for the length of the loan. Lenders might have higher incentives to protect profits when the maturity of the loan is longer. *Maturity* is equal to the

weighted average loan maturity in a loan deal. All variables used in this study are described in the Appendix.<sup>10</sup> I winsorize all continuous control variables at the 1 percent and 99 percent levels to limit the influence of outliers. I cluster standard errors at the firm level. Finally, to ease interpretation of the results, I standardize all continuous variables to have a mean of zero and a standard deviation of 1.

#### 4.2. Results

Table 4 provides the results when estimating equation 1. The coefficient on *Large Syndicate* is negative (-0.059) and statistically significant (t-stat = -2.72). This coefficient suggests that contracts with larger syndicates are almost 6% less likely to have potentially material information redacted. This evidence is consistent with the notion that when lenders invest less in the production of information, contracts will be less likely to withhold information in order to give existing lenders an information advantage. The coefficient on *Industry Adjusted Loan Spreads* is positive (0.023) and statistically significant (t-stat = 2.53). This coefficient suggests that a one standard deviation increase in industry adjusted spreads increases the probability of withholding potentially material information from the credit agreement by 2.3% points. This evidence is consistent with the notion that when lenders are extracting abnormal profits, contracts will withhold information to make it more difficult for outside lenders to assess the credit quality of the borrower or for other borrowers to get insights about contract terms.

With respect to the control variables, I find evidence that larger firms and firms in high litigation risk industries are more likely to have a redacted credit agreement. Firms exposed to

<sup>&</sup>lt;sup>10</sup> To ensure that I only use accounting information that is publicly available at the time of a loan, I employ the following procedure: for those deal packages made in calendar year t, if the deal activation date is four months or more after the fiscal year ending month in calendar year t, I use the data of that fiscal year. If the deal activation date is less than four months after the fiscal year ending month, I use the data from the fiscal year ending in calendar year t-1.

high litigation risk might want to restrain access to information that could increase that risk. I also find evidence that contracts with larger deal amounts and longer maturities are more likely to be redacted. This result is consistent with lenders having higher incentives to protect private information when the size of the loan is bigger and the contract is longer.

# 4.3. Cross-sectional tests

The greater the information asymmetry, the higher the need for lender monitoring and/or the stronger the bargaining position of lenders. Accordingly, partitioning the sample into high and low information asymmetry firms, I anticipate stronger results in redacted disclosures for the high asymmetry subsample.

As measures of high information asymmetry, I employ the below median number of previous relationships with members of the syndicated loan market, the nonexistence of a credit rating, and the below median firm size. The syndicated loan market is one of repeated interactions. As a result, lenders are more likely to have better information about borrowers that repeatedly access the market. Borrowers that lack an S&P senior unsecured debt rating are less transparent to lenders than are firms with S&P senior unsecured debt ratings suggesting that information asymmetry about the borrower's type is more severe on loans to unrated firms. Given that smaller firms are more opaque relative to larger firms, information asymmetry is likely to be more severe.

Table 5, Panel A reports the findings when the sample is partitioned based on whether firms have a below median number of previous relationships or interactions with lenders in the syndicated loan market. Column 1 shows that *Large Syndicate* is significant and negatively related to *Redacted*. The coefficient of -0.077 (t-stat = -2.45) suggests that larger syndicates are 7.7% less likely to have a redacted credit agreement in the *low* previous relationships sample (i.e., *Less Known=1*). In contrast, column 2 shows that *Large Syndicate* is not significantly related to

*Redacted* in the high previous relationships sample (i.e., *Less Known=*0). In addition, Column 1 shows that *Industry Adj. Loan Spread* is significant and positively related to *Redacted*. The coefficient of 0.035 (t-stat = 2.48) suggests that a one standard deviation increase in abnormal profits is associated with a 3.5% higher likelihood of having a redacted credit agreement in the *low* previous relationships sample (i.e., *Less Known=1*). In contrast, column 2 shows that *Industry Adj. Loan Spread* is not significantly related to *Redacted* in the high previous relationships sample (i.e., *Less Known=1*).

Panel B reports the findings when the sample is partitioned based on whether firms have a credit rating or not. Column 1 shows that *Large Syndicate* is significant and negatively related to *Redacted*. The coefficient of -0.068 (t-stat = -2.33) suggests that larger syndicates are 6.8% less likely to have a redacted credit agreement in the *not rated* sample (i.e., *Not Rated=1*). In contrast, column 2 shows that *Large Syndicate* is not significantly related to *Redacted* in the rated sample (i.e., *Not Rated=0*). In addition, Column 1 shows that *Industry Adj. Loan Spread* is significant and positively related to *Redacted*. The coefficient of 0.038 (t-stat = 3.34) suggests that a one standard deviation increase in abnormal profits is associated with a 3.8% higher likelihood of having a redacted credit agreement in the *not rated* sample (i.e., *Not Rated =1*). In contrast, column 2 shows that *Industry Adj. Loan Spread* is not significantly related to *Redacted* in the rated sample (i.e., *Not Rated =0*). In contrast, is associated with a 3.8% higher likelihood of having a redacted credit agreement in the *not rated* sample (i.e., *Not Rated =1*). In contrast, column 2 shows that *Industry Adj. Loan Spread* is not significantly related to *Redacted* in the rated sample (i.e., *Not Rated =1*). In contrast, column 2 shows that *Industry Adj. Loan Spread* is not significantly related to *Redacted* in the rated sample (i.e., *Not Rated =1*).

Panel C reports the findings when the sample is partitioned based on whether firms are below the median firm size. Column 1 shows that *Large Syndicate* is slightly insignificant and negatively related to *Redacted*. The coefficient of -0.06 (t-stat = -1.55) suggests that larger syndicates are 6.0% less likely to have a redacted credit agreement in the *small firm* sample (i.e., *Small Firm=1*). In contrast, column 2 shows that *Large Syndicate* is not significantly related to

*Redacted* in the large firm sample (i.e., *Small Firm* =0). In addition, Column 1 shows that *Industry Adj. Loan Spread* is significant and positively related to *Redacted*. The coefficient of 0.058 (t-stat = 4.26) suggests that a one standard deviation increase in abnormal profits is associated with a 5.8% higher likelihood of having a redacted credit agreement in the *small firm* sample (i.e., *Small Firm*=1). In contrast, column 2 shows that *Industry Adj. Loan Spread* is not significantly related to *Redacted* in the large firm sample (i.e., *Small Firm*=0).

Overall, the results suggest that lender incentives to redact information are stronger when there is greater information asymmetry about the borrower.

## 5. Additional Tests

### 5.1. SEC grants request for confidential treatment

To provide evidence that my results are not solely driven by the redaction of fee information, I conduct analyses focusing only on contracts where the SEC grants a firm's request for confidential treatment.

#### 5.1.1 Econometric specification

Here I conduct a similar test as in the previous section but using SEC authorizations for confidential treatment as the dependent variable:

 $Confidential Treatment = \beta_0 + \beta_1 Large Syndicate + \beta_2 Industry Adj. Loan Spread + \beta_3 Controls + \vartheta.$ (2)

Here the outcome variable of interest is *Confidential Treatment*, which is a dummy for whether the borrower has been granted confidential treatment of certain information by the SEC. All variable definitions and controls are as in equation 1. My first prediction is that  $\beta_1 < 0$ , suggesting that larger syndicates are less likely to have fee information missing from the credit

agreement. My second prediction is that  $\beta_2 > 0$ , suggesting that when lenders are earning abnormal profits, credit agreements are more likely not to disclose fee information.

### 5.1.2. Results

Table 6 provides the results when estimating equation 2. The coefficient on *Large Syndicate* is negative but not statistically significant. This result is likely due to the smaller number of firms that have been granted confidential treatment. In contrast, the coefficient on *Industry Adjusted Loan Spreads* is positive and statistically significant. This coefficient suggests that higher abnormal loan profits or lender bargaining power increase the probability of withholding potentially material information from the credit agreement. This evidence is consistent with the notion that when lenders are extracting abnormal profits, contracts will withhold information to make it more difficult for outside lenders to compete for the borrower or for other customers to infer loan terms.

#### 5.1.3. Cross-sectional tests based on what information is redacted

A concern with the interpretation of my findings is reverse causality: borrowers might decide to become more opaque by reducing disclosure, and this might lead to lenders' forming smaller syndicates or charging higher loan spreads. To address this issue, I classify redactions authorized by the SEC based on whether they are likely to be lender or borrower driven. Findings that my results hold in the case of lender driven redaction would strengthen my inferences.

Anecdotal evidence suggests that lender driven redaction relates almost exclusively to redacting information about terms of the credit agreement such as fees or covenants that lenders want to hide from competitors or other borrowers. (See first four rows of Table 2.) For example, in the credit agreement for Viasat Inc. from December 31, 2002, fee information has been redacted. As a result, outside lenders or other borrowers lending from the current syndicate have an

information disadvantage. In another example, in the credit agreement for Finisar Corporation from October 2, 2009, the covenant section of the contract includes clauses that have been redacted. As a result, outside lenders have an information disadvantage about all the mechanisms current lead arrangers are using to monitor the loan, thereby reducing their incentives to compete for this borrower. Borrower driven redactions relate to information that is not directly linked to the terms of the credit agreement such as patents, location of inventories, or bank accounts.

Table 7 presents the results. I find that lender driven redaction is more strongly related to smaller syndicates and abnormal loan spreads. In contrast, I find that borrower driven redaction is not related to larger syndicates or abnormal spreads. Rather, it is driven by litigation risk of the borrower. These findings suggest that lender incentives affect the redaction or non-disclosure of potentially material information in loan agreements.

#### 5.2. Redacted credit agreements and future lead loan arrangers

Next, I investigate how redacted credit agreements are related to incumbent lenders arranging the next loan. Given that all loans in my sample correspond to public borrowers, it is *exante* not clear whether redacting credit agreements will increase adverse selection costs. In particular, if competition for borrowers is high and outside lenders are less likely to face a winner's curse in competing to lend to the borrower, then these borrowers should not face adverse selection. To provide some insights into the consequences of withholding information, I investigate whether redacting credit agreements increases the chances that incumbent lenders arrange the next loan by employing the following regression framework:

Same Lender = 
$$\beta_0 + \beta_1 Redacted + \beta_2 Controls + \vartheta$$
. (3)

*Same Lender* is a dummy variable equal to one if the borrower's next loan is issued by the current lead loan arranger, zero otherwise. Controls include the number of lenders on the loan, the

interest rate, loan amount, maturity, and the number of financial covenants in the loan package. All controls are contemporaneous with the new loan being issued. Table 8 presents the results. My findings suggest that borrowers with redacted credit agreements are more likely to issue the next loan with the current lead arranger. This is consistent with the notion that the withholding of potentially material information from credit agreements gives incumbent lenders an information advantage. In terms of economic magnitude, I find that borrowers with redacted credit agreements have a 7.3% higher likelihood of issuing their next loan with the same lead lender.

#### 5.3. Other redacted

Based on the hand-collection of the debt contracts, certain clauses often indicate that sections have been "Omitted," "Reserved," or "Deleted." An issue is that these contracts might be redacted and that my previous analyses did not fully capture them. However, conversations with practitioners suggest that contracting parties use these terms as drafting tools and not with the purpose of redacting information. Nevertheless, to make sure that my results would hold if these contracts were indeed redacted, I collect this information and find that about 42% of all contracts include these keywords. Moreover, when using a dummy variable for whether sections of the agreement have been "Omitted," "Reserved," "Deleted," or "Redacted," I find that smaller syndicates and those earning abnormal rents are more likely to use these terms. Table 9 presents the regression results.

# 6. Conclusion

I examine whether lender incentives to safeguard private information are related to the redaction or non-disclosure of potentially material information from credit agreements of public firms. I find evidence that when lenders invest more in screening and monitoring the borrower or when lenders earn abnormal profits from the loan, credit agreements are more likely to have potentially material information redacted. Furthermore, consistent with the notion that the withholding of information from credit agreements gives current lenders an information advantage, I find that borrowers with redacted credit agreements are more likely to issue subsequent loans with the same lead arranger. Finally, my findings suggest that firms often withhold potentially material information without requesting confidential treatment from the SEC.

The main contribution of the paper is in providing evidence that lender incentives influence mandatory disclosures. Despite lenders being a major source of financing to corporations, little is known about whether lenders shape mandatory corporate disclosures. My findings that lenders play a role in shaping these disclosures and that they benefit from the resulting information advantage add new insights to a larger literature that investigates determinants and consequences of corporate disclosures.

My study also complements prior research that has shown that lenders play a critical role in providing high information asymmetry firms with financing (e.g., Fama 1985; Diamond 1991; Rajan 1992; Petersen and Rajan 1994; 1995). Despite lenders making an important contribution to society by reducing information asymmetry through the production of private information, little is known about how lenders are able to gain an information advantage that allows them recoup their initial investment. My paper contributes to this literature by providing insights into the lending dynamics for a sample of public firms that require significant production of information. I find that lenders are able to protect their private information by requiring the redaction of material information from credit agreements. Furthermore, consistent with the notion that the withholding of information from credit agreements gives current lenders an information advantage, I find that borrowers with redacted credit agreements are more likely to issue subsequent loans with the same lead arranger.

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# **Appendix: Variable Definitions**

Redacted:	Dummy equal to one if the credit agreement has been redacted, zero otherwise.
Confidential Treatment:	Dummy equal to one if the credit agreement has been redacted with SEC authorization, zero otherwise.
Confi. Treatment Lender:	Dummy equal to one if the credit agreement withholds information about contract terms such as covenants or fees, zero otherwise.
Confi. Treatment Borrower:	Dummy equal to one if the credit agreement withholds firm-specific information such as patents or litigation, zero otherwise.
Missing Fee Information:	Dummy equal to one if contract mentions that fee information is detailed in separate document, zero otherwise.
Large Syndicate:	Dummy equal to one if number of banks participating in the lending syndicate is in the top quartile of the distribution, zero otherwise.
Industry Adj. Loan Spread	The loan spread charged to the borrower in excess of the loan spread charged to other borrowers in the same Fama and French 48 industry.
Hindex:	The rank of the industry's Herfindahl index. The Herfindahl index is calculated as the sum of the squared market share of each publicly traded company in a particular two-digit SIC code. Market share is calculated as the sales of a particular company divided by the total sales of the SIC code.
Profitability:	Net income divided by total assets
Firm Age:	Number of years in the Compustat database.
Size:	The natural logarithm of total assets.
Market-to-book:	The book value of total assets minus the book value of equity plus the market value of equity as the numerator of the ratio and the book value of assets as the denominator.
#Previous Deals:	Equal to the number of previous loans issued by the borrower.
High Tech	Dummy equal to one if borrower is in a high-tech industry (SIC codes 283, 357, 366, 367, 382, 384, and 737), and zero otherwise.

Litigation Risk	Dummy equal to one if borrower is in the biotech (SIC codes 2833–2836 and 8731–8734), computer (3570–3577 and 7370–7374), electronics (3600–3674), or retail (5200–5961) industry, and zero otherwise.
Cash Flow Volatility:	The volatility of pre-tax cash flows scaled by mean non-cash assets over the previous five years.
Deal Amount:	The deal amount measured in millions of dollars.
Maturity:	The weighted maturity of all facilities in the loan, which is measured in months.

# **Table 1: Sample Selection**

Loan Packages on Dealscan with all Variables	11,017
Loan Packages with all Variables and a Capital Expenditure Covenant	2,645
Missing Credit Agreements	-441
Main Sample	2,204

 Table 1. The table presents the sample selection.

# Table 2: Descriptive Statistics - Requests for Confidential Treatment

Covenants	42%
Prepayment and other terms	16%
Fees	11%
Interest rate	11%
Various (schedules, account information, inventory)	37%
Sale Contracts & Mergers & Investments	21%
Litigation	11%
Patents	5%
Lease Terms	5%

**Table 2.** The table presents descriptive statistics about the information that is redacted when firms request confidential treatment from the SEC for information in credit agreements.

Variable	Ν	Mean	Median	Std Dev	25th Pctl	75th Pctl
Redacted	2,204	0.728	1.000	0.445	0.000	1.000
Confidential Treatment	2,204	0.009	0.000	0.095	0.000	0.000
Missing Fee Information	2,204	0.725	1.000	0.446	0.000	1.000
Large Syndicate	2,204	0.282	0.000	0.450	0.000	1.000
Industry Adj. Loan Spread	2,204	0.000	-20.246	134.046	-87.306	52.106
Hindex	2,204	1.497	1.000	1.132	0.000	3.000
Profitability	2,204	-0.019	0.015	0.153	-0.044	0.054
Firm Age	2,204	16.890	12.000	13.296	7.000	23.000
Size	2,204	5.875	5.873	1.423	4.889	6.822
Market-to-Book	2,204	1.520	1.234	0.902	0.995	1.670
# Previous Deals	2,204	4.735	4.000	3.538	2.000	7.000
High Tech	2,204	0.164	0.000	0.371	0.000	0.000
Litigation Risk	2,204	0.245	0.000	0.430	0.000	0.000
Cash Flow Volatility	2,204	0.099	0.053	0.173	0.028	0.098
Deal Amount (millions)	2,204	232.809	100.000	345.617	40.000	275.000
Maturity (months)	2,204	44.811	41.000	19.416	35.000	60.000

# Table 3: Descriptive Statistics – Main Sample

**Table 3.** The table reports descriptive statistics for the variables used in the sample. Following previous research, I exclude financial firms (SIC code 6000-6999) and utilities (SIC code 4900-4999). I exclude firm-years with missing values for control variables. All variables are described in the appendix. All continuous variables are winsorized at the 1% level.

Dependent Variable =	Redacted
	(1)
Large Syndicate	-0.059***
	(-2.72)
Industry Adj. Loan Spread	0.023**
	(2.53)
Hindex	0.002
	(0.25)
Profitability	0.007
	(0.73)
Firm Age	0.000
	(0.04)
Size	0.036**
	(2.35)
Market-to-Book	0.006
	(0.69)
Log (1+ # Previous Deals)	0.015
	(1.40)
High Tech	-0.007
	(-0.23)
Litigation Risk	0.055**
-	(2.35)
Cash Flow Volatility	-0.006
	(-0.66)
Log (Deal Amount)	0.169***
	(9.73)
Maturity	0.075***
	(6.89)
Clustering	Firm
Ν	2,204
R-Squared	0.277

# **Table 4: Lender Incentives and Redacted Credit Agreements**

**Table 4.** The table investigates whether information production costs or abnormal loan returns affect the redaction of debt contracts. I standardize all continuous variables to have a mean of zero and a standard deviation of 1. Following previous research, I exclude financial firms (SIC code 6000-6999) and utilities (SIC code 4900-4999). I exclude firm-years with missing values for control variables. All variables are described in the appendix. All continuous variables are winsorized at the 1% level. \*\*\*, \*\*, and \* denote significance at the 1%, 5%, and 10% levels, two-tailed, respectively.

# **Table 5: Cross-sectional Tests**

	Dependent Variable = Redacted	
	Less Known=1	Less Known=0
Large Syndicate	-0.077**	-0.024
	(-2.45)	(-0.84)
Industry Adj. Loan Spread	0.035**	0.008
	(2.48)	(0.64)
Other Controls	Yes	Yes
Clustering	Firm	Firm
Ν	1,232	972
R-Squared	0.323	0.140

Panel A: Number of Previous Relationships with Lenders in the Syndicated Loan Market

# Panel B: Existence of a Credit Rating

	Dependent Variable = Redacted		
	Not Rated=1	Not Rated=0	
Large Syndicate	-0.068**	-0.010	
	(-2.33)	(-0.32)	
Industry Adj. Loan Spread	0.038***	0.004	
	(3.34)	(0.29)	
Other Controls	Yes	Yes	
Clustering	Firm	Firm	
Ν	1,434	770	
R-Squared	0.313	0.123	

# Panel C: Firm Size

	Dependent Vari	able = Redacted
	Small Firm=1	Small Firm=0
Large Syndicate	-0.060	-0.001
	(-1.55)	(-0.06)
Industry Adj. Loan Spread	0.058***	-0.007
	(4.26)	(-0.60)
Other Controls	Yes	Yes
Clustering	Firm	Firm
Ν	1,180	1,024
R-Squared	0.313	0.086

**Table 5.** The table shows cross-sectional tests about whether information production costs or abnormal loan returns affect the redaction of debt contracts. I standardize all continuous variables to have a mean of zero and a standard deviation of 1. Following previous research, I exclude financial firms (SIC code 6000-6999) and utilities (SIC code 4900-4999). I exclude firm-years with missing values for control variables. All variables are described in the appendix. All continuous variables are winsorized at the 1% level. \*\*\*, \*\*, and \* denote significance at the 1%, 5%, and 10% levels, two-tailed, respectively.

Dependent Variable =	Confidential Treatment
	(1)
Large Syndicate	-0.00150
	(-0.37)
Industry Adj. Loan Spread	0.00557**
	(2.06)
Hindex	0.00104
	(0.53)
Profitability	-0.00052
	(-0.23)
Firm Age	0.00364
	(1.52)
Size	0.00470
	(1.16)
Market-to-Book	0.00236
	(0.70)
Log (1+ # Previous Deals)	-0.00473*
	(-1.82)
High Tech	0.01182*
	(1.65)
Litigation Risk	0.00812*
	(1.69)
Cash Flow Volatility	-0.00292***
	(-2.64)
Log (Deal Amount)	-0.00171
	(-0.38)
Maturity	0.00278
	(1.45)
Clustering	Firm
N	2,204
R-Squared	0.013

# **Table 6: Lender Incentives and Requests for Confidential Treatment**

**Table 6.** The table investigates whether information production costs or abnormal loan returns are related to requests for confidential treatment in debt contracts. I standardize all continuous variables to have a mean of zero and a standard deviation of 1. Following previous research, I exclude financial firms (SIC code 6000-6999) and utilities (SIC code 4900-4999). I exclude firm-years with missing values for control variables. All variables are described in the appendix. All continuous variables are winsorized at the 1% level. \*\*\*, \*\*, and \* denote significance at the 1%, 5%, and 10% levels, two-tailed, respectively.

Dependent Variable =	Confidential Treatment Lender	Confidential Treatment Borrower	
	(1)	(2)	
Large Syndicate	-0.003	0.00221	
	(-0.79)	(0.83)	
Industry Adj. Loan Spread	0.005**	0.00095	
	(2.12)	(0.78)	
Hindex	0.002	-0.00024	
	(1.64)	(-0.15)	
Profitability	-0.001	0.00073	
	(-0.64)	(0.89)	
Firm Age	0.004**	0.00041	
	(2.15)	(0.23)	
Size	0.001	0.00281	
	(0.76)	(0.75)	
Market-to-Book	-0.000	0.00208	
	(-0.32)	(0.63)	
Log (1+ # Previous Deals)	-0.004*	-0.00159	
	(-1.76)	(-0.95)	
High Tech	0.002	0.00753	
	(0.49)	(1.24)	
Litigation Risk	0.004	0.00930**	
	(0.93)	(2.09)	
Cash Flow Volatility	-0.001	-0.00192**	
	(-1.46)	(-2.09)	
Log (Deal Amount)	0.002	-0.00210	
	(0.83)	(-0.50)	
Maturity	0.002	0.00173	
	(1.26)	(1.23)	
Clustering	Firm	Firm	
Ν	2,204	2,204	
R-Squared	0.012	0.009	

#### **Table 7: Lender versus Borrower Requests for Confidential Treatment**

**Table 7.** The table investigates whether information production costs or abnormal loan returns affect lender or borrower driven requests for confidential treatment of information in debt contracts. I standardize all continuous variables to have a mean of zero and a standard deviation of 1. Following previous research, I exclude financial firms (SIC code 6000-6999) and utilities (SIC code 4900-4999). I exclude firm-years with missing values for control variables. All variables are described in the appendix. All continuous variables are winsorized at the 1% level. \*\*\*, \*\*\*, and \* denote significance at the 1%, 5%, and 10% levels, two-tailed, respectively

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# **Table 8: Same Lender**

Dependent Variable =	Same Lender	
	(1)	
Redacted	0.073**	
	(2.34)	
Controls for Contract Terms	Yes	
Clustering	Firm	
Ν	1,420	
R-Squared	0.057	

**Table 8.** The table investigates whether withholding information increases incumbent lenders' chances of arranging a borrower's next loan. I exclude observations with missing values for control variables. All variables are described in the appendix. All continuous variables are winsorized at the 1% level. \*\*\*, \*\*, and \* denote significance at the 1%, 5%, and 10% levels, two-tailed, respectively.

Dependent Variable =	<b>Omitted Sections</b>
	(1)
Large Syndicate	-0.089***
	(-2.96)
Industry Adj. Loan Spread	0.084***
	(7.86)
Other Controls	Yes
Clustering	Firm
Ν	2,204
R-Squared	0.044

# **Table 9: Robustness Tests: Omitted Sections in Debt Contracts**

**Table 9.** The table presents a robustness test when using a dummy variable for contracts that have omitted, deleted, reserved, or redacted sections. I standardize all continuous variables to have a mean of zero and a standard deviation of 1. I exclude observations with missing values for control variables. All variables are described in the appendix. All continuous variables are winsorized at the 1% level. \*\*\*, \*\*, and \* denote significance at the 1%, 5%, and 10% levels, two-tailed, respectively.