CORPORATE NON-GOVERNANCE

JEREMY McCLANE*

ABSTRACT

Lenders have long been a crucial part of the checks and balances essential to good corporate governance, but in recent years many have begun to abandon their role. This dereliction of duty has gone largely unnoticed and undertheorized, but has enormous consequences: it heralds the disappearance of an important source of fiscal discipline and governance at a moment when U.S. corporations carry more debt than at any time in history, totaling half of GDP.

This Article presents the first theoretical and empirical examination of this dramatic change in corporate governance (or more accurately, non-governance) and its implications for corporate law and financial regulation. It shows how the diminishment of lenders' role in governance is a predictable result of a confluence of forces in the financial markets, in particular, the use of structured finance to securitize loans, which in turn drives a lending market with diminishing checks on borrower profligacy. It also shows how this new market is weakening governance norms in ways that are harmful to borrowing companies, lenders, and society as a whole.

*Jeremy McClane is a legal scholar whose research focuses on corporate and commercial transactions. His work combines empirical methods and systems analysis to study the impact of law on transactional outcomes. Previously, he was a professor at the University of Connecticut School of Law, and a clinical instructor and lecturer at Harvard Law School. Prior to his teaching career, he practiced in the International Capital Markets Group of the law firm of Allen & Overy in London and Paris, and Goldman Sachs International in London, where he conducted negotiations for a variety of international financial transactions involving securities, hedge funds and derivatives. He also served as in-house counsel for the London office of MFS Investment Management.

Professor McClane is currently the principal investigator for a project funded by the National Science Foundation to study small business resilience in the wake of the COVID-19 pandemic. His scholarship has been published or is forthcoming in venues such as the Vanderbilt Law Review, Cornell Law Review and the Fordham Law Review. His work has been selected for the Stanford/Yale/Harvard Junior Faculty Forum, the AALS Scholarly Papers Competition, and the Carroll P. Hurd Award for Excellence in Faculty Scholarship at the University of Illinois. In 2016, Professor McClane was honored to be the inaugural recipient of the teaching award at the University of Connecticut School of Law.

Professor McClane is a graduate of Harvard Law School and Michigan State University. In addition to his private practice experience, he served as a law clerk for the Judge Richard Cardamone of the United States Court of Appeals for the Second Circuit and Judge Thomas Penfield Jackson of the United States District Court for the District of Columbia. In addition, he has been a Fulbright Scholar, studying economic and business development in the former Soviet Union.
The Article makes two contributions to the literature. First, it empirically documents, for the first time, the decline of lenders' corporate governance interventions, cataloguing original data on all borrower loan covenant violations—the mechanism by which lenders intervene in governance—from 2008 through 2018 for use by academics and practitioners in the future. Second, although many scholars have written about lenders' role in corporate governance and securitization separately, this Article brings the two together. It thereby adds a missing component to an important literature by showing how corporate governance and the financial system affect each other endogenously, and proposing solutions to bolster both.

I. INTRODUCTION ............................................................3
II. BACKGROUND ............................................................9
   A. Lenders' Role in Corporate Governance .........................9
      1. Lenders, governance and agency costs........................10
      2. Lenders and enhanced firm value ................................12
   B. Corporate debt and leveraged loans ............................13
      1. Changes in the loan market: From "originate-to-hold" to "originate-to-distribute" ..............................................14
      2. Loan covenants as levers of lender intervention ..........16
      3. The process of lender intervention: waiver and renegotiation ...18
      4. Changes in the leveraged loan market and the erosion of loan covenants ......................................................19
   C. Structured Finance and CLOs .......................................21
      1. CLO structures and operation ....................................21
      2. From risky loans to safe securities: the alchemy of CLOs ......22
      3. The role of lending banks and non-bank institutions ..........23
   D. CLOs, credit supply and changes in creditor incentives ......24
      1. Securitization and (Non)Governance ..........................25
III. EMPIRICAL CASE STUDY IN NON-GOVERNANCE: DATA AND ANALYSIS .................................................................27
   A. Loan and covenant violation data ................................28
      1. Analysis of financial indicators ................................32
      2. Financial conservatism .........................................33
      3. Investment conservatism .......................................34
      4. Operating performance ........................................35
   B. General Approach and Controls ....................................36
      1. Basic results: raw data ..........................................39
      2. Further analysis and regression results .......................41
I. INTRODUCTION

When Scott Livengood, the CEO of Krispy Kreme doughnut company, was unceremoniously fired in 2005, scholars and industry watchers took note.¹ Livengood had been an exemplary CEO, successfully expanding his company from a largely regional chain of doughnut shops to a nationwide phenomenon.² He was also legendary for his loyalty to the brand, even having his wedding cake made entirely out of Krispy Kreme donuts.³ His firing seemed puzzling at first, but the reason soon became clear: the company had breached a small technicality in a loan agreement, and the lenders, who decided the company needed a change in direction after a few months of bad results, became empowered to take drastic action and replaced the CEO.⁴

The episode highlighted the often-overlooked but enormous power that lenders have in corporate governance, and subsequent research has showed that episodes like Krispy Kreme's were quite common. As such, lenders are an important part of the corporate governance ecosystem, frequently intervening to discipline (and sometimes fire) top management, enforce fiscal responsibility and constrain agency costs.⁵


⁴See Baird & Rasmussen, supra note 1, at 1212.

⁵See, e.g., Greg Nini, David C. Smith & Amir Sufi, Creditor Control Rights, Corporate Governance, and Firm Value, 25 REV. FIN. STUD. 1713, 1715-16 (2012) (finding empirical evidence that creditors intervene in corporate governance and generally improve firm value); see also Joanna M. Shepherd, Frederick Tung & Albert H. Yoon, What Else Matters for
But when Krispy Kreme again violated a loan agreement in 2012 by assuming too much debt, its lenders did something surprising that went largely unnoticed. Instead of forcing out the CEO or requiring better financial management, the lenders did the opposite of what corporate governance research predicted by doing next to nothing.\(^6\) In fact, the next renegotiation of Krispy Kreme's loan agreement resulted in expanded credit and more lenient terms.\(^7\)

It is tempting to assume that Krispy Kreme's situation is idiosyncratic, that perhaps the company did not need any intervention the second time around. However, as the data presented in this article shows for the first time, lenders are withdrawing from corporate governance in droves with respect to a large and growing class of corporate borrowers.\(^8\) Despite an explosion in recent years of corporate governance scholarship focusing on the role of activist investors,\(^9\) minority controlling shareholders,\(^10\) and proxy voting;\(^11\) scholars have missed this equally important trend, and existing corporate governance theory has no explanation for it. However, it is especially problematic at a time when debt discipline is lacking, and U.S. corporate debt levels are at a record high, nearing half of U.S. gross domestic product ("GDP").\(^12\)

---

\(^6\)See infra Part II.

\(^7\)See Syndicated loan agreement between Krispy Kreme, Inc. and Wells Fargo (Jan. 28, 2012).

\(^8\)See infra Section II.D.


The role that lenders play has been theorized in terms of "interactive" corporate governance—governance that results from external stakeholders (like lenders) interacting with and influencing internal ones (shareholders and directors). Lenders do so either through direct intervention (exercising voice) or by leaving the lending relationship (exit) thereby signaling problems to other decisionmakers. The new trend does not fit the paradigm, because lenders are neither intervening nor exiting, even when all indications show they should, and past research predicts that they would.

This suggests that scholars and practitioners have overlooked an important consideration with respect to corporate governance and lenders' role in corporate management in particular. Financial engineering introduces a powerful force into corporate governance that existing theories fail to account for. As this Article shows for the first time, important elements of corporate governance are a function of financial markets, and financial innovations in recent years have left lenders with little motive to fulfill their traditional roles. The empirical evidence presented in the Article bears out what a theory of interactivity that takes corporate finance into account would predict: that lenders have begun to abandon their role as corporate monitors for an important and growing class of corporate relationships.

This diminishing influence has enormous real-world consequences, as it heralds the disappearance of an important source of financial discipline at a time when corporate debt levels have reached half of U.S. gross domestic product—an unprecedented level. Financing techniques have grown ever more sophisticated in recent decades, but the literature has little to say on the role that these techniques have in shaping the incentives of corporate actors. This article fills the silence by providing theory and evidence on the role of financial engineering in interactive corporate governance. In doing so it explores how the changing economics of lending—driven by an extremely active market for leveraged loans for use in structured finance—are changing the nature of

debt-levels.html ("Debt outstanding for nonfinancial businesses stood at a little over US$15 trillion by the end of Q3 2018").


14 See Triantis & Daniels, supra note 13, at 1078.

15 See Nini et al., supra note 5, at 1715; see also Shepherd et al., supra note 5, at 993-94.

16 See Holmes, supra note 12.
lender-driven corporate governance and altering existing ideas about how stakeholders in corporate governance interact. This Article's claims are supported by an original hand-collected dataset of corporate loan documents, focusing on covenant violations as the primary opportunities for lender intervention dating from 2008 through 2018.

Legal scholars have noted the important role that corporate creditors play in influencing corporate management and constraining public company agency costs.\(^\text{17}\) Researchers in corporate finance have found that lender intervention has a significant positive impact on firm performance.\(^\text{18}\) However, the communications between interactive corporate governance and the larger financial system have not been widely studied. The issue is important because, as some scholars have noted, lenders' role in corporate governance may be as, or more, important than that of shareholders or the board of directors, particularly when firms are in financial distress.\(^\text{19}\)

Lenders are able to exert their influence on borrowing companies through contractual provisions that allow them to monitor borrowers, constrain borrowers' actions, and intervene when borrowers run into trouble.\(^\text{20}\) Unlike the governance power held by shareholders and the board of directors which are defined by the relatively stable baseline of state corporate law and federal securities law, lenders' corporate governance influence is created by contract\(^\text{21}\) and therefore is heavily influenced by lenders' and borrowers' relative bargaining power.\(^\text{22}\)

This reality cuts two ways. On the one hand, this means that lenders are able to secure more power over a firm's management than many other stakeholders are able to do.\(^\text{23}\) On the other hand, as competition for lending

\(^{17}\)See Triantis & Daniels, supra note 13, at 1075-78 (discussing the role that creditors play in constraining agency costs, in particular with regard to managerial slack); see also Baird & Rasmussen, supra note 1, at 1211, 1215 (describing the "elaborate covenants" in loan agreements that give creditors a large role corporate management); Frederick Tung, Leverage in the Board Room: The Unsung Influence of Private Lenders in Corporate Governance, 57 UCLA L. REV. 115, 117 (2009) (arguing that "banks and other private lenders exercise influence over firm management that is both routine and significant" even exceeding that of shareholders and the board of directors).

\(^{18}\)See Nini et al, supra note 5, at 1715.

\(^{19}\)See Baird & Rasmussen, supra note 1, at 1215 (arguing that lenders exercise broader powers than other mechanisms of governance when firms are in distress); see also Tung, supra note 17, at 117.

\(^{20}\)See Tung, supra note 17, at 115.

\(^{21}\)Id.

\(^{22}\)Id. I recognize that the ability of shareholders and other company stakeholders to influence company management is also dependent on bargaining power to some degree, and that state corporate law allows many shareholder and director rights to be tailored or curtailed. Nonetheless, the default provisions of the law provide a starting point, and in most cases, a fallback position that these stakeholders have regardless of their bargaining power.

\(^{23}\)Id. at 117.
has grown more intense, lenders' bargaining power has waned, and lenders have been left with fewer rights, or less power to use those rights for fear of alienating valuable clients. The resultant loss of corporate governance mechanisms supplied by lenders is potentially problematic if there is nothing to fill the void. Moreover, the loss of lenders' influence over borrowers has consequences for financial regulation, because it has the potential to make lending riskier, which in turn increases the risk of the financial products that are driving the increased demand for loans in the first place.24

The data and analysis developed in this article document some of the ways in which lenders' influence is waning. Specifically, the analysis provides evidence that relational lenders—banking institutions that have ongoing relationships with their clients—continue to intervene in a borrowing firm's affairs when the borrower violates a covenant in its loan agreement. On average, those interventions result in more responsible firm financial management: lower debt, greater cashflow and higher firm value, among other financial metrics. These firms are also more likely to see their CEO or CFO suddenly depart shortly after the violation, suggesting that lenders are not shy about exerting their influence to shake up a company's management team. However, the evidence suggests that when loans have been securitized, lenders take little or no action, and the result is higher debt, lower cashflow, and diminished firm value.

As this Article shows, the data provides a predictable pattern resulting in one of two major trends, each eroding lenders' role in corporate governance for a large class of corporate borrowers. First, non-bank financial institutions have captured an ever-growing share of the market for so-called leveraged loans—loans made to companies that already have significant levels of debt, and therefore have credit ratings below investment grade.25 As of February 2019, approximately 70% of US companies fell into this category, including well-known firms such as Burger King, Chrysler, Dell, American Airlines, and Avis.26 By the end of 2018, non-bank financial institutions accounted for 90% of the $1.4 trillion leveraged loan market.27

24See Tung, supra note 17, at 120.
26Id.
Most of these loans are ultimately packaged into securitization vehicles called collateralized loan obligations ("CLOs")—financial products that hold managed portfolios of leveraged debt. Because of the way that CLOs operate, one would predict that CLO managers have far less incentive to monitor corporate borrowers or intervene when borrowers run into trouble than relational lenders, because the CLO has essentially repackaged the risk of the loans’ default and sold it to investors in the market.

This article provides evidence that this prediction is correct. The data shows that corporate borrowers whose loans are packaged into CLOs experience far lower levels of beneficial creditor intervention even after a covenant violation. The same financial metrics that improve for relational lending covenant violators either fail to improve or languish for covenant violators whose loans are packaged into CLOs. Similarly, the evidence shows that CLOs intervene far less to change a company’s CEO, suggesting that they are either unable or unwilling to exert their influence, either because they have sold enough risk not to care, or because loans are in high demand and these borrowers have ever increasing bargaining power.

The second trend is the rise of so-called "cov-lite" loans: leveraged loans that contain fewer covenants restricting borrowers' actions, and thus have fewer creditor protections. The proliferation of these loans has meant that there are fewer covenants to violate and therefore fewer opportunities for lenders to intervene. This might not be overly troublesome if the cov-lite borrowers are also inherently well-run companies. But over 80% of new leveraged loans issued in the last year were cov-lite, and it is likely that at least some of these firms would benefit from the disciplining effects that covenants and creditor intervention bring.

The rest of this paper proceeds as follows. Section II provides background information on leveraged loans, loan covenants, and CLOs. It also describes the literature that has looked at this and similar issues in the past. Section III describes the data and presents the results of the
empirical analysis. Section IV provides discussion and some proposals for addressing the issues raised in the article.

II. BACKGROUND

Background information on lenders' role in corporate governance, corporate loans and CLOs is helpful for framing the inquiry in this Article and understanding the analysis below. This section begins with a summary of the issues regarding lender intervention in corporate governance, gives background on the market for corporate loans, and then discusses how the financial alchemy of CLOs affects both of the preceding two topics.

A. Lenders' Role in Corporate Governance

Corporations rely on debt to finance their activities. Broadly speaking, corporate debt takes one of two forms: bank loans evidenced by contracts between lenders and corporate borrowers, and debt securities such as bonds that can be traded among investors. Bonds, like other kinds of securities, are relatively impersonal; investors have little direct relationship with the borrowers and can usually only affect the borrower if they hold a high percentage of face value of the bonds, usually at least 50%. Loans (at least historically speaking) are different in that the lenders maintain an ongoing contractual relationship with the lender. Lenders often include covenants in their contracts that allow them to monitor borrowers by, for example, requiring periodic reports, and setting thresholds for the borrowing company's future borrowing and spending.

Loans also frequently restrict borrower behavior by requiring the lenders' permission to take certain actions such as issuing new debt, acquiring large stakes in other companies, or expending large amounts of capital. When a borrower violates a covenant, the lender acquires the

---

34See infra Part III.
35See infra Part IV.
38Id. at 464.
39Id.
40Id. at 462-65.
41Bratton, supra note 37, at 463-64.
right to accelerate (i.e., ask for immediate payment of principal and interest).\textsuperscript{42} Lenders rarely invoke this right in reality, as borrowers could seldom actually repay; instead lenders typically waive these violations and renegotiate the loan agreement, in exchange for remedial action by the borrower according to the lender's wishes.\textsuperscript{43} Lenders' waiver and renegotiation gives them substantial influence in corporate governance.\textsuperscript{44}

1. Lenders, governance and agency costs

For the past several decades, the study of corporate law has focused on the separation of ownership and control, and the agency cost problems that arise when the interests of shareholder-owners diverge from the interests of corporate manager-agents.\textsuperscript{45} Shareholders, who generally must delegate management of the firm to others, worry that the managers will serve their own interests at the expense of maximizing the value of the firm.\textsuperscript{46} This may happen for a number of reasons, such as management's desire to entrench itself, empire building, excessive compensation, overconsumption of corporate perquisites, or simple incompetence.\textsuperscript{47} Remedying these agency costs is often seen as the goal of corporate governance.\textsuperscript{48} The mechanisms for doing so can be broken down into internal and external disciplinary forces.\textsuperscript{49} Internal governance forces consist of its directors (especially independent directors),\textsuperscript{50} shareholder proposals, the proxy voting process,\textsuperscript{51} and fiduciary duties imposed by state corporate law.\textsuperscript{52} External forces include the capital markets,\textsuperscript{53} the

\textsuperscript{42}Id. at 464.


\textsuperscript{44}Id. at 167.

\textsuperscript{45}See generally, ADOLF A. BERLE, JR. & GARDINER C. MEANS, THE MODERN CORPORATION AND PRIVATE PROPERTY 119-25 (1932) (observing the separation of ownership and control while further establishing a large body of legal scholarship focus with the basic agency cost problem).

\textsuperscript{46}See Triantis & Daniels, supra note 13, at 1074.

\textsuperscript{47}Id.

\textsuperscript{48}Id. at 1075.

\textsuperscript{49}Id. at 1075-76.

\textsuperscript{50}See, e.g., Gregory H. Shill, The Golden Leash and the Fiduciary Duty of Loyalty, 64 UCLA L. REV. 1246, 1264-68 (2017) (examining independent director compensation arrangements as they affect the duty of loyalty).

\textsuperscript{51}See Fisch, supra note 11, at 20-21.


\textsuperscript{53}See Triantis & Daniels, supra note 13, at 1075-76.
market for corporate control, and the product market in which the firm operates. Lenders enter this picture as external stakeholders who influence some of the internal ones by monitoring management and helping to mitigate the agency cost problem, potentially creating agency costs of their own. A number of scholars in law and finance have written about the influence of lenders on corporate governance, and the impact such influence might have on firm value and agency costs. Some scholars argue that lender intervention in governance can sharpen conflicts of interest between equity holders and debt holders. Lenders are assumed to be more risk averse than equity holders, since they stand to suffer greater downside losses from potentially risky projects than equity holders. This is because equity holders stand to gain the upside of any high-risk, high-reward projects, while lenders get little of the upside apart from what they are already owed under their loan contracts, but lenders stand to lose the value of their loan if the project goes poorly and results in financial trouble for the borrowing company. Thus, when creditors intervene they may act conservatively and stymie projects they view as excessively risky, even if those projects have a positive net present value ("NPV"), i.e., projects

---


55See Triantis & Daniel, supra note 13, at 1075-76.

56See Jensen & Meckling, supra note 13, at 308-10.

57See Triantis & Daniels, supra note 13, at 1076-77.


59This is purported to be particularly true with respect to debtor corporations who are close to insolvency. See, e.g., Credit Lyonnais Bank Nederland, N.V. v. Pathe Comm'n's Corp., No. CIV. A. 12150, 1991 WL 277613, at *1 (Del. Ch. Dec. 30, 1991), reprinted in 17 DEL. J. CORP. L. 1099, 1103 (1992) (discussing the fiduciary duties of managers to creditors when a corporation is in the "zone of insolvency"). To illustrate, if a debtor firm close to insolvency has two opportunities, one with high risk of loss but high potential payout, and one with low risk of loss but low potential payout, the creditors – who stand to lose the value of their investment if the high-risk gamble goes poorly and the firm goes insolvent – will want to firm to take the less risky route, ensuring they can be repaid even if the company and equity holders are is left with little money. The equity holders, however, will prefer the riskier option since they have less to lose and more to gain from doing so. Since they stand to lose everything in most scenarios, they would prefer to take the chance, however slim, of a large payout. The interests of equity holders and debt holders are thus potentially adverse in some situations.
that are likely to result in more gains than losses, in present value terms.\textsuperscript{60} Alternatively, lenders may reduce firm value by intervening too aggressively when a borrower violates a financial covenant.\textsuperscript{61} For instance, a lender may require too many concessions, insist on the dismissal of an otherwise competent CEO, or simply extract burdensome terms from the borrower in a loan renegotiation, in exchange for waiving the default and refraining from accelerating.\textsuperscript{62}

2. Lenders and enhanced firm value

On the other hand, lenders can influence firm governance in ways that lead to increased value for all stakeholders. Scholars have framed the benefits of lender intervention using a theory of interactive corporate governance.\textsuperscript{63} According to this theory, instead of a conflict between equity holders and debt holders as described above, both equity and debt holders have a common interest in containing agency costs by management.\textsuperscript{64} All stakeholders benefit from mechanisms that discipline management to be financially responsible, take appropriate (but not outsized) risks and restrict wastefulness, sometimes referred to as managerial "slack."\textsuperscript{65} Lenders have superior expertise with regard to debt management and fiscal responsibility, and they provide their expertise by interacting with internal corporate stakeholders.\textsuperscript{66}

Lender intervention is helpful because shareholders' ability to constrain management is sometimes limited by collective action problems—the reality that numerous dispersed shareholders do not have the incentive to coordinate and monitor management because the value of their stake tends to be smaller than the cost of such coordination, and if they do not like what management is doing, it is less costly simply to sell the stock.\textsuperscript{67} In such circumstances, creditors have more incentive to monitor, and can do so at a relatively lower cost than shareholders through contractual covenants.\textsuperscript{68}

\textsuperscript{60}See Nini et al., supra note 5, at 1747.
\textsuperscript{61}Id.
\textsuperscript{62}Id. at 1722-23
\textsuperscript{63}See Triantis & Daniels, supra note 13, at 1078-79.
\textsuperscript{64}Id.
\textsuperscript{65}Id. at 1088.
\textsuperscript{66}Id. at 1088-89.
\textsuperscript{67}See Melvin Aron Eisenberg, The Legal Roles of Shareholders and Management in Modern Corporate Decisionmaking, 57 CAL. L. REV. 1, 10-11 (1969).
\textsuperscript{68}See Triantis & Daniels, supra note 13, at 1077-78; see also Nini et al., supra note 5, at 1758.
In addition, in theory creditors also have more incentive to care about the long-term performance of a borrower because they are bound contractually and are often repeat players.\textsuperscript{69} Unlike public company shareholders, who can exit their relationships with a corporation at any time by selling their shares, or bond market investors who can sell their bonds, lenders have historically had longer term relationships with corporate borrowers and a stake in borrowers' long-term success.\textsuperscript{70}

Empirical research supports the theory that lenders interact with borrowing companies to improve their performance, in a way that is consistent with the interests of all corporate stakeholders. Specifically, several rigorous studies have found that lender intervention following a covenant violation leads to positive changes in firm performance.\textsuperscript{71} Moreover, there is scant evidence of increased conflicts of interest with shareholders, or at least, conflicts in which the agency costs outweigh the positive benefits of lender intervention.\textsuperscript{72} To the contrary, the research suggests that lenders play an important role disciplining management when other governance mechanisms cannot.\textsuperscript{73} However, the incentives of these corporate governance actors are not static. As further explained below, related trends with respect to the lending market and the growth of structured finance force reconsideration of both the theory and empirical evidence on lenders' corporate governance intervention.

B. Corporate debt and leveraged loans

A trend that is indirectly undermining lenders' influence in governance is the expansion of the leveraged loan market, which in turn is driven by the expansion of structured finance.\textsuperscript{74} Leveraged loans are a staple of corporate finance, providing the dominant means for corporations to obtain funding for M&A activity and leveraged buyouts, among other things.\textsuperscript{75} The term "leveraged" refers to the fact that borrowers typically have high levels of debt, and therefore have credit ratings below

\textsuperscript{69}See Triantis & Daniels, supra note 13, at 1092.
\textsuperscript{70}Id. at 1079-80 ("In this sense, the interactive theory is true to the contractual vision of the firm and yields a system that is in fact far more effective in disciplining and correcting managerial slack than the traditionally conceived model in which shareholders act as the sole principals for management.").
\textsuperscript{71}See Nini et al., supra note 5, at 1715.
\textsuperscript{72}Id.; see also Triantis & Daniels, supra note 13, at 1091.
\textsuperscript{73}See Triantis & Daniels, supra note 13, at 1091.
\textsuperscript{74}See Glenn Yago & Donald McCarthy, The U.S. Leveraged Loan Market: A Primer 12 (Milken Institute 2004).
\textsuperscript{75}Id. at 16.
investment grade. This means that their ability to repay is more speculative than other kinds of debt, making them attractive to lenders looking to charge higher interest rates. Despite the implications of riskiness, leveraged borrowing is quite common, and 70% of U.S. corporations fit the definition of leveraged borrowers. Thus as the supply of credit has grown, the market for leveraged loans has grown from $497 billion in 2010 to over $1.4 trillion by the end of 2018.

1. Changes in the loan market: From "originate-to-hold" to "originate-to-distribute"

The market for leveraged loans has changed dramatically in recent years. Before 2010, loans were arranged and distributed in a manner similar to some types of securities offerings. The borrower (or issuer) appointed a lead bank, or an arranger, usually a large commercial or investment bank often selected in a competitive bidding process, but also by virtue of pre-existing relationships between the bank and the borrower. Arrangers typically syndicated the loans by finding other banks willing to become lenders, in order to share the credit risk on the loan. The lead bank performed due diligence on the borrower, analyzed the borrower's credit and negotiates the loan terms, including the covenants which provide the mechanism for influencing corporate

---

77See YAGO & MCCARTHY, supra note 74, at 12. A leveraged loan typically varies an interest rate of between 200 and 1,000 basis points ("bps") over LIBOR (the London Interbank Offered Rate), which is a benchmark market interest rate used for many types of financing. See id. Some market participants define leveraged loans exclusively in relation to their interest rate. For instance, the rating agency S&P defines a loan as leveraged if it has an interest rate of 125 bps or more above LIBOR. Loans with a margin (interest rate) of 500 bps or more above LIBOR are often referred to colloquially as "high-octane" loans. Id. Credit ratings assigned by credit rating agencies such as Moody’s, Fitch and Standard & Poor's range from the highest investment grade (AAA for S&P and Fitch, Aaa for Moody's) to those below investment grade (BB+ and lower for S&P and Fitch, Ba1 and below for Moody's).
78See Kolchin et al., supra note 76, at 3.
81See Kolchin et al., supra note 76, at 12.
82Id.
governance. The lead bank also acted as an agent for the lending syndicate, policing violations of the loan covenants or deterioration in the borrower's condition. In the event of a violation, the lead bank advises the rest of the syndicate on the appropriate course of action. Although the loans could be traded, they were relatively illiquid compared to debt securities, because transferring an interest in the loan required assigning rights under the contract, which often required the permission of the borrower, some percentage of the other lenders in the syndicate, or both. Moreover, the trading market for these loans was limited to banking institutions, which reduced the loans' liquidity. This model of leveraged lending is generally referred to as the "originate-to-hold" model, because originating lenders usually held the loans themselves through maturity.

In the years leading up to the financial crisis, the "originate-to-hold" model gave way to the "originate-to-distribute" model, as a growing class of non-bank investors took an interest in leveraged loans, creating a robust trading market for them. The majority of these non-bank investors were CLOs—a financial innovation created to transform pools of risky loans into less risky securities that spurred demand for loans—but also included some mutual funds, pension funds and insurance companies. Banks began to originate loans specifically to distribute to the non-bank institutions, which came to be referred to collectively as "shadow banks." Banks continued to retain portions of the total loans extended to any given borrower, usually as a combination of term loans (loans with a stated maturity, usually less than five years) known as Term Loan A facilities ("TLA" or "Term A"), and credit facilities (loans that can be drawn upon at the discretion of the borrower like a credit card). Non-bank institutions

85 Id. at 355.
86 Id.
88 Id.
89 Id. at 24.
90 Id.
91 See ERIK F. GERING, LAW, BUBBLES, AND FINANCIAL REGULATION 16 (2014) (describing the development of the shadow banking system).
92 See Bord & Santos, supra note 87, at 5.
were sold what were referred to as Term Loan B facilities ("TLB" or "Term B") that had longer maturities than the TLAs and fewer restrictive covenants, making them easier to trade.93

As this market grew, banks not only originated Term B tranches for the express purpose of selling them, but increasingly sold their Term A loans to non-banks as well, with the net result that traditional relationship banks held an ever-shrinking amount of the debt they had originated.94 Meanwhile, the ability and willingness of the non-banks to provide monitoring or governance functions came into question.95 The financial crisis dampened the "originate-to-distribute" market, but it gained momentum again rapidly beginning in 2010 to reach its current unprecedented level.96 Moreover, non-banks have become significant loan originators themselves, creating institutional tranches for use in their own CLOs and for sale to others.97 Traditional banks have also piled in, retaining small Term A tranches and some revolving facilities, but selling the largest share of their loan portfolios to non-banks, whose financial alchemy gave rise to an insatiable demand for the loans, as further explained below.98

The market described here had important consequences for the terms of the loans themselves that are especially important for this analysis. Specifically, changes in the market led to changes in loan covenants, and the renegotiation dynamics of the loans.

2. Loan covenants as levers of lender intervention

Loan contracts contain elaborate sets of covenants that govern the lender-borrower relationship, although for certain types of loans the lending market is causing the covenants to depart from the historical norm. Covenants in corporate loans serve several purposes. Generally, they help the lenders monitor borrowers, alert the lenders if borrowers approach financial distress and ensure that the borrowers do not do anything to jeopardize their ability to repay the loan.99 Covenants operate to do this in

93Id. at 2.
94Id. at 5.
95Id. at 2-3.
96See Bord & Santos, supra note 87 at 5-6 charts 1 & 2.
97Id. at 10-11.
98Id. at 8, 10.
99See Bratton, supra note 37, at 462 (explaining that business covenants "are designed to accord lenders significant influence over the operation of the borrower's business without affecting a transfer of control"); see also William W. Bratton, Bond Covenants and Creditor Protection: Economics and Law, Theory and Practice, Substance and Process, 7 EUR. BUS. ORG. L. REV. 39, 50 (2006) [hereinafter Creditor Protection] (discussing the role of covenants
several ways. One way is through affirmative promises by the borrower to take certain actions, for example, an agreement by the borrowers to provide periodic reports to lenders to assist in monitoring.100 It was this type of covenant that Krispy Kreme initially violated, leading to the removal of its CEO.101 Others include promises to pay taxes, and generally maintain its business operations as it would be expected to do.102

Another class of provisions is negative covenants—agreements to refrain from certain actions. These covenants can be broken down into financial covenants and business covenants. Generally, financial covenants create thresholds for the borrowers' financial standing, acting both as a deterrent to prevent borrowers from getting into financial trouble, and as a warning mechanism to alert lenders if trouble should occur.103 Such covenants might include restrictions on spending, or limits on changes to the borrowers' mix of assets and liabilities (or income and expenses).104

For example, some common covenants specify that borrowers need to maintain a minimum net worth (usually defined as assets minus liabilities); a minimum level of cash flow; a minimum leverage ratio (defined as the level of total debt to the level of EBITDA (earnings before interest, taxes, depreciation and amortization), a measure of the money available to service debt); or a minimum current ratio (defined as current assets over current liabilities—a measure of a borrower's liquid assets available to pay debts).105 If the thresholds are crossed, lenders have the right to accelerate the loan, i.e., demand immediate payment for all remaining amounts due.106 These tests serve several purposes: they provide a benchmark for a borrower's financial health, help the lender monitor the borrower by providing an early warning system if a borrower is in distress, and provide a means for lenders to exert control into the borrower's affairs,107 as further explained below.

Business covenants put restrictions on the kinds of activities a borrower can undertake. For example, common covenants restrict borrowers from taking on over a certain amount of new debt, undertaking


100See Bratton, supra note 37, at 463.
101See Baird & Rasmussen, supra note 1, at 1211.
102See Bratton, supra note 37, at 463.
103Id. at 463-64.
104Id.
105Id. at 464. (describing common financial covenants included in loan agreements).
106See Bratton, supra note 37, at 464.
107Id.
new acquisitions, or giving a security interest in collateral to a new party without the consent of the lenders. Breaching one these covenants similarly gives the lenders the ability to accelerate the loan.

3. The process of lender intervention: waiver and renegotiation

Even when covenants are breached, lenders rarely accelerate the loans, because doing so would often put the borrower into financial trouble or even bankruptcy, and the lenders would recover only a fraction of their investment. Rather, the value of the acceleration right is to provide the lenders with leverage to influence the borrowing company's management to take certain courses of action that the lenders deem appropriate. They do this in two ways: explicitly through renegotiated covenants, usually placing more restrictions on borrowers, and less explicitly through behind-the-scenes maneuvering. Behind the scenes maneuvering is often preferable because overt actions can create liability for the lender if the borrower performs poorly.

Thus covenants, and in particular their violation, explicitly give lenders the ability to influence (and even control) corporate decisions and policies. These explicit controls work alongside the behind-the-scenes maneuvering that lenders may do with borrowers, particularly if those lenders and borrowers have longstanding relationships through repeated interactions over time. In return for having a covenant violation waived, borrowers will agree to stricter loan terms such as a higher interest rate, limits on the amount of debt it may issue, limits on the money it may invest, and restrictions on the dividends it may pay out to its

---

108 Id. at 468-74.
109 See, e.g., Shepherd et al, supra note 5, at 1009.
110 See Tung, supra note 17, at 141 (stating that renegotiation of private credit agreements after a violation "is not only common, it is the rule."); see also Roberts & Sufi, supra note 43, at 160, 163 (noting that 96% percent of contracts with stated maturity exceeding three years in their sample had been renegotiated); see also Bratton, supra note 37, at 464 ("Negative covenants indirectly open the door to affirmative lender participation in borrower decision-making by forcing a borrower facing a covenant default to negotiate with the lender for a waiver or amendment.").

111 Lenders often wish to obscure their influence over borrowers to avoid the possibility that they will incur liability for the borrower's losses under business organization law. See Bratton, supra note 37, at 462 ("When a controlling lender's decisions yield losses, liability to other creditors or even to shareholders can follow.").
112 Id.
113 See Tung, supra note 17, at 141.
shareholders.\textsuperscript{115} Research on these types of interventions has found that they often result in a positive change for the borrowers. For instance, one group of researchers found that borrowers who violated a covenant subsequently saw their financial performance improve significantly due to the lenders' intervention.\textsuperscript{116}

4. Changes in the leveraged loan market and the erosion of loan covenants

The past decade has seen a large shift in the economics of lending that has in turn changed the covenants typically seen in syndicated leveraged loans.\textsuperscript{117} These changes were brought about in part by macroeconomic conditions, but in large part the demand for leveraged loans was spurred by structured finance.\textsuperscript{118} Demand from investors for leveraged loans has risen steadily since 2009, when the economy began to emerge from the credit crisis.\textsuperscript{119} Since then, the issuance of these loans has risen from $90 billion in 2009 to $609 billion in 2018, for a total market worth of $1.4 trillion.\textsuperscript{120}

The rise in demand for loans has been accompanied by a shift toward more borrower-friendly loan terms; most notably, the move to so-called covenant-light or "cov-lite" loans.\textsuperscript{121} The most commonly described feature of cov-lite loans is their lack of ongoing financial monitoring covenants—in other words, borrower financial health metrics like

\textsuperscript{115}Edison Yu, Banking Trends: Measuring Cov-Lite Right, 3 ECON. INSIGHTS, FED. RES. BANK PHILA. 1, 2 (2018).


\textsuperscript{117}See Yu, supra note 115, at 2.

\textsuperscript{118}Id. (noting that the patterns of issuance in the leveraged loan market track the changes in CLO issuances throughout time).

\textsuperscript{119}Id.


\textsuperscript{121}See Yu, supra note 115, at 3. The shift matches the model set out by Professors Choi and Triantis, who argued that increased supply of credit would lead to more borrower friendly terms. See Albert Choi & George Triantis, Market Conditions and Contract Design: Variations in Debt Contracting, 88 N.Y.U. L. REV. 51, 53-55 (2013) (arguing that the shift is driven, at least in part, by a decrease in adverse selection of borrowers, and less moral hazard when macroeconomic conditions are good). This is different, although consistent with the narrative advanced here that the supply of credit and increase borrower bargaining power are behind the shift. I note, however, that either explanation supports the basic conclusions of this Article.
leverage ratios and minimum coverage ratios are not tested continuously as they had been in the past.\textsuperscript{122} Rather, in cov-lite loans the borrower's compliance with financial ratios are tested only if the borrower undertakes certain transactions, such as issuing new debt or making a major acquisition.\textsuperscript{123} This type of monitoring covenant, known as an incurrence covenant, is common in high-yield bonds, and leaves the borrower free to breach its financial ratios as long as it is not engaging in a major transaction, or to engage in any major transaction as long it remains within its financial ratios.\textsuperscript{124} The ongoing monitoring function of traditional covenants is missing however, and the covenants do not have the same power to influence borrower behavior on an ongoing basis.\textsuperscript{125} In addition, the financial ratios themselves have become more lenient over time, both in terms of their levels, and in terms of what is included when calculating them.\textsuperscript{126}

The cov-lite phenomenon was first seen before the financial crisis, beginning around 2005.\textsuperscript{127} The prevalence of these loans faded during the credit crisis, but cov-lite loans began to appear again shortly after.\textsuperscript{128} Between October 2015 and October 2018, the proportion of leveraged loans that were cov-lite is estimated to have grown from just under 65% to almost 80% of the syndicated loan market.\textsuperscript{129} The rising proportion of

\textsuperscript{122}See Meyer C. Dworkin & Monica Holland, Recent Trends in US Term Loan B, in THE INTERNATIONAL COMPARATIVE LEGAL GUIDE TO: LENDING & SECURED FINANCE 26, 26 (2014). I note that there a number of other features of cov-lite loans, and that these permutations vary from deal to deal. The move to incurrence covenants is the commonly cited and the most relevant to this Article.
\textsuperscript{123}Id. at 27.
\textsuperscript{124}Id. at 29.
\textsuperscript{125}Id. at 27.
\textsuperscript{126}One prominent example of this is a more borrower-friendly definition of EBITDA, of which there are many variations. See Dworkin & Holland, supra note 122, at 27; see also Adam B. Badawi & Elisabeth de Fontenay, Contractual Complexity in Debt Agreements: The Case of EBITDA 1, 16 (June 20, 2019) (unpublished manuscript) (on file with author) (identifying previously unexamined variety in the definitions of EBITDA).
\textsuperscript{128}Id.
such loans reflects the loss of lenders' bargaining power as competition for such loans has grown.\footnote{See Albert Choi & George Triantis, Market Conditions and Contract Design: Variations in Debt Contracting, 88 N.Y.U. L. REV. 51, 54-55, 61 (2013).}

\section*{C. Structured Finance and CLOs}

Structured finance is a primary factor driving increased demand for leveraged loans, and in turn, the move toward cov-lite loans.\footnote{Yu, supra note 115, at 1-3.} Structured finance vehicles, in particular, CLOs, have emerged as the dominant investors in the corporate loan market,\footnote{See Yun Lou, Maria Loumioti & Florin P. Vasvari, CLOs' Trading Activity and Performance 1, 3 (Working Paper, Apr. 2014), https://www.kellogg.northwestern.edu/departments/accounting/~media/A41AC10049B4473293086BDA5231775Cashx.} and are estimated to hold over half of all non-investment grade loans,\footnote{See Gary Gorton & Andrew Metrick, Securitization, in 2B HANDBOOK OF THE ECONOMICS OF FINANCE 48 (G.M. Constantinides, M. Harris & R.M. Stulz eds., 2013); see also Houman B. Shadab, Credit Risk Transfer Governance: The Good, the Bad, and the Savvy, 42 SETON HALL L. REV. 1009, 1067 (2012).} driving a large part of the market for them.\footnote{See Yihui Wang & Han Xia, Do Lenders Still Monitor When They Can Securitize Loans?, 27 REV. FIN. STUD. 2354, 2358 (2014) (noting that the patterns of issuance in the leveraged loan market pre-crisis track the changes in CLO issuances throughout this time).} Not only do these structures shift bargaining power between lenders and borrowers, but they allow lenders to separate ownership and risk, dampening their incentives to monitor, as explained below. A description of how CLOs and similar structured finance vehicles work helps to explain why, and helps illuminate how, these vehicles have impacted the demand for leveraged corporate debt.

\subsection*{1. CLO structures and operation}

CLOs are structured investments based on portfolios of corporate loans.\footnote{See Efraim Benmelech, Jennifer Dlugosz & Victoria Ivashina, Securitization Without Adverse Selection: The Case of CLOs, 106 J. FIN. ECON. 91, 91 (2012); see also Lou et al, supra note 132, at 9 (stating that a CLO is a structured product that invests in corporate loans).} They are a species of the much-maligned collateralized debt obligations ("CDOs") that are alleged to have contributed to the financial crisis of 2008.\footnote{See Benmelech, supra note 135, at 91.} However, CLOs are different because their collateral and payout structure are based on corporate debt, unlike most pre-crisis CDOs which were based on home mortgage loans.\footnote{See Gorton & Metrick, supra note 133, at 11.} Like all CDOs, CLOs are structured by banks, asset managers, hedge funds or private equity funds
using a special purpose vehicles ("SPV")—a company set up for the sole purpose of holding the loans that make up the core of the investment.\footnote{Id.} Asset managers acquire a collateral portfolio by buying pieces of syndicated corporate loans.\footnote{See Benmelech supra note 135, at 94; see also Lou et al, supra note 132, at 9 (noting that the period during which the manager acquires the collateral is called warehousing).} The collateral in a typical CLO collateral pool can include over one hundred different syndicated loans.\footnote{See Benmelech, supra note 135, at 94.} As of 2015, an average CLO had a principal balance of $500 to $600 million in outstanding loans involving an average of 140 corporate borrowers.\footnote{Stavros Peristiani & João A.C. Santos, Investigating the Trading Activity of CLO Portfolio Managers, LIBERTY STREET ECON. (Aug. 3, 2015, 7:00 AM), http://libertystreeteconomics.newyorkfed.org/2015/08/investigating-the-trading-activity-of-clo-portfolio-managers.html#.VthahlTrJph.} The average size of an individual loan in a CLO portfolio was $2 to $3 million.\footnote{See Benmelech, supra note 135, at 94.} The average CLO manager in 2014 controlled 16 CLO vehicles at any one time.\footnote{See Lou et al., supra note 132, at 4.}

2. From risky loans to safe securities: the alchemy of CLOs

CLOs bundle leveraged loans—relatively risky loans from debt-laden borrowers—and convert them into "safe" securities. The loans that go into CLOs are term loans—TLAs, TLBs and so on. Although each of the underlying loans in a CLO portfolio is individually rated,\footnote{See Shadab, supra note 133, at 1067.} the attraction of the CLO to investors is the tranched structure: interests in the collateral pool are sold as debt instruments, such as notes, issued by the SPV, but these notes carry different risks of loss compared to the underlying pool of loans. In most such securitizations, the first losses suffered by the collateral pool (for instance, when the first borrowers default) are borne by the lowest tranches of notes; meanwhile, the highest tranches are the last to lose anything.\footnote{See Gorton & Metrick, supra note 133, at 11.} Each tranche gets its own rating by the credit rating agency which is separate from the credit rating of any of the individual underlying loans in the SPV.\footnote{See Charles Kahn & Gur Huberman, Default, Foreclosure, and Strategic Renegotiation, 52 L. CONTEMP. PROBS. 49, 51 (1989).} The rating of the higher tranches of notes is usually very strong – often AAA which is the highest rating and essentially the safest form of debt investment.\footnote{Id.} The rating on the higher tranches is so strong because, ideally, loans are chosen in such
a way that there is a small probability that losses will be large enough to reach the highest tranches, and thus those tranches are considered to be extremely safe investments. That safety depends, of course, on the assumptions of the statistical model that predicts what, if any, losses are likely to occur on the underlying loans (as further explained in the analysis section below). The 2008 financial crisis starkly illustrated how badly things can go if the assumptions of those models do not hold up.

3. The role of lending banks and non-bank institutions

CLO underwriters serve a particularly important role (and sometimes multiple roles) creating these structures. Underwriters are often banks, but increasingly private equity firms, asset managers and other non-bank institutions have become heavily active in the market. For example, private equity firm Kohlberg Kravis and Roberts ("KKR") ended 2018 as one of the top 25 underwriters of U.S. CLOs, underwriting a total of $162 million worth of CLO notes. Underwriters are responsible for structuring the CLO, determining how payments will work, how decisions of which loans to buy will be made, working with CLO managers to buy the loans for the vehicle, and working with the rating agencies to get CLO tranches rated, priced, and allocated.

Many of the banks that arrange leveraged loans and sell their participations to CLO vehicles are themselves heavily involved in structuring and underwriting CLOs. These institutions earn fees in return for underwriting the CLOs, and often retain some portion of the CLO notes, usually highly rated super senior tranches. In so doing, these institutions limit their own exposure to the borrower's creditworthiness, and earn additional profit by creating and investing in CLOs made from their own loans. This creates a cycle in which large financial institutions have a greater incentive to lend in order to sell loans to CLO vehicles. The more CLOs a bank structures, the more it will be incentivized to lend in order to provide collateral for the vehicles it may structure and underwrite.

---

148 Id. at 51-52.
150 See Benmelech, supra note 135, at 11; see also Nicola Cetorelli & Stavros Peristiani, The Role of Banks in Asset Securitization, 18 FED. RES. BANK N.Y ECON. POL'Y REV. 47, 57 (2012).
151 See Shadab, supra note 133, at 1067.
152 See Wang & Xia, supra note 134, at 2357.
153 See Shadab, supra note 133, at 1067.
Moreover, non-bank institutions have seized on the demand for loans and begun issuing loans and sponsoring CLOs as well. Consequently, the market for CLOs has grown to an all-time high with a total volume of $97.89 billion for the year. In turn, CLOs currently account for two thirds of leveraged loan investments.

D. CLOs, credit supply and changes in creditor incentives

In addition to giving banks incentives to lend by increasing demand, CLOs allow banks to engage in regulatory arbitrage that allows them to lend more. Before the widespread use of structured finance, corporate loans were often held on the lenders' balance sheets, providing an incentive to screen and monitor borrowers. Securitizing the loans—in essence, selling both the right to payment and the risk of default to a CLO—allows lending banks to finance them off of their balance sheets. This has benefits for banks' management of their regulatory capital. For any loans on a bank's balance sheet, the bank must carry a cushion of capital to protect against the possibility that borrowers will default on their loans in amounts greater than expected loan loss reserves. The more loans a bank makes, the greater the capital it must hold back. Moreover, banks are restricted by regulatory capital requirements to meet specified ratios in terms of their assets to loan liabilities. All of this means that as banks lend greater amounts, it restricts their ability to make more loans until the original ones are paid back.

However, when a bank sells an interest in a loan to a securitization vehicle like a CLO, it reduces the overall liabilities for potential losses on

154 See Wang & Xia, supra note 134, at 2355; see also Taylor D. Nadauld & Michael S. Weisbach, Did Securitization Affect the Cost of Corporate Debt?, J. FIN. ECON. 1, 2 (2012) (finding that large underwriters are more likely to sell the loans they arrange to CLO vehicles).
155 See Nadauld & Weisbach, supra note 154, at 16.
158 See Cetorelli & Peristiani, supra note 150, at 56.
159 See Gorton & Metrick, supra note 133, at 2.
160 Id.
161 See Margolis, supra note 157.
162 See Gorton & Metrick, supra note 131, at 3.
163 Id.
the loans listed on their balance sheets, and provides them with cash approximately equal to the net present value of all of the payments to be made under the loans.\textsuperscript{165} This effectively redistributes credit risk to the loan purchaser, giving the originating bank more capital and reducing its potential liabilities, giving it freedom to make more loans.\textsuperscript{166} The operation thus increases the overall supply of credit by spreading the credit risk to investors.\textsuperscript{167} The investors, in turn, buy the loans as part of a structured pool of collateral that, as explained above, has been enhanced to an investment-grade product.\textsuperscript{168}

Thus, securitization of the loans gives loan originators greater flexibility in managing their portfolios and reducing the minimum capital required on their loan book.\textsuperscript{169} It has also has the effect of converting illiquid assets (loans) to tradeable debt securities (notes).\textsuperscript{170} Consequently, banks can continue to lend without causing their balance sheet to grow, which in turn increases the availability of finance for corporate borrowers.\textsuperscript{171} This has the added benefit of increasing liquidity in the secondary loan market, as CLO managers create a robust market for loans.\textsuperscript{172}

1. Securitization and (Non)Governance

The market dynamics just described add up to a system that has the potential to undermine corporate governance (and as explained below in Part II, this Article empirically supports the hypothesis that it does). The effects of CLO issuances impact governance in two ways: by contributing to the erosion of loan terms, and by reducing lenders’ incentives to monitor or intervene.\textsuperscript{173} By increasing the supply of credit, CLOs indirectly contribute to erosion of loan terms as described above. In turn, they help to diminish the ability of lenders to monitor borrowers because loans do not contain the same levers that they once did.\textsuperscript{174} But CLOs also reduce lenders’ incentives to use even the tools they have left for two reasons.

\textsuperscript{165}See Gorton & Metrick, \textit{supra} note 133, at 2.
\textsuperscript{166}Id.
\textsuperscript{167}Id.
\textsuperscript{169}Id. at 11.
\textsuperscript{170}Id. at 14.
\textsuperscript{171}Id. at 16.
\textsuperscript{172}See Peristiani & Santos, \textit{supra} note 141.
\textsuperscript{173}See Bord & Santos, \textit{supra} note 87, at 25.
\textsuperscript{174}Id.
First, bank lenders are retaining ever smaller portions of the loans they originate, and therefore have less reason to engage in monitoring, even though they are in the best position to do so.175 This is because monitoring is costly and as the risk they retain decreases, the costs of monitoring outweigh the benefits of doing it.176 Moreover, the CLOs that are taking over the majority of the loans have less expertise and fewer resources with which to monitor.177 They also have less reason to do so, because their compensation is only weakly tied to performance; CLO managers receive a base fee, typically senior to all notes simply for managing the loans, regardless of how they perform.178

Some scholars have noted that despite the fact that CLO's (and indeed, all non-bank institutional investors) have little incentive to act in the event of a covenant violation, that this should not be a problem because the traditional relationship banks continue to extend revolving lines of credit, and that those loans continue to contain full covenants.179 Thus, relationship banks should retain incentives to continue to monitor, and other lenders (like CLOs and other shadow banks) can free ride off the monitoring.180

However, this contention does not take into account the whole story and the changing dynamics of loan markets are rendering the assumptions underpinning those arguments problematic. First, more non-banks have entered the lending space in recent years, arranging loans that are not tethered to full-covenant credit facilities or relationship lenders.181 Thus, there is an ever-growing pool of borrowers for there is no free ride, because there is no relationship lender or full covenant loan.

Second, as explained above, many relationship banks have gotten into the CLO business themselves, and reduced the amounts they extend to borrowers under the facilities that they retain to a small proportion.182 Given the costs of monitoring, it may not be worth a banks effort if the exposure they keep is still small. Third, the competitiveness of the market is diminishing banks' bargaining power vis a vis borrower. Banks may be reluctant to intervene too forcefully, for fear that the borrower will take their business elsewhere. Thus, even if relationship banks want to monitor, it is becoming costly in terms of both time and potential loss of

175Id.
176Id.
177See Bord & Santos, supra note 87, at 26.
178Id.
179See Yu, supra note 115, at 4.
180Id.
181See Bord & Santos, supra note 87, at 30.
182Id.
business, providing them another reason to simply avoid doing anything. Finally, the maturities of the revolving facilities and Term loans rarely match, and the TLBs often survive after TLAs and some facilities have dropped away.\footnote{Id.} This means that there are numerous instances in which there may be no relationship bank to intervene, even if one were willing and able to.

These explanations all point to the conclusion that there is a substantial group of borrowers for whom an important mechanism of corporate governance is disappearing. Whether and to what extent this is actually happening is explored empirically in Part II below.

III. EMPIRICAL CASE STUDY IN NON-GOVERNANCE: DATA AND ANALYSIS

This article searches and analyzes a large original dataset of corporate loans that provides evidence of the extent of corporate governance interventions that lenders take, and how these interventions change with the changing supply of credit due to securitization. The empirical analysis consists of three parts. In the first part, I investigate whether the lender governance interventions that were documented in the period before the financial crisis are still apparent. Following the methods used in prior research, I seek to establish whether patterns that held before the financial crisis still hold today. I do this using a first-difference approach (an approach that allows for changes in a company over time, as per the older studies), and controlling for the financial covenants that both violators and non-violators are subject to. The goal is to see how indicia of good management change following a violation. If there is a notable improvement, as was observed in the pre-crisis era, it is an indication that lender interventions were effective at improving a company's governance and management.

The second part of this analysis examines whether or not there is a divergence between the governance changes of covenant violators whose loans are not securitized versus those that are. The empirical strategy is to use a difference-in-difference analysis, using pre- and post-violation governance and financial metrics as the first difference, and whether the loan is securitized (i.e., included in a CLO) as the second difference. The technique helps to distinguish a true difference in trends of the two types of loans from ones that are spurious.
The third analysis looks at CEO and CFO turnover in the wake of a loan covenant violation. Lenders sometimes exert their influence over borrowers by forcing a change in management, a phenomenon that was documented in the pre-crisis era with respect to loan covenant violations.\(^\text{184}\) If lenders have less bargaining power (or less interest in monitoring), one might expect to see fewer high-level turnovers following a violation. In the analysis below, I investigate whether the lenders continue to force management changes in the wake of covenant violations as they did in the pre-crisis era. I also examine whether the incidence with respect to securitized loans varies significantly from the incidence with non-securitized loans.

A. Loan and covenant violation data

To create the dataset, I start with a sample of firms with quarterly financial data available from the Compustat fundamental quarterly dataset, from July 2007 through December 2018.\(^\text{185}\) I remove any firm-quarter observations for which certain fundamental accounting information is missing: in particular, I remove firm-quarters that have no information for a firm's total assets, total sales and common shares outstanding at the end of a quarter.\(^\text{186}\) These are dropped because without this information, it is difficult to match the observation with an SEC filing, and difficult to conduct any meaningful analysis with respect to a firm's performance for that quarter. Using this preliminary dataset, I extract every annual report on Form 10-K and quarterly report on Form 10-Q for each firm from 2008 through March 2019 from the SEC's EDGAR database.\(^\text{187}\) I match these filings to the initial list of firms taken from Compustat using the SEC's central indexing key ("CIK") where this is available in the database, and the IRS's employer identification number ("EIN") where the CIK is not listed in Compustat. This results in a dataset of 289,589 SEC filings, each constituting a firm-quarter observation.\(^\text{188}\) Most of the filings are in HTML

\(^{184}\)See Nini et al., supra note 5, at 1715.


\(^{186}\)Abbreviations in parentheses denote the Compustat codes for these accounting items. This method tracks the one used by other researchers on data from before the financial crisis. See Nini et al., supra note 5, at 1747.


\(^{188}\)This method follows that used by Sufi. See Nini et al., supra note 5, at 1747.
format, which makes them difficult to read or parse naturally. I therefore use an algorithm to remove all HTML tags in order to render the filings readable and searchable.

Reading nearly 300,000 filings to find information on loan covenant violations would be a daunting task (and I would be working on this article for years). Therefore, I use a combination of text mining and machine learning techniques to identify the violations and pull out the data about them. First, I search the "cleaned" SEC filings for information about loan covenant violations. Such violations must be disclosed pursuant to Regulation S-X, even if they have been waived by the lender, which is almost always the case.189 The search algorithm identified any mention of the word "covenant" or "covenants" within five lines (30 characters) of the words "waiv", "viol", "in default", "modify", or "not in compliance."190 A manually searched sample of 1,000 filings reveals that the search algorithm is vastly over-inclusive, identifying approximately 8 false positives for every one true violation in the data, but that 97% of violations are captured in the search.

In order to separate the true positives from false positives, I manually coded 1,000 of the filings, and used a machine learning algorithm to separate true positives from false positives. In order to do this, I used 600 of the 1,000 hand-coded filings to iteratively train a deep neural net to classify the remaining filings.191 This process is an iterative one. Each time the algorithm is trained, it is tested against a sample of 200 documents held out. Any mistakes are then corrected and become inputs

---

189See 17 C.F.R. § 210.4-08 (2018) (requiring that "[t]he facts and amounts concerning any default in principal, interest, sinking fund, or redemption provisions with respect to any issue of securities or credit agreements, or any breach of covenant of a related indenture or agreement, which default or breach existed at the date of the most recent balance sheet being filed and which has not been subsequently cured, shall be stated in the notes to the financial statements. If a default or breach exists but acceleration of the obligation has been waived for a stated period of time beyond the date of the most recent balance sheet being filed, [the issuer must] state the amount of the obligation and the period of the waiver."). The SEC has also stated that companies should disclose if they are reasonably likely to breach a loan covenant. See In re Comm’r Guidance Regarding Md&a of Fin. Condition & Results of Operation, Release No. 8350 (Dec. 19, 2003).

190This method is similar to that used in prior research on lender interventions. See Nini et al., supra note 5, at 1749.

191This method has begun to see wider use in legal research and practice. See, e.g., Gabriel Rauterberg & Eric Talley, Contracting out of the Fiduciary Duty of Loyalty: An Empirical Analysis of Corporate Opportunity Waivers, 117 COLUM. L. REV. 1075, 1082 (2017) (using a machine learning classifier to identify fiduciary duty waivers in SEC filings). The method is already widely used by law firms to sift large troves of documents in discovery.
into the next iteration to train the neural net. By the end, the neural net had 100% accuracy classifying documents in the test sample.\(^{192}\)

After the classifier was run on the remaining data, I performed a further check on 200 randomly selected filings to test for accurate classification. I found that the classifier had correctly identified each one. The result was a sample of 3,581 firm-quarters for which a new covenant violation was reported, involving 1,343 borrowing companies. The entire dataset was then matched with long-term bond rating data from Standard & Poor's for each company in each quarter.

The first noteworthy descriptive finding from data concerns the basic trend in covenant violations over time. The trend over time with respect to covenant violations reported in 10-Ks and 10-Qs is illustrated in Figures 1 and 2 below.\(^{193}\) Figure 1 shows the total number of violations reported between 2008 and 2018.\(^{194}\) Figure 2 shows "new" covenant violations.\(^{195}\) Since companies report the same violation during the entire time it is ongoing, I isolate violations which are reported for the first time, i.e., for companies that have no violations reported for the preceding four quarters.\(^{196}\)

**Figure 1: Total Covenant Violations Reported from 2008-2018**

---

\(^{192}\)The machine learning classifier even picked up mistakes that I had made in hand-coding the filings.

\(^{193}\)See infra figs. 1, 2.

\(^{194}\)See infra fig. 1.

\(^{195}\)See infra fig. 2.

\(^{196}\)See infra figs. 1, 2.
Evident from Figures 2 and 3 is that a large number of violations were reported in the first few years of the dataset\textsuperscript{197} (not altogether surprising given the financial distress that was occurring at the time) but that the number of violations has declined steadily since then. In particular, the number of violations dropped off significantly in 2017 and 2018. The pattern is consistent with a relatively good economic environment for borrowing firms,\textsuperscript{198} as well as an increase in cov-lite loans, which have fewer covenants to violate.

Observations were then matched with data from the Loan Pricing Corporation Dealscan database ("Dealscan"), a database of loan transactions and deal information.\textsuperscript{199} The Dealscan database contains only a portion of the loans and other debt instruments involving public companies at a given time, and thus does not include all of the loans taken by companies in the initial dataset, or all of the companies who report covenant violations. Nonetheless, the initial dataset was successfully matched with 10,105 debt transactions involving 3,370 companies, 1041

\textsuperscript{197}See supra figs. 1, 2.
\textsuperscript{198}Id.
of which were covenant violators. In addition to the Dealscan data, I extracted loan agreements for a further 1,520 companies from the SEC's EDGAR database, again using an algorithm to extract agreements that had been filed as exhibits to other public filings.

For the second part of the analysis (the analysis of CEO and CFO departures), I extracted information from Forms 10-K, 10-Q and 8-K filings regarding turnover of senior company officers. As previously mentioned, lenders sometimes exert their influence by forcing a change in management, a phenomenon that was documented in the pre-crisis era with respect to loan covenant violations.\footnote{See Nini et al., supra note 5, at 1715; see also Baird & Rasmussen, supra note 1, at 1215.} Although it is not possible to directly observe whether a lender influences a senior officer to step down from their role (and indeed, lenders have reason to keep their influence over such processes obscure),\footnote{See Bratton, supra note 37, at 462 (noting that lenders prefer to work behind the scenes to force an ouster of management, to avoid liability under the doctrine of substantive consolidation: "[w]hen a controlling lender's decisions yield losses, liability to other creditors or even to shareholders can follow").} when a departure occurs suddenly after a new loan covenant violation occurs, a plausible inference is that the lender had some influence over the process.\footnote{This metric is the one validated in financial economic research on lender interventions. See, e.g., Nini et al., supra note 5, at 1715.} The inference becomes even more plausible if there is a systematic pattern of such departures after new violations for different companies. Part of the analysis below investigates whether or not this pattern persists, with respect to debt that is primarily securitized in CLO vehicles, and whether the pattern changes as the market for credit becomes more competitive. The analysis and results that come from this data are further described below.

1. Analysis of financial indicators

Research on lender intervention has found that that lenders intervene after a covenant violation, and that the intervention leads to better performance, as measured by a number of indicators.\footnote{Id. at 1716.} That research also found that covenant violations frequently result in renegotiation of the loan agreement shortly after the violation, indicating the lender placing more restrictions on the borrower.\footnote{Id. at 1715.} Specifically, important accounting measures that indicate a firm's financial health tend to deteriorate in the period leading up to a covenant violation, but they improve significantly in the four quarters following a violation in response
to both explicit and implicit intervention by lenders. Some (but not all) of these indicators track financial covenants that are typically included in the agreements.

Three categories of performance indicators are particularly relevant to lenders and offer particular insight: measures of financial conservatism, investment conservatism and operating performance. In essence, they measure the extent to which borrowers cut back on assets, reduce leverage, and improve their costs and cashflow following a covenant violation, all of which are moves that speak to lenders' monitoring functions. If companies exhibit financially irresponsible behavior before the violation, and then markedly improved financial responsibility following the violation, it is compelling evidence that the lender intervened either directly or indirectly. These measures are explained below.

2. Financial conservatism

The first category of performance indicators proxy for financial conservatism, i.e., how careful a company's management is conserving the company's funds and limiting debt in the periods after a violation. Accounting measures that proxy for financial conservatism are: the change in total cashflow of the firm (as a percentage of the total assets), the change in the amount of shareholder payouts made (i.e., how much the company's money is being poured into share buybacks or dividend distributions), the change in the total debt of the company (scaled by the amount of the company's assets, so that the metric can be compared across firms of different sizes), and the change in the net debt issuance, or, how much new debt a company takes on without eliminating old debt.

---

205 Id. at 1716.
206 See Nini et al., supra note 5, at 1737.
207 Id. at 1719-20.
208 Id.
209 Id. at 1717.
210 See Nini et al., at 1719-20.
211 These categories are used in other studies of lender interventions and firm management. See, e.g., Nini et al., supra note 5, at 1719-20. Other scholars have used metrics such as Tobin's Q to measure management effectiveness. See Shepherd et al., supra note 5, at 1016. Tobin's Q attempts to measure the replacement cost of the intangible assets of a firm, one of which is assumed to be management's ability to run the firm well. Although it has been widely used in research on the value of corporate governance provisions, its effectiveness has been called into question as an adequate measure of the value of firm governance. See, e.g., Robert Bartlett & Frank Partnoy, The Misuse of Tobin's Q 1-2 (Univ. of Cal. Berkeley Pub. Law, Research Paper, Feb. 4, 2018), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3118020. The measures used here are more nuanced and diverse than Tobin's Q. All of them, taken together, provide a robust means of measuring management's performance on specific criteria.
Of perhaps particular interest is the shareholder payout metrics and debt-related measures. Each of these is the subject of common loan covenants, the goal of which is to constrain the agency costs of debt, i.e., to prevent managers from taking action to benefit themselves or shareholders, that might put their ability to repay the loan at risk. In addition to restricting new debt issuance, covenants sometimes limit shareholder payouts to prevent the transfer of assets to shareholders at the expense of creditors. Given that, it should come as no surprise that violations often occur in tandem with, and sometimes as a result of, an increase in new debt issuance or shareholder payouts, and that lender intervention results in bringing the level of these metrics back down. Regardless of whether restrictions on such payouts are a cause of a violation or a result of it, a rise in shareholder payouts indicates less financial conservatism and greater agency costs with respect to lenders (although not necessarily with respect to shareholders). Similarly, total debt and net debt issuance might be restricted by covenants, or might be imposed as part of a waiver agreement or renegotiation. In any event, changes in these measures are good indicators of lender intervention.

3. Investment conservatism

The second category of performance metric is investment conservatism. Investment conservatism is related to financial conservatism, in that it measures how carefully management uses its resources, but investment conservatism focuses specifically on how much of a company's resources are being put toward major acquisitions. Major acquisitions can, of course, have positive results for a company; however, if a company is in distress to the point that it is violating covenants in its loan agreements, lenders typically prefer that companies be conservative with such acquisitions.

Investment conservatism is typically measured by looking at a number of accounting metrics: changes in a company's assets (in log scale to normalize the distribution of changes in assets and allow for

---

212 See Bratton, supra note 37, at 463.
213 Id.
214 See Nini et al., supra note 5, at 1716.
215 Id.
216 Id. at 1757.
217 Id. at 1741.
218 See Nini et al., supra note 5, at 1717.
219 Id. at 1719.
220 Id.
221 Id.
comparability), the change in a firm's property, plant and equipment balance sheet item, another way of assessing a company's investment in large fixed assets (in log scale for comparability), the change in a company's capital expenditures, which measures the outflow of cash to acquire significant new property (scaled by assets, again, for comparability), and changes in cash acquisitions, a measure of the outflow of a company's cash spent on major purchases (also scaled by assets).222

As with financial conservatism, measures of investment conservatism are directly affected by covenants commonly found in loans.223 Covenants might directly limit mergers or sales of assets.224 They might also limit capital expenditures (expenditures for fixed or capital assets).225 These expenditures are often necessary to maintain a business, but lenders might impose a cap to ensure that money is invested in more liquid assets and is available to pay debt.226 Acquisitions might also be limited to conserve cash for debt payment and deter the acquisition of risky assets at the expense of safer ones.227 In any event, where these measures improve from the perspective of lenders, a lender intervention or influence (direct or indirect) can be inferred.228

4. Operating performance

The last category is operating performance.229 Operating performance can be measured in accounting terms as: changes in operating cashflow (scaled by the amount of assets a firm has to maintain comparability with other firms), the change in revenues from sales, and the change in operating costs (the latter two are both transformed to their natural log, in order to mitigate skew and make the distributions comparable between periods and between companies). Finally, the market-to-book ratio of the firm is also sometimes used as a performance metric.230 This ratio measures the relationship between the market price of firm's shares and the value of the firm as recorded in historical terms on its balance sheet.231 The metric is intended to proxy for extra value that shareholders give to the firm's intangible assets and growth potential, and

222See Nini et al., supra note 5, at 1735.
223See Bratton, supra note 37, at 479.
224Id. at 473.
225Id. at 474.
226Id.
227See Bratton, supra note 37, at 474.
228See Nini at al., supra note 5, at 1716.
229Id. at 1734.
230Id.
231Id.
thus has been used as a rough signal for the effectiveness of the firm's management.\footnote{See Bartlett & Partnoy, supra note 211, at 1-3 (noting the use of market-to-book ratio in many studies).}  

\textbf{B. General Approach and Controls}

The average effect of a covenant violation on all of these measures is assessed below. When covenants are violated, lenders often agree to waive the transgression in exchange for the borrower's agreement to take certain actions to run the company in way that will be less financially risky.\footnote{See Shepherd et al., supra note 5, at 995-96.} Lenders are also able to force borrowers to agree to new contractual terms that may have more stringent requirements.\footnote{Id.} If these measures are effective, they should be apparent as changes in the performance metrics described above, occurring shortly after a new covenant violation.

The empirical results are remarkably consistent with the pre-crisis research and the work of legal scholars who have posited that lenders have an important role to play in corporate governance. For most of the measures just described, companies' average performance deteriorates until the quarter of the violation, but the measures improve significantly by the fourth quarter after the violation.\footnote{See Nini et al., supra note 5, at 1716.} This suggests that lenders continue to get involved after a violation and help make the company run more effectively (at least, from the perspective of the creditor).\footnote{Id. at 1717.} In doing so, it is plausible these creditors reduce agency costs by reducing management slack.\footnote{Id. at 1739.} The graphs below illustrate the trends in the raw data with respect to some of these measures.

The analysis looks at initial covenant violations only.\footnote{See infra fig. 4.} Since violations are sometimes ongoing for multiple quarters, using each violation would effectively double count some violations. To mitigate this problem, I assume that new violations are those reported after at least four quarters (one year) during which no violation is reported.\footnote{Id.} I assume that violations reported in successive quarters, or violation reports separated by less than one year are the same violation.\footnote{See infra fig. 4.}
The analysis uses a number of controls, as further described in the appendix table notes. Controls are included for each borrower's industry (as 2-digit standard industry classification ("SIC") codes), for each calendar quarter, for the long term bond rating of each company as a proxy for company strength, and for several measures that proxy for firm size and quality that are commonly used in the financial economic literature, and sometimes the subject of financial covenants: the leverage ratio, the ratio of interest expense to average assets, the ratio of net worth to total assets, the current ratio, and the market to book ratio. Each of these ratios is the subject of ubiquitous financial covenants in loan agreements, and they are included to control for possible unobservable differences between firms.

**FIGURE 4: MEASURES OF OPERATING PERFORMANCE BEFORE AND AFTER LOAN COVENANT VIOLATION**

---

241These controls are consistent with those used in other research on the impact of covenant violations. See e.g., Nini et al., supra note 5, at 1734. In addition, the number of lenders in a syndicate have been found to influence the aggressiveness with which lenders respond to covenant violations. See Chava & Roberts, supra note 116, at 28-29 (discussing the aggressive response of solo lender as compared to those in a syndicate). This is thought to occur because smaller lenders in a smaller syndicate each face more risks, and potentially have fewer mechanisms for reducing information asymmetry between themselves and the borrowers. Id. Smaller lending groups may also find it easier to renegotiate loan terms than larger syndicates, which face coordination problems. See Patrick Bolton & David S. Scharfstein, Optimal Debt Structure and the Number of Creditors, 104 J. POL. ECON. 1, 3-4 (1996). The vast majority of the loans in the sample studied here involve syndicates of five lenders or more, thus mitigating the concern that single lenders or small syndicates might affect the results. In unreported regressions, I include a control for the number of lenders, and the results remain consistent.
These trends are confirmed using a first difference estimator. First difference analysis allows for measurement of how a firm’s performance changes over time, using various controls, in comparison with other firms, and has the additional advantage of negating the effect of time-varying, firm-specific characteristics that might otherwise lead to biased results. The results of these analyses are reported in Tables A, B, C and D in the appendix.

**Figure 5: Measures of Financial Conservatism Before and After Loan Covenant Violation**

![Graphs showing trends in financial metrics before and after violation](image)

Lender Intervention: CLO versus Non-CLO Loans

---

242 See infra Appendix Tables A, B, C & D.
I use a difference-in-difference method to assess whether the effects of lender interventions differ when a loan is bundled into a CLO as opposed to when it is not.\textsuperscript{245} Difference-in-difference is a technique that can be used to determine whether the difference between two changing trends is statistically significant.\textsuperscript{244} To do this, I first identify which covenant violators' loans are put into CLOs, using a subset of the data for which Dealscan information is available.\textsuperscript{245} This leaves me with two samples: one group of covenant violators whose loans are included in CLOs and one group whose loans are not.\textsuperscript{246} The sample of CLO loans that can be identified includes 564 loans, with a value of approximately $89 billion.\textsuperscript{247} The loans with no identifiable CLO-included tranche, or where the non-institutional debt is significant (greater than 10% of all loans to the borrower) includes 1,036 loans totaling $54 billion.\textsuperscript{248}

1. Basic results: raw data

Even without any sophisticated analysis, the difference between the CLO and non-CLO sample is immediately apparent in the raw data.\textsuperscript{249} For illustration purposes, figure 6 below shows the pattern with respect to

\textsuperscript{245}See infra Appendix Tables A, B, C & D.
\textsuperscript{244}See JEFFREY WOOLDRIDGE, ECONOMETRIC ANALYSIS OF PANEL DATA, 288 (2002).
\textsuperscript{247}Dealscan provides the identity of the lenders in the lending syndicate, the arranger, and the type of loan, among other information. Most of the loans are one of two types: term loans (i.e., loans made for a set period of time) and revolving credit facilities (lines of credit that borrowers can draw upon at any time). Two realities of the CLO market allow me to determine which loans go into CLOs. First, CLO's invariably include institutional tranches of leveraged loans (i.e., Term Loan B facilities). See, e.g., Benmelech et al., supra note 135, at 96. CLOs also include Term Loan C, D, E facilities and so on, but for the sake of simplicity, I refer to all of these collectively as Term Loan B facilities. These tranches are created for institutional investors, often with securitization in mind. See Wang & Xia, supra note 134, at 2358-60. This can be contrasted with a Term Loan A or revolving credit facilities, for which the initial arranger usually remains the lender for some period of time and retains its relationship with the borrower.

Second, when the lenders in the syndicate include asset managers or CLO special purpose vehicles, the loans will always be included in a CLO. See e.g., Benmelech et al., supra note 135, at 95. I take the names of CLOs from Moody's Structured Finance Reports, covering 2008 through 2018. While it is possible that a loan for which the syndicate did not include a CLO vehicle can later acquire a loan (for example, when an underwriter warehouses the loans for later use in a CLO), it is uncommon for this to occur and for no CLO sponsor or issuer to be in the lending syndicate. Moreover, even if loans are subsequently traded, the method used here establishes a lower bound for the number of loan securitized, and this any difference seen between securitized and non-securitized borrowers would be a conservative estimate, but still

\textsuperscript{249}See infra Appendix Tables A, B, C & D.
some of the outcome variables described above. Results of regression analyses confirm the pattern and are set out in tables A and B in the appendix.

These graphs show changes in metrics of financial conservatism, investment conservatism, and operating performance, in the four quarters leading up to a covenant violation and waiver, and the four to six quarters afterward. The solid line represents borrowers whose loans are not placed into CLOs while the dashed line represents borrowers whose loans are included in CLOs. The solid vertical lines represent the quarter during which the violation and waiver took place.

The figures show the medians in the raw data; further regression analyses using control variables confirm these trends and those results are set out in the tables in the appendix.

**Figure 6: Performance of CLO versus Non-CLO Loans Before and After Covenant Violations**

---

250 See infra fig. 6.
251 See infra fig. 6.
252 See infra fig. 6.
253 See infra fig. 6.
254 See infra fig. 6.
255 See infra fig. 6.
Most notable in these graphs is the difference between CLO and non-CLO loans.\textsuperscript{256} For most of the metrics, performance of CLO and non-CLO loans are roughly similar before the violation.\textsuperscript{257} At the time of the violation, these measures tend to change starkly for non-CLO borrowers, but less so (and sometimes not at all) for CLO borrowers.\textsuperscript{258} After the violation, metrics continue to improve for non-CLO borrowers, but less so (and sometimes not at all) for CLO borrowers.\textsuperscript{259} Non-CLO included borrowers show signs of more financial investment conservatism (i.e., lower debt issuance, reduction is assets and shareholder payouts) and improvement in operating performance (better cashflow, lower operating expenses and better market-to-book ratio).\textsuperscript{260} By contrast, CLO-included loans improve little if at all.\textsuperscript{261}

2. Further analysis and regression results

These results indicate that lenders intervene less for borrowers whose loans are in CLOs, exactly in line with their incentives.\textsuperscript{262}

\begin{itemize}
\item[\textsuperscript{256}] See infra fig. 6.
\item[\textsuperscript{257}] See infra fig. 6.
\item[\textsuperscript{258}] See infra fig. 6.
\item[\textsuperscript{259}] See infra fig. 6.
\item[\textsuperscript{260}] See infra fig. 6.
\item[\textsuperscript{261}] See infra fig. 6.
\item[\textsuperscript{262}] See infra fig. 6.
\end{itemize}
Borrowers whose loans were included in CLO vehicles tended to have poorer performance in the four quarters following the violation than leveraged loan borrowers whose loans are not included in the CLO.263 In particular, with respect to investment and financial conservatism, loans that are put into CLOs show a pattern of increased spending and distribution of funds to shareholders after a violation, as compared to loans that are not put into CLOs.264 Even for metrics for which CLO and non-CLO loan borrowers exhibit similar performance metrics after four quarters, the CLO borrowers financial metrics grow worse more quickly than for non CLO loans, on average.265 For some of the performance measures, there is no discernable change in the CLO loans outcomes in response to the covenant violation.266 For the non-CLO loans, by contrast, the change in trend is apparent in the quarter of the violation or shortly thereafter. These figures represent the raw data only.267 The difference-in-difference analysis further assesses whether these different outcomes are statistically significant.268

The results of the difference-in-difference analysis are presented in the appendix, in Tables A and B. The test gives statistically significant results for most metrics, showing that the pattern in the raw data largely holds. The notable exceptions are capital expenditure, which is not significant, and cash acquisitions, which go down even further for securitized borrowers.269 With respect to the other financial outcomes, firms whose loans are sold to CLOs exhibit less financial and investment conservatism after a covenant violation, as compared to loans that are not put into CLOs. This suggests that lenders whose loans are put into CLOs have less incentive, or perhaps less leverage to force the kinds of changes on borrowers after a default that they have with other kinds of borrowers.270

To make clear the contrast in intervention between CLO and non-CLO violators, I highlight here some of the results from the regression analysis, when controls are used as described above. With respect to financial conservatism measures: shareholder payout averages approximately $50 million per quarter for all firms before violation. Post violation, non-CLO borrowers' shareholder payout goes down 12%, while

---

263 See infra fig. 6.
264 See infra fig. 6.
265 See infra fig. 6.
266 See infra fig. 6.
267 See infra fig. 6.
268 See infra Appendix Tables A & B.
269 See infra Appendix Tables A & B.
270 As a robustness check, I ran the analysis again using the securitization market share of the loan arranger as a proxy for whether the lenders are likely to be subject to the pressures of the CLO market. These results are consistent.
CLO violators’ payout goes up 22% on average. Total debt outstanding for firms in both groups averages $3.6 billion prior to violation; after violation, total debt for non-CLO violators goes down 4% on average, while debt for CLO violators goes up 6%. Net debt issuance goes down 3% for non-CLO loans and goes up 2.5% for CLO loans, on average.

With respect to investment conservatism: quarterly change in property, plant and equipment (or PPE, a measure of assets) for all firms before violation is an increase of 4.6% per quarter, on average; after a violation, non-CLO violators' PPE decreases by 0.5% per quarter for the next four quarters (on average) while CLO violators' PPE increases by nearly 6% per quarter (on average). Total assets increase by an average of 6% per quarter for all firms' pre-violation; after violations, CLO firms' assets increase by an average of 15% while non-CLO firms' assets decrease on average 14% per quarter for four quarters.

With respect to operating performance: quarterly operating cashflow on average pre-violation is $156 million; four quarters after a violation, non-CLO borrowers' cashflow is up by 5.5%, while CLO violators' is down by 15%, on average. Market-to-book ratio remains similar for both groups prior to violation, but after violation goes down by 10% for CLO violators and goes up by 5% for non-CLO violators, on average. The general pattern for all of these measures indicates that prior to the violation, both CLO and non-CLO violators performance follows the same trend; after a violation, the results are consistent with the prediction that lenders intervene to positive effect for non-CLO borrowers, but that the same is not true for CLO borrowers.

3. Covenant violations and renegotiation

In addition, there is evidence that lenders to CLO borrowers force renegotiation of their loan terms far less often than they do with respect to borrowers not in CLOs. I assess this using Dealscan data, and data from loan agreement collected from EDGAR. In the Dealscan data, a renegotiation is signified by a borrower entering into a new loan with the same lender with new terms before the maturity of the existing loan. Renegotiations following a violation also often involve a change in terms that is unfavorable to the borrower, for example, a reduction in the size of any undrawn portion of loan, an increase in the interest rate, or stricter monitoring thresholds (for full covenant loans) or incurrence thresholds (for cov-lite loans). I identify loan renegotiations that result in less

---

borrower-friendly terms and compare the instance of such renegotiation between CLO-included and non-CLO included borrowers. I found that, consistent with the performance metrics examined above, lenders required renegotiation with worse terms far less frequently for CLO loans that for non-CLO loans. Specifically, banks require renegotiation following a violation 64% of the time for non-CLO loans, but only 27% of the time for CLO loans. This further supports the conclusion that lenders intervene less when loans are securitized into CLOs.

C. CEO/Officer turnover

Another important lever that lenders can pull to influence corporate policy and governance is forcing high level officers to resign. As another test of the level of intervention that lenders undertake after a borrower's default, I examined whether a covenant violation is closely followed by change in the CEO, president or CFO. Lenders often exert behind-the-scenes influence on borrowers after a default. One way a lender might force the borrower to make a change in leadership is by insisting on the departure of the CEO or CFO.272 This mechanism of influencing corporate governance is particularly important when ordinary corporate governance mechanisms are weak and agency costs are high.273 In the pre-crisis period, a systematic pattern of such changes was observed for borrowers who had defaulted on their loans.274

In this part of the analysis, I first investigate whether or not there is a systematic pattern of such CEO and CFO departures following a loan default. A pattern of departures suggests that lenders still exert influence on companies by forcing changes in their leadership in the post crisis era. The second part of the analysis examines departures with respect to borrowers whose loans are put into CLOs.

In the first analysis I use a Cox proportional hazard model—an empirical test that assesses the probability of an event occurring at any given time, given a set of controls—to assess the baseline probability of a CEO, president or CFO turnover given the characteristics of a company,

272 See Shepherd et al., supra note 5, at 1002; see also Baird & Rasmussen, supra note 1, at 1211 (discussing lender intervention to force the removal of the CEO of Krispy Kreme); see also Mitchell Pacelle, Banks Face Dilemmas on Lending As Firms Seek Waivers on Covenant, WALL ST. J. (Oct. 15, 2001, 12:21 AM), https://www.wsj.com/articles/SB1003094883752843520 (recounting bank lenders’ influence over the appointment of a new CEO at ANC Rental Corp., the parent company of Alamo and National car rental companies, following loan covenant violations).

273 See Shepherd et al., supra note 5, at 1003.

274 See Nini et al., supra note 5, at 1721; see also Dirk Jenter & Fadi Kanaan, CEO Turnover and Relative Performance Evaluation, 70 J. Fin. 2155, 2155 (2015).
its financial performance and the officer's tenure in his or her position.\textsuperscript{275} I use CEO sudden departures—resignations that were not announced in news articles in the year leading up to the resignation—and I exclude any retirements. Research on director and officer turnover has shown that such resignations are more likely to be the product of an unplanned departure from the board, whereas retirements or announced departures are more likely to have been planned in advance.\textsuperscript{276} I then calculate the difference from the baseline probability that an officer will turn over for companies experiencing a loan default. As controls, I use several measures of financial performance to account for the fact that poor performing firms may be more likely to change CEO's, as further detailed in Table C in the Appendix.\textsuperscript{277}

Companies that violate a covenant see a 34-40\% greater likelihood of a turnover within the first three quarters following the initial report of the violation than firms that do not report a violation. The analysis supports the pattern in the raw data, with additional controls for the size of the company, industry and quarter. These results support the contention that lender intervention is related to the departure of these senior officers.

Of course, it is not possible to definitively determine from the analysis whether the lenders are the main impetus for these individuals' departures. It is possible that these conditions, while leading to a default of a loan covenant, also lead naturally to management turnover. It is telling, however, that the probability of turnover is so much higher in the quarter when the violation occurs or shortly thereafter, even though the financial condition of the borrowers tends to deteriorate beginning several quarters in advance of the violation itself.

If the management turnover is due to lender intervention, the natural question is whether there is less of this turnover when lenders have less incentive or less bargaining power to effect these changes. I ran the analysis again on the subset of loans that are included in CLOs. This time, the effect was much smaller. A CLO borrower has a 32\% lower chance

\textsuperscript{275}See Jeffery Wooldridge, Econometric Analysis of Panel Data, 691-95 (2002)(explaining the theory and usage of a hazard model).

\textsuperscript{276}See Jenter & Kanaan, supra note 274, at 2166; see also Michael S. Weisbach, Outside Directors and CEO Turnover, 20 J. Fin. Econ. 431, 438 (1988).

\textsuperscript{277}See Jenter & Kanaan, supra note 274, at 2155; see also Weisbach, supra note 276, at 432 (finding that more CEO retirements follow in the wake of poor performance, especially when the firm's board of directors is comprised of at least 60\% independent directors). Some of this concern is mitigated by the fact that Exchange listing rules now require that listed companies have a majority of independent directors on their boards and thus all companies in the data will face similar dynamics. See NYSE, Listed Company Manual § 303A.02; NASDAQ Corporate Governance Certification - §5605(b)(1).
of having a CEO or president leave suddenly after a loan covenant than a non-CLO borrower.

I confirmed that this is the case using the alternative specification for CLO loans, using the arranger market shares in the CLO market as a proxy for lenders who are unlikely to be as motivated to police borrowers. Once again, the results are consistent, and show a lower propensity for management changes. This finding suggests that when lenders securitize, they intervene less in the company management. It may be an open question, at least as far the empirical analysis is concerned, whether lenders' intervening in changing a borrower's leadership is a good or bad thing. Nonetheless, given the results above showing that lender intervention is associated with better financial performance, it is reasonable to think that an engaged lender helping to make decisions about who occupies executive positions is likely to be beneficial.

IV. DISCUSSION AND PROPOSALS

Two broad patterns emerge from the analysis just described. First, the results show that lender influence on corporate management is strong in the post-crisis era for companies that are not included in CLOs, i.e., loans that are not primarily traded in the non-bank institutional markets. Second, the results are consistent with the contention that securitizing loans into CLOs, and the high demand or corporate debt to fuel these CLOs, has reduced the ability or willingness of lenders to exert their influence on corporate governance on the securitized loans.

A. The Relationship Between Structured Finance and Corporate Non-Governance

The findings support the connection between structured finance and lenders' abdication of their corporate governance role. The withdrawal of lenders from corporate governance exposes a gap in the common understanding of how corporate governance functions, and this gap has real consequences. A large and important body of scholarship has focused on agency costs and how the mechanisms of corporate governance either contain or exacerbate them. Another body of scholars has focused on

278See, e.g., Bebchuk, Brav & Jiang, supra note 9, at 1087-88 (discussing the effects of activist hedge fuds and large shareholder activism generally); see also Bebchuk, Cohen & Hirst,
structured finance and its regulation, and what dangers financing mechanisms may pose to the economic system. However, to date scholars have not connected these two areas.

Corporate governance scholars have focused largely on failures of internal governance mechanisms: for example, negligence (usually framed in terms of corporate directors' duty of care), self-dealing and independence (in the context of directors' duty of loyalty), shareholder collective action problems, and large shareholder influence. However, surprisingly little attention has been paid to what happens when important external governance mechanisms like lenders intentionally withdraw from a role that they were understood to have, or how financing systems cause this to happen. Moreover, most scholars of financial regulation study how securitization should be regulated to avoid the creation of asset bubbles, but the impact on governance is largely overlooked. To be sure, a handful of eminent scholars have mentioned the effects of structured finance on governance, but they have argued that securitization should not have an impact on lenders' incentives to participate in corporate governance. The

supra note 9, at 90-91 (discussing presenting an analytical framework for understanding the motives of activist and institutional investors).


281See Shill, supra note 50, at 1273-74 (discussing director duty of loyalty).


283See, e.g., Bechuk, Brav & Jiang, supra note 9 at 1087 (discussing the effects of activist hedge fund); Bechuk, Cohen & Hirst, supra note 9, at 90 discussing the motives of institutional investors).

284See Tung, supra note 17, 164-66 (acknowledging the argument that lenders' ability to offload risk through, inter alia, securitization "may create moral hazard, encouraging lax credit analysis in the origination process or weaker monitoring after the loan is made," but concluding that "[l]ead banks have reputational stakes in refraining from opportunism in a syndication, and both lead banks and selling banks take steps to bond themselves as monitors."); see also Benmelech et al., supra note 135 at 92-93 (analyzing a sample of loans from 2005-2007, and finding no evidence that lenders choose poor quality loans to sell to CLO vehicles). See Tung, supra note 17, at 167-69 (arguing that credit derivates are a bigger potential problem than securitization.). I agree that credit derivatives are a potential problem, although the magnitude of the problem is difficult to assess given the lack of transparency in the market, even after the post-crisis reforms. In any event, the finding in this would not be impacted by the credit derivatives market. This is because lenders who have sold loan risk to a securitization vehicles would have no further need to hedge the risk, and to the extent they are banks, would also be limited by the Volcker Rule in their ability to buy speculative credit derivatives covering
results presented in this article point out the endogenous relationship between corporate governance and structured finance. As further elaborated below, the failure to adequately deal with one will invariably impact the other. It is important to understand why and how this is problematic, and what might be done to improve it. This Article begins to do so here.

B. Agency Costs and Corporate Non-Governance

An initial question that must be answered is whether lender abdication is really a problem for corporate governance at all? With America's corporate debt at record levels, and a large and growing amount funneled into securitization, it might seem as though a check on borrower financial health would be helpful both for corporate governance and the financial system generally. However, there are important arguments for why corporate governance is not harmed, and perhaps helped, by lender inaction.

First, it is possible that other corporate stakeholders may come in to fill the void. Some possible candidates are the activist hedge funds who look for weak companies to invest in and turn around. While these hedge funds often lack the expertise in debt management that lenders have, they may have an incentive to be more proactive, which would be better to have than lenders who do nothing. However, the pattern in the data does not suggest that anyone else is intervening to improve CLO-included borrowers after a violation. In addition, a search of activist campaigns compiled by the website Sharkrepellent.net shows that a relatively small percentage of CLO-included companies that breached covenants were the target of an activist campaign with the four quarters following the breach, which is the time period during which lender intervention is most pronounced.

---

exposures which they do not carry. See Dodd-Frank Wall Street Reform and Consumer Protection Act § 619, 12 U.S.C. §§ 5301-5641 (2010). To the extent banks keep the risk and hedge (which could be the case for the “control” group in the data), the evidence does not suggest lesser monitoring on average. If there is any impact on monitoring, its impact is lower than the impact of securitization, which the results suggest plays a much greater role in altering lenders’ monitoring incentives.

285 See Tung, supra note 17, at 117, 122.
286 See Holmes, supra note 12.
288 See Tung, supra note 17, at 156.
289 Id. at 127.
290 Id. at 156.
291 Id.
Even if other actors do not fill the void, it is possible that lender inaction is still not a problem for corporate governance. Corporate governance is primarily concerned with agency costs, defined as the divergence of interest between corporate manager-agents and shareholder-owners.292 However, lenders are primarily concerned about what are known as the agency costs of debt—that is, the divergence between the interests of company managers (and possibly shareholders) and the interest of the creditors (including the lenders).293 Under certain conditions, the interests of debtholders and shareholders may conflict.294

Although shareholder and debtholder interests are undoubtedly aligned at times, the agency cost story is complex. Earlier research in financial economics seems to take for granted that the kinds of interventions lenders make (like reducing capital expenditure, acquisitions, or shareholder payouts) are unqualifiedly good for firm governance.295 However, governance also involves monitoring of agency costs with respect to shareholders,296 whom lenders may care little about or whose interests may be in opposition. Relatedly, corporate governance involves giving management incentives to invest in productive projects and refrain from using the corporation's resources for unproductive, self-serving ends.297

The measures used in the analysis above might be viewed as shedding little light on those important areas of corporate governance. They may even be viewed as having a negative impact on corporate governance, because they run counter to the interests of shareholders. This would be especially problematic if, as has been argued, managers have become much more aligned with shareholder interests in recent years.298 For example, lender intervention (when it happens) tends to result in lower levels of total debt and debt issuance,299 which is good for debtholders because it means the borrower will be more likely to pay debts. However,

292See Jensen & Meckling, supra note 13, at 305, 308-09.
293Id. at 308.
294See George Triantis, Exploring the Limits of Contract Design, 161 U. PA. L. REV 2041, 2042 (2013) ("Most notably, as faithful agents of their shareholders, managers are more likely to (a) forego lower-risk, profitable projects ("underinvestment"); (b) invest in higher-risk, unprofitable alternatives ("overinvestment" or "risk alteration"); (c) incur additional debt to further leverage the equity in the firm; and (d) distribute firm value to shareholders in the form of dividends or share repurchases.").
295See, e.g., Nini et al., supra note 5, at 1715.
296See Triantis, supra note 296, at 2042.
297See Triantis & Daniels, supra note 13, at 1079-80.
299See Triantis & Daniels, supra note 13, at 1081.
the finance and law literatures have pointed out that debt can sometimes constrain agency costs by leaving management without free cash flow to waste, and thus imposing discipline.\(^{300}\) In effect, debt can be a governance mechanism (independent of the borrower's relationship with the lender) because it incentivizes management to work more efficiently.\(^{301}\)

Similarly, shareholder payouts, like dividends or share buybacks, may be viewed as a sign of managerial fidelity to shareholders, even if it might increase risks for debtholders.\(^{302}\) To take another example, while lower levels of corporate acquisitions certainly signal more investment conservatism, such conservatism may not be in the best interests of all stakeholders if acquisitions could produce high returns. Creditors are more risk averse than shareholders because they will enjoy the upside of any risky venture only to the point at which they get paid back, but they will take the downside risk if the venture falls through and the loan is unpaid; shareholders will enjoy all the surplus of the risky venture, and if the firm is in financial distress, they will be no worse off if the venture falls through.\(^{303}\) Thus what might be good corporate governance (in the sense of reducing agency costs) for a lender may be less so for shareholders.

Despite the arguments that lender intervention increases agency costs with respect to shareholders, there are important reasons to believe that they are warranted. Even if the interests of debtholders and shareholders do sometimes conflict, this is a problem only to the extent that the costs to shareholders do not outweigh the benefits of the intervention. There are strong reasons to believe that his balance favors lender intervention as a positive corporate governance mechanism. Lenders possess expertise at managing debt, and maintain relationships with borrowers that can help them to manage the debt well. Remaining free of financial distress is arguably in the interests of shareholders as much as in the interest of lenders.

Moreover, even if certain corporate decisions would be good for stockholders in the short run, it is useful to have a mechanism that can check management opportunism when it comes to the interests of shareholders (and other corporate stakeholders such as employees) in the long run. For example, if a company borrows money to execute a stock

\(^{300}\)See Michael C. Jensen, *Agency Costs of Free Cash Flow, Corporate Finance, and Takeovers*, 76 AM. ECON. REV. 323, 325 (1986) (arguing that debt could help reduce the agency costs of public company management by strengthening management's incentives to maximize value to investors).

\(^{301}\)Id.

\(^{302}\)See Triantis, *supra* note 296 at 2048.

\(^{303}\)Id. at 2042.
buyback (an even more common scenario today) it is good in the short term for shareholders. Such moves may not be good for companies in the long run, however. The law currently has no check on such practices, but lenders, who are experts at assessing the risks and rewards of projects undertaken with debt, play a valuable role in allowing such moves when they are warranted, and preventing them when they are overly risky.

This sort of intervention may seem somewhat paternalistic; however, it is important to remember that for any corporate decision that is good for shareholders, there may be some set of other decisions that would be better, but that shareholders do not have the capacity or willingness to explore, either because of collective action problems, or rational apathy that comes with diversified investing. The law recognizes that there are sometimes better choices for shareholders than they might choose in a given situation, and both regulation and fiduciary duties accommodate occasionally taking choices away from shareholders when better ones might be available.

Given the fact that lender interventions tend to lead to healthier financial metrics, including better market-to-book ratios, and higher abnormal returns (both signals of higher overall firm value) it stands to reason that the conflict between shareholders and lenders' interests is far

---


306 See Velasco, supra note 282, at 622-25 (discussing shareholder rational apathy and collective action problems).

307 For example, tender offer rules under the Williams Act prevent certain kinds of tender offers that would favor one set of shareholders, even if all shareholders would end up better off, because these offers exert pressure on shareholders to tender at a price that might be lower than what they could otherwise have. See 15 U.S.C. § 78n(d)(5)-(7) (1989). In certain kinds of front-loaded, two-tiered offers, tendering shareholders would still benefit relative to non-tendering ones, but not as much as they would if all shareholders are given equal access to the offer. See Robert Prentice, Front-End Loaded, Two-Tiered Tender Offers: An Examination of the Counterproductive Effects of a Mighty Offensive Weapon, 39 CASE W. L. REV. 389, 444 (1989).

Similarly, a doctrine under Delaware law allows boards of directors to employ defensive measures against hostile bids, even if those bids would give shareholders a short-term premium over what they have (albeit with heightened scrutiny) if the corporate managers reasonably believe their strategy will result in longer-term gains. See, e.g., Moran v. Household Int’l., Inc., 490 A.2d 1059, 1074 (Del. Ch. 1985), aff’d, 500 A.2d 1346 (Del. 1985). In this situation, again, even shareholders taking a coercive offer might be better off than they were before, but the law recognizes that in some cases there might be better possibilities available, and permits corporate directors to seek those better offers consistent with their fiduciary duties.

308 See Nini et al., supra note 5, at 13-14.
outweighed by the benefits lenders bring to the table. These financial metrics proxy for the continued solvency of borrowers who, having violated loan covenants, are already on their way to distress. It stands to reason that on average, better operating performance, and more investment and financial conservatism (for at least some period of time) is likely to be the prudent course of action for managers trying to fulfill their duties to the corporation, regardless of which stakeholders one considers. All of these considerations lead to the conclusion that lender non-governance is a problem for corporate governance.

In addition, lender non-governance creates externalities that affect financial regulation. To the extent corporate governance implicates not just the relationships between stakeholders in the corporation, but stakeholders outside the corporation, the lenders' ability to affect these externalities is relevant in a broader sense, as discussed below.

C. Fixing Non-Governance

Scholars have recognized that lenders provide a check on firm mismanagement that other corporate stakeholders cannot. Lender governance acts as an important disciplinary force, preventing companies from overextending themselves and making decisions that domino throughout the economy. Given the importance of this corporate governance lever, policy should focus on preventing its erosion.

Some scholars have posited that, because the lead lender on a syndicated leveraged loan (the Term A lender) might continue to monitor and intervene when borrowers violate loan covenants, holders of securitized tranches have no reason to care.309 They can effectively free ride off of the work of the Term A lender.310 As previously discussed, this is often not the case, because Term A lenders frequently sell their loan after origination, or hold a nominal portion of a loan as the "price of admission" to the securitization market.311 And although they retain revolving credit facilities, their stake is lower and their participation in the CLO market is far more lucrative and thus as the originate-to-distribute model of lending grows in importance, they have less incentive to expend resources on monitoring the borrowers.312 Moreover, non-bank institutional lenders have begun originating their own loans, which may or

310Id.
311See Bord & Santos, supra note 87, at 25.
312See Wang & Xia, supra note 134, at 31-32.
may not have a Term A component that they retain long term, containing full covenants and providing an incentive to monitor the borrowers.

Despite these deficiencies, one simple way of addressing the problem would be a modified version of the skin-in-the-game rule the SEC created for securitizations. The modified version of the rule would require Term A loan holders to retain their loans for the duration of any institutional tranches. Currently, Term A loans have shorter maturities than the institutional tranches, and lead lenders often sell their interest in the loans before maturity. Under the new rule, Term A loans would be required to have the same maturities as institutional tranches and lead lenders would be required to hold their tranches until they matured. This would ensure that lead lenders had incentives to monitor and intervene even if holders of institutional tranches do not. This rule could be extended to loans originated by non-bank lenders as well, requiring any arranger to keep a tranche of the loan so that they would retain their monitoring incentive. One problem with this, however, is that is does not address the bargaining power problem: even if lenders have incentives to monitor, they may lack the bargaining power to enforce change if the supply of credit remains strong and borrowers are able to walk away from over demanding creditors.

A more stringent possibility that addresses both incentives and bargaining power is to expand the scope of corporate directors' fiduciary duties to require that debt contracts include full sets of covenants to limit the agency costs of debt, and that require corporate managers to abide by these covenants. Such covenants would give lenders full monitoring powers, but they might also include duties for lenders to monitor, thus mitigating the non-governance incentive problem. These covenants might also include fiduciary-like duties for lenders, requiring them to account for and limit agency costs vis-à-vis shareholders where possible, in order to limit the conflict of interests between themselves and stockholders. Thus, if lenders decide to intervene to push for a change in financial policies or force a change in management, they will do so with the interests of shareholders in mind. Moreover, corporate directors would be bound by fiduciary duties to bargain with lenders, even if they would otherwise possess enough bargaining power to ignore the lenders' demands.

There are, admittedly, problems with such a proposal as well. Imposing fiduciary duties into a lender-debtor contractual relationship opens up uncertainty in the performance of those duties. It may become harder for courts to determine, ex-post, what the right course of action is

---

315 This possibility is similar to one that has been proposed in a parallel context. See Rock, supra note 300, at 1912.
in a given situation. Perhaps more importantly, it would be harder for parties to predict, ex-ante, what a court might do in enforcing such rights.\textsuperscript{314} This would give rise to uncertainty, effectively raising contracting costs for both companies and lenders. However, this increase in costs is a problem only insofar as it is not offset by the benefits of such a proposal. As already discussed, firms and society as a whole benefit greatly from lender monitoring and governance intervention. Moreover, the kinds of activities that would meet this expanded fiduciary duty would not be uncharted territory. They would essentially encompass the same actions that lenders and firms were doing before the lending market disincentivized them from doing so. The parties would, in effect, be doing what they did before, which would greatly mitigate any uncertainties about what their duties entailed. Thus, the usual problems inherent in fiduciary duties and enforcing contract standards would be greatly mitigated, and arguably worth the benefits they would engender.

V. CONCLUSION

Amidst the debates about the actions of large institutional shareholders in corporate governance, important stakeholders like lenders sometimes receive less attention. As this paper documents, lenders' important role in corporate governance has begun to erode with respect to companies who may benefit most from it. As the credit market has heated up and corporate borrowers have gained outsized leverage in negotiations with lenders, problematic practices have begun to emerge. The change in bargaining power driven by CLOs is increasingly associated with weakening lender protections, but an unintended consequence is weakening of governance. This may create problems for individual companies, but may also lead to increased risk for the financial products driving this trend in the first place.

A better appreciation of the ways that corporate governance and the financial system affect each other is helpful to understanding the problems with each. The financial system, and the regulation that constrains it, impacts the interactivity that corporate governance depends upon; at the same time, the quality of corporate governance affects the assumptions that financial innovation and regulation are built upon. Misunderstanding of this endogenous relationship between the financial system and corporate governance has resulted in a degradation of an important check

\textsuperscript{314}See Triantis, supra note 296, at 2045 (explaining how standards-based contract can "raise back-end enforcement costs, especially the costs of litigation and judicial error in applying the standard").
in the system of corporate checks and balances, to which attention has scarcely been paid.

The complex problem of corporate non-governance does not lend itself to easy solutions, but understanding the source of the problem is a first step in thinking through possible fixes. The goal should be to align actors' incentives with the roles each should play in appropriate governance, and a start would be intervention that gives parties a reason to view their financial asset as a relationship, as much as an investment.
VI. Appendix

**Appendix Table A: Difference in Difference – Investment conservatism and Covenant Violations, CLO vs. Non CLO Loans**

<table>
<thead>
<tr>
<th>Panel A: Cash/total assets</th>
<th>Panel B: Shareholder Payout (standardized)</th>
<th>Panel C: Net Debt Issuance</th>
<th>Panel D: Total Debt (Log)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
</tr>
<tr>
<td>Post New Covenant violation (CLO v non-CLO) (treat*post)</td>
<td>-0.026* (0.013)</td>
<td>0.112</td>
<td>0.007** (0.003)</td>
</tr>
<tr>
<td>Operating Cash flow/ assets</td>
<td>-0.057 (0.104)</td>
<td>0.058*** (0.009)</td>
<td>0.233** (0.071)</td>
</tr>
<tr>
<td>Leverage ratio</td>
<td>0.036 (0.089)</td>
<td>0.099*** (0.287)</td>
<td>0.996*** (0.111)</td>
</tr>
<tr>
<td>Interest Expense/ assets</td>
<td>0.120 (1.727)</td>
<td>0.057*** (0.121)</td>
<td>0.806* (0.454)</td>
</tr>
<tr>
<td>Net Worth/ Assets</td>
<td>0.007 (0.045)</td>
<td>0.012 (3.401)</td>
<td>0.121* (0.013)</td>
</tr>
<tr>
<td>Current Ratio</td>
<td>0.007 (0.006)</td>
<td>0.017 (0.016)</td>
<td>0.005 (0.001)</td>
</tr>
<tr>
<td>Market-to-Book Ratio</td>
<td>0.002 (0.010)</td>
<td>0.065** (0.031)</td>
<td>0.004* (0.002)</td>
</tr>
<tr>
<td>Higher order covenant controls</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Industry FE</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Quarter FE</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Number of Observations</td>
<td>33,517</td>
<td>33,517</td>
<td>38,799</td>
</tr>
<tr>
<td>Adj. R²</td>
<td>0.293</td>
<td>0.350</td>
<td>0.479</td>
</tr>
</tbody>
</table>

This table presents the difference in difference analysis of the marginal effect of a new covenant violation on various company financial metrics, with loans held in a securitization vehicle being the "treatment" group and loans not in a CLO being the "control" group. Controls are included for the financial covenants metrics that appear in loan agreements: operating cash flow scaled by average assets, the leverage ratio, the ratio of interest expense to average assets, the ratio of net worth to total assets, the current ratio, and the market-to-book ratio. Higher order covenant controls are covenant control variables raised to the second and
third power. All specifications include industry and calendar quarter fixed effects and the following control variables: credit rating of the borrower, total assets, and ppe, both in logscale. Standard errors are clustered by firm and calendar quarter. ***, **, and * denote 1%, 5% and 10% levels of significance, respectively.

### APPENDIX TABLE B: DIFFERENCE IN DIFFERENCE – INVESTMENT CONSERVATISM AND COVENANT VIOLATIONS, CLO VS. NON CLO LOANS

<table>
<thead>
<tr>
<th>Panel A: Total Assets (Log of Total Assets)</th>
<th>Panel B: Property Plant &amp; Equipment (Log)</th>
<th>Panel C: Capital Expenditure (as Capex/Average Assets)</th>
<th>Panel D: Acquisitions (as Cash Acquisitions/Average Assets)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
<td>(4)</td>
</tr>
<tr>
<td>Post New</td>
<td>1.063***</td>
<td>1.027***</td>
<td>0.246*</td>
</tr>
<tr>
<td>(0.168)</td>
<td>(0.165)</td>
<td>(0.135)</td>
<td>(0.137)</td>
</tr>
<tr>
<td>Covenant violation (CLO vs non-CLO)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(treat*post)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating Cash Flow/Assets</td>
<td>0.007</td>
<td>0.061**</td>
<td>2.320**</td>
</tr>
<tr>
<td>(0.016)</td>
<td>(0.023)</td>
<td>(0.963)</td>
<td>(1.53)</td>
</tr>
<tr>
<td>Leverage Ratio</td>
<td>-0.0001</td>
<td>0.005**</td>
<td>1.479**</td>
</tr>
<tr>
<td>(0.001)</td>
<td>(0.002)</td>
<td>(0.493)</td>
<td>(0.983)</td>
</tr>
<tr>
<td>Interest</td>
<td>-0.035</td>
<td>-0.226</td>
<td>-13.881</td>
</tr>
<tr>
<td>(0.014)</td>
<td>(0.077)</td>
<td>(13.763)</td>
<td>(25.92)</td>
</tr>
<tr>
<td>Expense/Assets</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net Worth/Assets</td>
<td>0.0004</td>
<td>0.002**</td>
<td>0.462</td>
</tr>
<tr>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.440)</td>
<td>(0.417)</td>
</tr>
<tr>
<td>Current Ratio</td>
<td>-0.002</td>
<td>-0.001</td>
<td>-0.051</td>
</tr>
<tr>
<td>(0.002)</td>
<td>(0.001)</td>
<td>(0.051)</td>
<td>(0.097)</td>
</tr>
<tr>
<td>Market-to-Book Ratio</td>
<td>-0.001***</td>
<td>-0.003***</td>
<td>-0.042</td>
</tr>
<tr>
<td>(0.0001)</td>
<td>(0.001)</td>
<td>(0.039)</td>
<td>(0.075)</td>
</tr>
<tr>
<td>Higher order covenant controls</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Industry FE</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Quarter FE</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Number of Observations</td>
<td>34,363</td>
<td>34,360</td>
<td>34,361</td>
</tr>
<tr>
<td>Adj. R²</td>
<td>0.922</td>
<td>0.942</td>
<td>0.860</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This table presents the difference-in-difference analysis of the marginal effect of a new covenant violation on various company financial metrics, with loans held in a securitization vehicle being the "treatment" group and loans not in a CLO being the "control" group. Controls are included for the financial covenants metrics that appear in loan agreements: operating cash flow scaled by average assets, the leverage ratio, the ratio of interest expense to average assets, the ratio of net worth to total assets, the current ratio, and the market-to-book ratio. Higher order covenant controls are covenant control variables raised to the second and
third power. All specifications include industry and calendar quarter fixed
effects and the following control variables the credit rating of the
borrower, total assets, and ppe, both in logscale. Standard errors are
clustered by firm and calendar quarter. ***, **, and * denote 1%, 5%, and
10% levels of significance, respectively.

### Appendix Table C: CEO Departures Following Covenant Violation

<table>
<thead>
<tr>
<th>Covenant violations versus non-violators</th>
<th>Three Violation (1)</th>
<th>Quarters (2)</th>
<th>Post (3)</th>
<th>Covenant (4)</th>
<th>Seven Quarters Post Covenant Violation (5)</th>
<th>Post Covenant Violation (6)</th>
<th>(7)</th>
<th>(8)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLO violators versus violators not in a CLO</td>
<td>0.682** (0.248)</td>
<td>31.8% less likely</td>
<td>0.250** (0.142)</td>
<td>75% less likely</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CLO violators rated above CCC versus violators above CCC not in a CLO</td>
<td>0.351* (0.184)</td>
<td>64.9% less likely</td>
<td>0.233*** (0.131)</td>
<td>76.7% less likely</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leverage ratio</td>
<td>0.798*** (0.018)</td>
<td>0.095** (0.018)</td>
<td>0.089** (0.107)</td>
<td>0.794*** (0.054)</td>
<td>0.044*** (0.043)</td>
<td>0.081** (0.094)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interest</td>
<td>1.377</td>
<td>3.213</td>
<td>9.051</td>
<td>1.492</td>
<td>6.222</td>
<td>7.721</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expense/ assets</td>
<td>(1.071)</td>
<td>(2.163)</td>
<td>(6.992)</td>
<td>(1.159)</td>
<td>(4.182)</td>
<td>(5.881)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net Worth/ Assets</td>
<td>0.965</td>
<td>0.719</td>
<td>0.531</td>
<td>0.964**</td>
<td>0.687</td>
<td>0.557</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current Ratio</td>
<td>1.006</td>
<td>1.102</td>
<td>1.077</td>
<td>1.007</td>
<td>1.110</td>
<td>1.078</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Market-to-Book Ratio</td>
<td>(0.012)</td>
<td>(0.096)</td>
<td>(0.119)</td>
<td>(0.012)</td>
<td>(0.098)</td>
<td>(0.119)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Higher order covenant controls</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lagged Covenant Controls</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Industry FE</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of Observations</td>
<td>3,395</td>
<td>876</td>
<td>731</td>
<td>3,395</td>
<td>876</td>
<td>731</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This table presents hazard ratio model of the relative effect of a new covenant violation on the probability that a CEO, president or CFO will leave the company. The table shows loan violators versus everyone else, CLO loan violators versus non-CLO violators, and CLO violators with a credit rating above CCC and those rated CCC or below. Controls are
included for the financial covenants metrics that appear in loan agreements: operating cash flow scaled by average assets, the leverage ratio, the ratio of interest expense to average assets, the ratio of net worth to total assets, the current ratio, and the market-to-book ratio. Higher order covenant controls are covenant control variables raised to the second and third power. All specifications include industry and calendar quarter fixed effects and the following control variables: the length of time a director has been in office, the credit rating of the borrower, total assets, and ppe, both in logscale. Standard errors are clustered by firm and calendar quarter. ***, **, and * denote 1%, 5%, and 10% levels of significance, respectively.

***