## **Do Lenders Still Monitor?**

## Leveraged Lending and the Search for Covenants

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It was once conventional wisdom that lenders routinely influenced corporate managers' decision making. Covenants constrained borrower risk taking and compelled specific affirmative obligations to protect lenders. Recent policy discussion, however, laments loan markets' turn to various forms of high-risk lending. So-called leveraged loans—relatively risky, below-investment-grade loans—more than doubled in outstanding dollar terms, growing from about \$550 billion in 2010 to \$1.2 trillion by 2019. These risky loans have taken up a larger and larger share of the loan markets over time. More leveraged loans are also "covenant-lite," issued without traditional financial maintenance covenants. And regulators worry about "add-backs"—borrowers' growing practice of making upward adjustments to projected earnings that tend to weaken leverage constraints.

Moreover, bank regulatory changes have incentivized "originate-to-distribute" loan syndications that enable non-bank lenders to hold and trade leveraged loans too risky for banks to keep. Syndicated lending now involves greater and greater participation by non-bank or "institutional" lenders like hedge funds, CLOs (collateralized loan obligations), and mutual funds. Commentators worry about the new species of risky loans, with their dearth of traditional covenants and the fewer instances of lender intervention, which may portend instability in debt markets. At the same time, weakened covenant protections may lead to weakened corporate governance.

In this Article, I respond to these fears, arguing that they may be somewhat overblown. The increasing share of leveraged and covenant-lite loans may not necessarily evidence undisciplined debt issuance. Many seemingly troublesome loans are issued as subparts of deals that include loans with traditional covenants and cross-default provisions, which effectively constrain borrower behavior. Though add-backs typically increase firm leverage—which is worrisome—they may also improve the informativeness of earnings-based financial covenants. In addition, while the incidence of loan covenant violations has dropped dramatically across U.S. public firms, recent research suggests that covenants have become more efficient. In effect, covenants are doing more with less. Financial covenants have generally become less restrictive and more discriminating in differentiating distress from non-distress situations.

#### I. INTRODUCTION

Forty-odd years ago, financial economists began to study the important interactions between capital structure and corporate governance. In particular, they offered theories to explain why the structure of firms' debt contracts matters for corporate governance.<sup>1</sup> The finance literature continues to document the ways that various features of lending contracts constrain managers' behavior. Lenders routinely influence corporate decision-making, even outside the distress context. The pervasiveness of lender influence in public companies suggests that lender constraints—loan covenants—may often substitute for or complement shareholder-centered corporate governance mechanisms.<sup>2</sup> Indeed, banks may enjoy advantages in monitoring borrowers even compared to corporate boards, which do not enjoy the regular stream of information that banks receive. Banks enjoy enormous advantages over other outsiders—even the borrower firm's outside directors—in terms of access to the firm's managers and private information.<sup>3</sup> The beneficent effects of bank monitoring on firm value have been well documented over the past few decades,<sup>4</sup> and the finance literature continues to expand the

3. Frederick Tung, Leverage in the Board Room: The Unsung Influence of Private Lenders in Corporate Governance, 57 UCLA L. REV. 115, 125 (2009).

<sup>1.</sup> See, e.g., Clifford W. Smith, Jr. & Jerold B. Warner, *On Financial Contracting: An Analysis of Bond Covenants*, 7 J. FIN. ECON. 117, 117 (1979) (examining the control of debt contracts in bondholder-stockholder conflict).

<sup>2.</sup> Conventional internal and external corporate governance mechanisms—independent boards and markets for corporate control, for example—may be less critical in the presence of bank lending, since bank monitoring can substitute for these governance mechanisms. *See* Steven S. Byers et al., *Are Corporate Governance and Bank Monitoring Substitutes: Evidence from the Perceived Value of Bank Loans*, 14 J. CORP. FIN. 475, 476 (2008) (finding that loan announcements are more likely to generate positive wealth effects for firms with weak internal and external corporate governance, which suggests that bank monitoring may substitute for weak governance); Ioannis Spyridopoulos, *Tough Love: The Effects of Debt Contract Design on Firms' Performance*, 9 REV. CORP. FIN. STUD. 44, 47 (2020) (finding that even absent any covenant violation, stricter loan covenants improve performance of firms with managerial agency conflicts—those (a) without a large monitoring blockholder; (b) facing softer product market competition; or (c) with entrenched management); *see also* Sungyoon Ahn & Wooseok Choi, *The Role of Bank Monitoring in Corporate Governance: Evidence from Borrowers' Earnings Management Behavior*, 33 J. BANKING & FIN. 425, 426 (2009) (finding that borrower firms' earnings management behavior decreases as the strength of bank monitoring increases).

<sup>4.</sup> See Christopher James, Some Evidence on the Uniqueness of Bank Loans, 19 J. FIN. ECON. 217, 219 (1987) (showing a positive and statistically significant stock price response to the public announcement of bank loans, a nonpositive response for publicly placed straight debt issues, and a negative and statistically significant response for debt privately placed with insurance companies and private placements and straight debt issues used to repay bank loans); George G. Triantis & Ronald J. Daniels, *The Role of Debt in Interactive Corporate Governance*, 83 CALIF. L. REV. 1073, 1100–01 (1995) (noting that the prospect of repeat business with the borrower firm may serve to align the bank's interests with those of equity holders as to investment policy and the firm's recovery); Sudip Datta et al., *Bank Monitoring and the Pricing of Corporate Public Debt*, 51 J. FIN. ECON. 435, 437 (1999) (finding that the presence of a preexisting bank loan reduces at-issue yield spreads for borrower firms' first public debt offerings by an average of 68 basis points, and the length of the bank/firm relationship is negatively related to at-issue yield spreads, consistent with the monitoring hypothesis); *See generally* Douglas G. Baird & Robert K. Rasmussen, *Private Debt and the Missing Lever of Corporate Governance*, 154 U. PA. L. REV. 1209 (2006). Firm value may also be enhanced through the certification effect of bank lending. *Id.* A bank's decision to extend financing may signal the borrower firm's creditworthiness, offering useful information to securities markets and thereby enhancing the market value of the firm's equity.

mapping of lender governance.<sup>5</sup>

Various observers of the lending markets, however, including regulators and rating agencies, foresee potential trouble ahead. Covenants are disappearing; lender interventions are becoming rarer.<sup>6</sup> Without loan covenants, there is no lender governance or monitoring. The leveraged loan market raises special concern. Leveraged loans are relatively risky, below-investment-grade loans.<sup>7</sup> Over the last decade, this market has exploded, more than doubling in size. From 2010—a low point for leveraged lending in the aftermath of the financial crisis—to mid-2019, leveraged lending grew from about \$500 billion to \$1.2 trillion.<sup>8</sup> In that same period, the share of so-called covenant-lite ("cov-lite") leveraged loans jumped from under 5% to about 85%.<sup>9</sup> "Cov-lite" loans are worrisome because they contain no financial maintenance covenants.<sup>10</sup> Traditional loan agreements include covenants, which constrain various aspects of the borrower's operations or investments or financing decisions, in order to protect the lender from borrower risk taking over the life of the loan.<sup>11</sup> A financial maintenance covenant requires the borrower to maintain a specified level of financial constraint, for example, a certain ratio of debt to cash flow or earnings relative to interest expense.<sup>12</sup>

With no financial maintenance covenants, a cov-lite loan is riskier than traditional loans.<sup>13</sup> "Cov-lite takes away the canary in the coal mine for lenders."<sup>14</sup> Borrower firms

6. See infra Part III.D (focusing on regulator worries that leveraged loans may lead to weaker covenants).

7. Though there is no formal agreed-upon definition of what counts as a leveraged loan, a syndicated loan rated BB+ or lower, or an unrated loan with an interest spread larger than 150 basis points (bps), is one common benchmark. Loan Pricing Corporation, PC definition. A BB+ rating is the highest grade of non-investment-grade (or "speculative" grade) loan. Speculative grade loans are more likely to default than investment-grade loans. As of mid-2017, some 90% of loans issued in the U.S. are rated. S&P GLOBAL, LEVERAGED COMMENTARY & DATA (LCD): LEVERAGED LOAN PRIMER 8 (2020), https://www.lcdcomps.com/d/pdf/LCD%20Loan%20Primer.pdf [https://perma.cc/XJK4-584L] (stating a basis point (bp) is 1/100 of a percentage point, so 150 bps is 1.5%).

8. Michelle Sierra, *Leveraged Loan Market Size Doubles in Ten Years, Private Credit Explodes*, REUTERS (Dec. 23, 2019, 7:01 AM), https://www.reuters.com/article/levloan-decade/leveraged-loan-marketsize-doubles-in-ten-years-private-credit-explodes-idUSL1N28U0QQ [https://perma.cc/LSX3-EFBC]; Joe Rennison & Colby Smith, *Debt Machine: Are Risks Piling Up in Leveraged Loans?*, FIN. TIMES (Jan. 20, 2019), https://www.ft.com/content/64c9665e-1814-11e9-9e64-d150b3105d21 [https://perma.cc/C3MX-5EH6].

9. See infra note 146 and accompanying text (finding the number of covenant-lite leveraged loans sharply increased to reach 85 percent of new loans in 2018).

10. Edison Yu, Banking Trends: Measuring Cov-Lite Right, 3 ECON. INSIGHTS 1, 2 (2018).

12. The ratio of earnings to interest expense is commonly referred to as the Interest Coverage Ratio.

13. Cov-lite loans may, however, include so-called "incurrence" covenants, which require compliance with caps or financial ratios only when the borrower pursues a specified significant action, like issuing new debt or paying dividends or making an acquisition. *See infra* notes 144–146 and accompanying text.

Id.

<sup>5.</sup> See, e.g., Greg Nini et al., Creditor Control Rights, Corporate Governance, and Firm Value, 25 REV. FIN. STUD. 1713, 1717–19 (2012) (finding that firm operating performance and stock price performance improve post-covenant-violation); Daniel Ferreira et al., Creditor Control Rights and Board Independence, 73 J. FIN. 2385, 2385 (2018) (finding that the number of independent directors increases by about 24% following a covenant violation, that most new directors have ties to lenders, and that firms that appoint new directors postviolation are more likely to issue new equity and to decrease payouts, operational risk, and CEO cash compensation).

<sup>11.</sup> Id.

seem happy to take up these risky loans since the scarcity of covenants means fewer constraints on firms' operations and risk taking. At the same time, lender-investors appreciate the high interest rates and fees that come with risky loans. Moreover, as the costs of credit continue to decline as leveraged loan credit supply expands, lenders may enjoy less and less clout to demand covenant protection. The explosion of leveraged and cov-lite loans over the last decade naturally leaves regulators with misgivings about the quantum of risk taking in loan markets.<sup>15</sup>

In addition to the prospect of riskier loan markets, fewer and weaker covenants and an observed decline in lender interventions may portend weakened corporate governance. Financial economists have demonstrated empirically that judiciously crafted covenants can improve firm value.<sup>16</sup> Through covenants and monitoring, lenders routinely exercise significant influence over corporate decision making. Weaker covenant protections and fewer lender interventions may therefore detract from effective corporate governance.<sup>17</sup> Covenants screen borrowers *ex ante*. They also act as tripwires *ex post* to catch the attention of both the lender and the borrower's management. A covenant violation triggers a re-evaluation of the lender's constraints on management, and perhaps a renegotiation of loan terms, often well before a borrower firm approaches distress.

In this Article, I offer an updated and somewhat optimistic perspective on the leveraged loan market and lender governance. Despite important changes in lending markets that could plausibly exacerbate systemic risk and blunt the efficacy of lender governance, I show that lending practices have evolved that may address the new risky lending. While the steep growth of the leverage loan market may portend lenders' debility to demand contractual protections, lender governance may tend to persist, even as syndicated lending has become more complex.

One artifact of today's leveraged lending is the greater number and more diverse types of lenders involved in a leveraged loan deal as compared to traditional syndicated loans. A few decades ago, traditional syndications typically involved only banks, which held their loans to maturity. Today, banks continue to arrange syndicated loans, but they sell most of their loans in secondary loan markets to non-bank institutional investors. Larger and more disparate lender groups make loan renegotiations ("workouts") more difficult. Different types of institutions hold differing priorities. A non-bank lending group may include collateralized loan obligations (CLOs),<sup>18</sup> loan mutual funds, insurance companies, foreign investors, and pension funds, among others. The presence of heterogeneous lending institutions complicates the renegotiation of a loan agreement.

Another practice worrisome to regulators involves borrowers' excessive leverage,

<sup>14.</sup> Rennison & Smith, *supra* note 8 (quoting Ruth Yang, managing director at S&P Global Market Intelligence).

<sup>15.</sup> Infra Part III.D.

<sup>16.</sup> Supra notes 4–5 and accompanying text.

<sup>17.</sup> Jeremy McClane, Corporate Non-Governance, 44 DEL. J. CORP. L. 1, 5 (2020).

<sup>18.</sup> A CLO is a securitization vehicle that buys slices of many syndicated loans, issuing securities to investors that are backed by the cash flows from the loans purchased. *See* William W. Bratton & Adam J. Levitin, *A Tale of Two Markets: Regulation and Innovation in Post-Crisis Mortgage and Structured Finance Markets*, 2020 U. ILL. L. REV. 47, 97–105 (explaining CLO structure and post-financial-crisis evolution of CLO indentures and federal regulation); *see also infra* notes 129–130 and accompanying text.

relative to traditional ratios of leverage to earnings. Especially in the context of acquisitions and other extraordinary transactions, borrowers and lenders have taken to the practice of earnings "add-backs." The parties craft bespoke accounting provisions in their private loan contracts that allow for adjustments to projected earnings, which affect earnings-based financial covenants. With the justifiable aim of presenting a fair picture of the borrower's future earnings, the post-transaction borrower will adjust (augment) its earnings by adding back non-recurring items that affect cash flows or accruals—for example, one-time charges or expenses of the transaction. The firm's debt-to-earnings ratio is a typical leverage measure. Upward adjustments to earnings reduce the firm's reported leverage, which may create an excessively rosy picture. To the extent the borrower overstates adjusted earnings through add-backs, the leverage measure may become even less reliable.

Lenders have adapted to these concerns, however. Lenders have evolved new covenant structures and other contractual innovations to address the new and more complicated renegotiation frictions that arise with leveraged loans. First, loan arrangers have created so-called split control rights. An examination of individual cov-lite leveraged loans might suggest an absence of covenant constraints, but it turns out that very few leveraged loan *deals* are issued without maintenance covenants. Taking account of all the loan tranches in a given deal, the banks continue to enjoy the benefit of maintenance covenant constraints on the borrower firm. The typical leveraged loan deal includes a bank-sponsored loan, which almost always contains traditional financial covenants.<sup>19</sup> At the same time, the bank group will arrange one or more additional loans for the borrower, but these loans will be sold to non-bank institutional lenders.<sup>20</sup> In many deals, the bank-held loans and institutional loans will include identical covenants. But only the banks, and not the institutional lenders, enjoy the right to renegotiate covenants or waive violations. This split control effectively leaves the banks in charge of renegotiations with the borrower, reducing bargaining frictions. Traditional covenants in the banks' loan constrain the borrower firm. The absence of maintenance covenants in a particular loan, then, does not mean that the borrower is free from covenant constraints.<sup>21</sup> Contractual innovations have also emerged to facilitate renegotiation of institutional loans. "Amend-and-extend" provisions and "refinancing facilities" enable institutional loan borrowers to extend maturities or refinance with only a subset of their lenders.<sup>22</sup>

Second, with respect to add-backs, though upward adjustment of projected earnings carry real risk of understating borrower leverage, new research suggests that permissive use of add-backs may improve the informativeness of EBITDA-based contract terms like financial covenants.<sup>23</sup> Tailored accounting provisions for financial performance covenants in private loan agreements predict future cash flows better than GAAP-based

<sup>19.</sup> This bank loan will typically be a revolving loan. The bank group may also extend an amortizing term loan. *Infra* note 132 and accompanying text.

<sup>20.</sup> These loans sold to institutional lenders are typically non-amortizing term loans, which for reasons we discuss below, are riskier than the loans retained by banks. *Infra* Part III.C.

<sup>21.</sup> Infra Part IV.A.

<sup>22.</sup> Id.

<sup>23.</sup> See infra Part IV.B. EBITDA is one common earnings measure. It stands for Earnings Before Interest, Taxes, Depreciation, and Amortization.

measures.<sup>24</sup> Better earnings information may eliminate noisy features of accounting earnings, such that add-backs may facilitate both tighter covenants and fewer false positive covenant violations.<sup>25</sup> It remains to be seen, however, how the trade-off between potentially overstated earnings and improved informativeness will work out.

Lenders have recrafted covenants in another way as well. Over the course of the last two decades, covenants have become more efficient. This efficiency is driven largely by a turn away from balance sheet covenants in favor of cash flow covenants, which are much more discerning than balance sheet covenants. Cash flow covenants trigger false positives far less often than balance sheet covenants, with a negligible increase in false negatives.<sup>26</sup> Financial covenants overall have also become less restrictive, both in terms of the number of covenants in a given loan and their tightness. Reported violations are correspondingly fewer. This should not be read as cause for concern, however. Rather than leaving borrower firms with no guardrails, covenant structures have instead become better at discriminating distress from non-distress situations.<sup>27</sup> Efficient covenants minimize the sum of expected costs of false positive violations and false negatives. Efficient covenants seem to offer unalloyed improvement in covenant technology. Split control rights, amend-and-extend provisions, and refinancing facilities also seem promising for their prospects for reducing bargaining friction. Add-back informativeness is the trickiest to characterize because of the inevitable trade-offs involved.

My analysis proceeds as follows. In Part II, I explain the traditional structure of bank lending and the role of covenants and monitoring for lender governance. I describe banks' traditional and particular expertise in crafting covenants, monitoring borrowers, and renegotiating loan terms when the borrower falters. Traditional covenant structure meant tight covenants and pervasive monitoring, which differs dramatically from the evolved lender governance of split control rights and more efficient covenants. In Part III, I describe the evolution from traditional lending to a new and riskier loan market, driven in part by banking deregulation, in part by the advent of junk bonds and the 1980s leveraged buyout boom, in part by modernized bank capital rules, and in part by the advent of securitization. I also summarize the misgivings of regulators and other debt market observers concerned with the new loan market's appetite for risk. In Part IV, I explain the new lender governance regime. It features a number of lending contract innovations-split control rights, amend-and-extend and refinancing provisions, addback informativeness, and efficient covenants. These innovations facilitate lender governance and debt renegotiation in the face of larger loan syndicates with more dispersed lenders than in the past. I also discuss implications of the new lender governance. Part V concludes.

<sup>24.</sup> See id. GAAP stands for Generally Accepted Accounting Principles.

<sup>25.</sup> For our purposes, a false positive occurs when a borrower violates a covenant even though only a low likelihood of distress exists *See id*.

<sup>26.</sup> A false negative occurs when the borrower has a high likelihood of distress, but no covenant is triggered. *Infra* Part IV.C.

<sup>27.</sup> Id.

#### II. TRADITIONAL BANK LENDING: COVENANTS AND MONITORING

This Part describes the structural features of bank lending that facilitate traditional bank monitoring. It introduces the tools banks use to constrain borrower risk taking and to facilitate monitoring—primarily an array of covenants that include affirmative and negative constraints and reporting and financial covenants. It then explains traditional covenant structure, both the setting of covenants and the bank's management of covenant violations.

#### A. The Structure of Bank Lending

Unlike equity holders, lenders do not enjoy unlimited upside with their debt investments in firms. Instead, lenders must content themselves with the regular periodic interest payments that their loan contracts memorialize, and also the repayment of principal when the loan matures. Because lenders enjoy no great upside from their lending, their natural obsession is to curb as much downside risk as possible without drastically interfering with the borrower's ability to earn a respectable profit. By contrast, public company equity holders, who are typically diversified, are better off when their firms' managers pursue all available positive net present value projects. Because high returns to the firm arise only from firm managers taking high risks, equity holders sometimes push for risky gambits.

This divergence of interests between lenders and equity holders gets worked out in loan agreements. Lenders use covenants to constrain borrower risk taking, and borrowers and lenders will trade off interest rates against covenant strictness to reach a deal. A safer deal for the lender means a lower interest rate for the borrower. Typical affirmative covenants include obligations to purchase insurance and to comply with all applicable laws and regulations. Typical negative covenants include constraints on additional firm borrowing, payment of dividends or distributions to equity holders, and major asset sales. Financial covenants are also typical. For example, the lender may set a cap on the ratio of the borrower's debt-to-cash flow, in an effort to assure that the borrower will be able to maintain its periodic interest payments.<sup>28</sup>

Banks enjoy access to private information about their borrowers' business activities. Bank loan agreements typically demand regular reporting by the borrower, including financial statements and certificates attesting to the borrower's continuing compliance with financial covenants and other contractual obligations. Bank lenders also often require their borrower firms to keep their deposit accounts with the lending bank. This arrangement enables the lender to closely follow its borrower's aggregation and uses of cash in real time, giving the lender a clear window on the borrower's business activity.<sup>29</sup>

<sup>28.</sup> In addition to debt-to-cash flow, other common financial covenants include a fixed charge coverage ratio (a measure of the borrower's ability to cover all its fixed charges); a current ratio (the ratio of current assets to current liabilities); and a net worth covenant.

<sup>29.</sup> See Fisher Black, Bank Funds Management in an Efficient Market, 2 J. FIN. ECON. 323, 326 (1975) (explaining the informational advantages that accrue to a lender from maintaining its borrower's deposit account); Arnoud W. A. Boot, *Relationship Banking: What Do We Know*, 9 J. FIN. INTERMEDIATION. 7, 11 (2000); Eugene F. Fama, *What's Different About Banks?*, 15 J. MONETARY ECON. 29, 37–38 (1985). Bank lenders also typically enjoy wide access to their borrowers' books and records. A bank may also have a

These institutional features of bank lending make banks especially effective monitors. Moreover, there is evidence that bank monitoring benefits not only the bank and other creditors; it may also improve firm value to the benefit of equity holders. Event studies consistently associate the public announcement of bank loans with positive abnormal stock returns for the borrower firm.<sup>30</sup> The announcement is typically good news for shareholders, since the loan commits the bank to monitoring the borrower firm over the life of the loan.<sup>31</sup>

#### B. Traditional Covenant Structure

Covenant constraints in the initial loan agreement both screen borrowers ex ante and curb managers' discretion from the inception of the lending relationship. Subsequent covenant violations trigger lender scrutiny and the possibility of further constraints on management and operations.

#### 1. Covenant Setting to Control Agency Costs

Empirical studies show that the structuring of initial covenants responds to firm characteristics that affect credit risk, and that managers alter their behavior in response to

31. See Sudha Krishnaswami et al., Information Asymmetry, Monitoring, and the Placement Structure of Corporate Debt, 51 J. FIN. ECON. 407, 409 (1999) (finding that firms with greater growth prospects—and therefore greater debt-related moral hazard problems—rely more heavily on private debt than public debt, and attributing this result to the monitoring advantages of private debt); Scott L. Lummer & John J. McConnell, *Further Evidence on the Bank Lending Process and the Capital-Market Response to Bank Loan Agreements*, 25 J. FIN. ECON. 99, 101 (1989) (finding excess stock returns almost exclusively around the announcement of loan renewals, but not new loans, and concluding that the value to shareholders comes not from the initial screening of prospective borrowers, but from private information the bank gleans during the course of its relationship with the borrower, consistent with a monitoring theory).

This positive stock market reaction may also arise from a complementary source. The bank's decision to extend credit may signal that it has positive private information about the firm—i.e., the bank resolves adverse selection problems for the stock market. *See generally* Best & Zhang, *supra* note 30; Charles J. Hadlock & Christopher M. James, *Do Banks Provide Financial Slack*?, 57 J. FIN. 1383 (2002); Wayne H. Mikkelson & M. Megan Partch, *Valuation Effects of Security Offerings and the Issuance Process*, 15 J. FIN. ECON. 31 (1986); Stewart C. Myers & Nicholas S. Majluf, *Corporate Financing and Investment Decisions When Firms Have Information That Investors Do Not Have*, 13 J. FIN. ECON. 187 (1984). The cross-monitoring benefits may run in favor of the bank as well. One study finds that bank debt is cheaper for firms with publicly traded shares or investment-grade public debt outstanding. James R. Booth, *Contract Costs, Bank Loans, and the Cross-Monitoring Hypothesis*, 31 J. FIN. ECON. 25 (1992).

representative on its borrower's board of directors, which enables the bank to obtain soft information about the borrower. Tung, *supra* note 3, at 138–40.

<sup>30.</sup> Christopher James, Some Evidence on the Uniqueness of Bank Loans, 19 J. FIN. ECON. 217, 219 (1987); Myron B. Slovin et al., Firm Size and the Information Content of Bank Loan Announcements, 16 J. BANKING & FIN. 1057, 1058 (1992); Ronald Best & Hang Zhang, Alternative Information Sources and the Information Content of Bank Loans, 48 J. FIN. 1507, 1511 (1993); Matthew T. Billett et al., The Effect of Lender Identity on a Borrowing Firm's Equity Return, 50 J. FIN. 699, 700 (1995). A related literature suggests that nonbank private debt may also bring bank-like benefits to equity holders. These studies show a positive stock price reaction to announcements of nonbank private debt placements, with no statistical difference between announcements of bank debt versus nonbank private debt. See Dianna C. Preece & Donald J. Mullineaux, Monitoring by Financial Intermediaries: Banks Versus Nonbanks, 8 J. FIN. SERV. RSCH. 193, 199 (1994); Billet et al., infra note 155.

covenant constraints. Lender influence commences from the very beginning of the lending arrangement.

Among other fears, lenders would worry that once credit is extended, firm managers may favor their own interests or the interests of equity holders over those of creditors. Managers might, for instance, substitute risky projects for more conservative ones, since in the presence of debt, diversified equity holders do better with the former than the latter. Managers might even spend free cash on negative net present value projects, either to build empires for their own benefit or to improve equity holders' upside returns. The finance literature has identified situations in which these agency costs may be most troublesome. Financial distress, for example, heightens the conflict between debt and equity.

Traditional covenant structure responds to those perils. Firms with greater risk of financial distress—smaller, more highly levered, more volatile firms, and firms with highly liquid assets—are more likely to have covenants in their lending agreements. By contrast, loans to firms with a higher ratio of tangible assets to total assets are less likely to include covenants.<sup>32</sup> This makes sense as tangible assets are easier to value and easier to liquidate than intangible assets in the event of the firm's default. Firms with intangible assets and growth opportunities are riskier because realization of the value of these opportunities depends on discretionary future investment by the firm. Specific covenants address this sort of risk: high-growth firms are more likely to attract demands for security, financial ratio covenants, and covenants restricting dividends.<sup>33</sup> Moreover, historically, private lenders set covenants fairly tightly relative to the variability of the underlying accounting measure, adjusting covenant "slack" to account for this variability for each borrower.<sup>34</sup> Tighter covenants were also associated with lower borrowing costs, consistent with the proposition that lenders valued these stricter limits and their effects on borrower behavior.<sup>35</sup>

Covenants also likely affect managers' behavior. Technical covenant violations are common and do not typically result in punitive lender action. But managers cannot count on such happy outcomes. A violation triggers the lender's legal right to demand immediate repayment of the entire debt, and even though acceleration is unlikely, a violation might always cause some curtailment of managerial discretion through the bank's intervention. Even for healthy firms in the best of situations, there is a hassle factor: a violation requires managers to explain. It triggers review by the bank and may impose additional reporting burdens on borrower management, which is put to the task of defending its forecasts and strategies.<sup>36</sup> All this takes time away from running the

<sup>32.</sup> Michael Bradley & Michael R. Roberts, *The Structure and Pricing of Corporate Debt Covenants*, 5 Q.J. FIN. 1, 3 (2015) (analyzing commercial loans made from 1993–2001, as reflected in Loan Pricing Corporation's Dealscan database).

<sup>33.</sup> Id. at 24 tbl.6 (relying on the market-to-book ratio as a measure of growth).

<sup>34.</sup> Ilia D. Dichev & Douglas J. Skinner, *Large-Sample Evidence on the Debt Covenant Hypothesis*, 40 J. ACCT. RSCH. 1091, 1093, 1106–07 (2002).

<sup>35.</sup> Cem Demiroglu & Christopher M. James, *The Information Content of Bank Loan Covenants*, 23 REV. FIN. STUD. 3700, 3705 (2010). Tighter covenants may also simply reflect the lender's higher confidence in the borrower's future performance. *See id.* Stock price reactions to public announcement of loans are also larger for loans with tighter covenants. *Id.* 

<sup>36.</sup> Dichev & Skinner, *supra* note 34, at 1096 (describing the hassle factor).

company. Banks also often charge a fee for a waiver or modification of the loan. Managers have incentive to comply.

Though measuring the effects of loan covenants on managerial behavior may be a bit tricky, studies tend to confirm that covenants have real effects. When we look at firm performance following the loan's inception, we find some telling patterns. Comparing quarter-end accounting measures with the associated covenants, one study finds an unusually small number of loan quarters with borrower performance slightly beyond covenant thresholds-that is, in violation-while an unusually large number cluster just shy of the violation point.<sup>37</sup> In other words, there is a significant discontinuity in the distribution of firms' performance on accounting measures constrained by covenants. Moreover, the discontinuous pattern becomes more pronounced over the life of the loan. This longitudinal dimension is important. Clustering in general, while consistent with the view that covenants constrain managers, does not necessarily rule out the anticipatory contracting explanation-that covenants are set in order to anticipate the borrower's future performance, but not to constrain it. When lenders set tight covenants, we would expect to see some clustering near the covenant threshold. Anticipatory contracting could plausibly account for clustering generally or discontinuity in the quarters immediately following the loan's inception. However, the persistence and increased prominence of this discontinuous pattern in a loan's later years is difficult to explain as an artifact of anticipatory contracting.<sup>38</sup> Instead, the pattern suggests that covenants have real bite: firms attempt to manage in response to covenant constraints.

#### 2. Covenant Violations

Not surprisingly, poor performance and covenant violations typically cause lenders to monitor their borrowers more closely and perhaps to actively intervene in managerial decision-making. Financial covenant violations are common, and they do not typically presage financial distress,<sup>39</sup> though they might trigger some lender response. Over a tenyear period, according to one study, a quarter to almost a third of all public companies violated a financial covenant,<sup>40</sup> and this may be a lower bound, as methodological constraints suggest that many technical violations may go undetected.<sup>41</sup> Violations rarely lead to payment default or acceleration of the loan. A violation will trigger the lender's scrutiny, and firm managers might be tasked to justify the firm's strategies and forecasts.

<sup>37.</sup> Id. at 1111-12 (investigating current ratio and net worth covenants).

<sup>38.</sup> Id.

<sup>39.</sup> Id. at 1093; Sudheer Chava & Michael R. Roberts, *How Does Financing Impact Investment? The Role of Debt Covenants*, 62 J. FIN. 2085, 2086 (2008).

<sup>40.</sup> See Michael R. Roberts & Amir Sufi, Control Rights and Capital Structure: An Empirical Investigation, 64 J. FIN. 1657, 1663–64 tbl.I (2009) (finding that between 1996 and 2005, more than one quarter of U.S. public companies violated a financial covenant, and for companies with an average leverage ratio of at least 5%, that percentage increased to 30%); see also Dichev & Skinner, supra note 34, at 1093 (finding that with a Dealscan sample of private loans from 1986–99, violations occur in about 30% of all loans); Chava and Roberts, supra note 39, at 11 (finding that 37% of firms subject to a current ratio covenant and 25% of firms subject to a net worth covenant during the period 1994–2005 committed a violation of the respective covenant).

<sup>41.</sup> One lending officer at a prominent insurance company reports that in a given year, the company will receive on average one request for a covenant modification for each loan on its books. Edward D. Zinbarg, *The Private Placement Loan Agreement*, FIN. ANALYSTS J., 1975, at 35 (discussing private placement lenders).

Ultimately, however, the lender most often waives the violation.<sup>42</sup>

The second most likely lender response is to impose additional constraints on the borrower.<sup>43</sup> More serious measures such as a reduction in credit, an increase in interest rate, or a requirement of additional collateral are less likely,<sup>44</sup> though of course, if the firm's slide were to continue, the bank would resort to these and other more aggressive measures.<sup>45</sup>

Covenants are used primarily, then, not as a device to force the borrower's immediate repayment of the loan, even though the lending agreement provides for that remedy. Instead, covenants serve as tripwires that signal the need for creditor attention. When the wire is tripped, the lender steps in to update its information about the borrower. The lender communicates with management and examines the firm's financial position and internal forecasts. In most cases, tripping the wire does not ultimately result in any punitive response by the creditor. But it does command the lender's attention and gives the lender the option to act, depending on what its investigation shows.

#### 3. Lender Governance

Besides simply shoring up a borrower's creditworthiness with extra collateral or reduced credit availability, once a non-trivial violation occurs, a lender may additionally force important changes in the way the firm operates. The lender may demand crucial changes to financial policy or investment policy. In a drastic situation, the lender may force the CEO's replacement.

The lender's influence on financial policy, of course, begins at the loan's inception. Almost all loan agreements limit the borrower's ability to incur additional debt.<sup>46</sup> The restriction typically places a cap on a debt-related ratio, using a debt measure as the numerator and a measure of earnings, cash flow, or capitalization as the denominator.<sup>47</sup> A

<sup>42.</sup> V. Gopalakrishnan & Mohinder Parkash, *Borrower and Lender Perceptions of Accounting Information in Corporate Lending Agreements*, 9 ACCT. HORIZONS 13, 20 (1995) (surveying chief financial officers of Fortune 500 companies, chief lending officers of the largest 100 banks, and the heads of private placement departments at the top 100 insurance companies, with more than 95% of both borrowers and lenders indicating a medium or high probability of a waiver). According to one lender's report, more than 95% of requests for covenant modification are granted with no quid pro quo: "the vast majority of corporate requests are perfectly reasonable and do not increase [lender] risk materially." Zinbarg, *supra* note 41, at 35.

<sup>43.</sup> Seventy-five percent of borrowers and 59% of lenders indicate a medium to high probability of additional constraints. Gopalakrishnan & Parkash, *supra* note 42, at 20, 21 tbl.3.

<sup>44.</sup> *Id.*; Roberts & Sufi, *supra* note 40, at 1688, 1689 tbl.IX (noting from SEC filings for a random sample of 500 initial covenant-violating firms that 24% of violations resulted in reduced credit availability; 15% resulted in increases in interest spread; 7% resulted in the lender requiring additional collateral; and that in the aggregate, 32% of lenders took at least one of these actions, while 63% of violations resulted in a waiver without additional action).

<sup>45.</sup> The most drastic remedies of termination of the agreement and acceleration of the debt are, of course, the least common. Over 76% of Fortune 500 borrowers and more than 90% of their lenders assign a zero or low probability to these outcomes. Gopalakrishnan & Parkash, *supra* note 42, at 20–21 tbl.3.

<sup>46.</sup> Roberts & Sufi, *supra* note 40, at 1663 (noting that almost 90% of loan agreements in their sample contain an explicit or implicit restriction on the borrower's total debt).

<sup>47.</sup> Over 79% of loan agreements in the sample contain such a covenant. *Id.* at 1663–64. For example, one agreement defines a leverage ratio: *"Leverage Ratio"* means, on any date, the ratio of (a) Total Indebtedness as of such date to (b) Consolidated EBITDA for the period of four consecutive quarters of the

covenant violation often invites further constraints by the lender. In one study, normalizing firm borrowing as a percentage of assets, a covenant violation results in a 0.7% decrease in average firm borrowing in the quarter immediately following the violation. This is an economically significant drop.<sup>48</sup> It also endures.

Like financial policy, investment policy is a crucial aspect of managers' strategic decision making, effectively placing the firm's bets on the future. Banks typically enjoy meaningful influence over these decisions, since covenant constraints allocate control rights over investment policy, making it contingent on the firm's performance. For example, in one study sample, one-third of public company loan agreements contained a capital expenditure covenant, and over a ten-year sample period, 42% of public firms faced a capital expenditure restriction at some point.<sup>49</sup> Firms facing a new capital expenditure restriction experience a decline in investment 15-20% larger than firms not facing a new restriction.<sup>50</sup> Not surprisingly, such restrictions are quite sensitive to firm performance. A covenant violation, an increase in credit risk (as measured by the borrower's debt-to-cash-flow ratio), or a ratings downgrade increases the likelihood that the borrower will face an investment restriction. For example, a firm that suffers a ratings downgrade from the lowest Standard & Poor's investment grade (BBB) to the highest speculative grade (BB) experiences a 21% increase in the likelihood of incurring a capital expenditure restriction.<sup>51</sup> A similar increase in the likelihood of facing a capital expenditure restriction befalls the borrower violating a covenant.<sup>52</sup> While violating firms commonly face interest rate increases, demands for collateral, and dividend restrictions, the elasticity of the capital expenditure restriction with respect to a violation is significantly larger than the elasticity of other loan terms.<sup>33</sup>

Private lenders' influence is of course greatest in distress situations, as are the conflicts among lenders and other investors. Through a variety of lender liability doctrines, courts have constrained banks' decision-making in the context of troubled borrowers. Courts have imposed good faith requirements on lenders.<sup>54</sup> Courts have held that domination and control of the distressed borrower's day-to-day operations may cause the lender to be deemed an insider or fiduciary,<sup>55</sup> such that fraudulent or inequitable

49. Greg Nini et al., Creditor Control Rights and Firm Investment Policy, 92 J. FIN. ECON. 400, 405 (2009).

54. See K.M.C. Co., Inc., v. Irving Trust Co., 757 F.2d 752 (6th Cir. 1985) (imposing a good faith requirement with respect to a bank lender's discretionary refusal to advance funds or demand repayment).

Company ended on such date. *Id.* at 1679. Further down, the agreement caps the ratio at 3:1. SECTION 6.12. *Leverage Ratio*. The Company will not permit the Leverage Ratio as of the last day of any fiscal quarter to exceed 3.00 to 1.00. *Id.* at 1670. Credit Agreement Dated as of November 14, 2006, Among Amerisourcebergen Corporation et al., §§ 6.11, 6.12 (on file with author). "EBITDA" is earnings before interest, taxes, depreciation, and amortization.

<sup>48.</sup> Compare the effect of a change in firm size, which is the single most powerful predictor of net borrowing. A two-standard-deviation reduction in the size of the firm results in only a 0.52% reduction in net borrowing per quarter. In relative terms, the 0.7% drop moves the firm from the 65th to the 35th percentile of the within-firm net debt issuance distribution. Roberts & Sufi, *supra* note 40, at 1659.

<sup>50.</sup> Id. at 413.

<sup>51.</sup> Id. at 401.

<sup>52.</sup> Id. (noting that a capital expenditure restriction is 20% more likely with a covenant violation).

<sup>53.</sup> Id. at 411 tbl.6. (showing an increase of 51% in capital expenditure restrictions).

<sup>55.</sup> See In re Exide Techs., Inc., 299 B.R. 732, 743-46 (Bankr. D. Del. 2003) (upholding allegations in

conduct would subject the lender to damages for harm to the company.<sup>56</sup> A lender's own claim might also be subordinated below the claims of competing creditors harmed by such conduct.<sup>57</sup>

Finally, it is important to highlight the uncommon but sometimes necessary step of replacing a borrower firm's CEO. Though canonical accounts of change in the C-suite typically view boards of directors as the central players, as a practical matter, lender influence may be at least as important in many cases. The pattern is familiar. Having chosen a CEO who subsequently oversaw excellent results over a number of years, a board may be slow to recognize when the CEO's magic has run out. Having invested in the effort to handpick a CEO, and then cheered her success for a time, directors may naturally be reluctant later to second-guess their decision or consider the possibility of a replacement. "Once it has installed or chosen to retain a CEO, the board is motivated to trust the CEO more than it should."<sup>58</sup> Lenders, of course, are less likely to suffer from this commitment bias.<sup>59</sup> They were not formally (and likely not even informally) a part of the process that chose this CEO. So the lenders may be able to assess the borrower's situation with more dispassion than the directors who backed the now-faltering CEO. When the borrower gets into trouble, and shareholder pressure and the market for corporate control are insufficient to effect a CEO change, lender influence may be key. The firm's downward spiral will likely trigger covenant violations, which shifts control to lenders. And though lenders of course do not formally decide the existing CEO's fate nor

the complaint that the lenders' control over the borrowers rendered them insiders, whose claims may be subject to equitable subordination). According to the *Exide* complaint, the secured lenders caused the borrower to (a) grant the lenders significant pledges of prepetition collateral as part of an acquisition; (b) delay its bankruptcy filing to minimize the risk of preference avoidance to the lenders; and (c) fraudulently continue operating long after it should have been liquidated. The court refused to dismiss claims for deepening insolvency and equitable subordination. *See id.* at 743–46. The court also upheld insider preference claims. *See id.*; *see also In re* Adelphia Commc'ns Corp., 365 B.R. 24, 63 (Bankr. S.D.N.Y. 2007) (stating that the lender's control of the borrower's day-to-day management and operations or "the ability to compel the borrower to engage in unusual transactions" may trigger a fiduciary duty to the borrower); Temp-Way Corp. v. Cont'l Bank, 1369 B.R. 299, 317–18 (Bankr. E.D. Pa. 1992.

<sup>56.</sup> See In re Exide Technologies, Inc., 299 B.R. 732, 751–52 (Bankr. D. Del. 2003) (finding that controlling the borrower in order to force it to fraudulently continue its business while suffering massive losses to the detriment of competing creditors—deepening its insolvency—was actionable); *see also* Official Comm. of Unsecured Creditors v. R. F. Lafferty & Co., Inc., 267 F.2d 340, 349 (3d Cir. 2001) (finding an independent cause of action against firm managers and third parties for improperly expanding corporate debt and prolonging the life of an insolvent company).

<sup>57.</sup> See In re Fabricators, Inc., 926 F.2d 1458, 1467 (5th Cir. 1991) (noting that a lender that uses its leverage over the borrower to control the borrower's management to its own advantage and the detriment of other creditors may be subject to subordination); In re Exide Technologies, Inc., 299 B.R.732, 744 (Bankr. D. Del. 2003) (requiring inequitable conduct to justify equitable subordination).

<sup>58.</sup> Donald C. Langevoort, *Resetting the Corporate Thermostat: Lessons from the Recent Financial Scandals About Self-Deception, Deceiving Others and the Design of Internal Controls*, 93 GEO. L.J. 285, 294 (2004).

<sup>59.</sup> See, e.g., Barry M. Staw, Knee-Deep in the Big Muddy: A Study of Escalating Commitment to a Chosen Course of Action, 16 ORGANIZATIONAL BEHAV. & HUM. PERFORMANCE 22, 37 (1976) (noting that when individuals are personally responsible for a decision and its negative consequences, they may commit more resources to a prior decision).

tap her successor, lenders' influence is felt. As earlier noted,<sup>60</sup> once lenders enjoy the right to accelerate the entire debt, a number of less drastic measures are also on the table. CEO replacement is one such measure.<sup>61</sup>

The familiar story of Krispy Kreme offers an illustration. Scott Livengood served as Krispy Kreme's CEO from 1998-2005. He had worked for the company for several decades, having come up through the ranks of the HR department. His devotion to and enthusiasm for the company were legend. His wedding cake, for example, was made entirely from Krispy Kreme donuts.<sup>62</sup> He took the company through its IPO in 2000. The ensuing three years saw the company's stock price quadruple, and the headcount increased by 7,000.<sup>63</sup> Then the second largest doughnut chain in the country, Krispy Kreme became "a high-profile, closely watched darling in retail and investor circles after opening dozens of freestanding stores around the country." The company had attained "a cult-like following."<sup>64</sup>

The "darling" status was somewhat short-lived, however. By 2004, Krispy Kreme's popularity had waned. Livengood initially blamed the low-carb craze for the company's declining sales, but others believed the decline was the result of improvident expansion— the opening of too many stores too quickly without adequate support and planning.<sup>65</sup> Its accounting practices also triggered an SEC investigation,<sup>66</sup> which left the company vulnerable to a default declaration by its lenders for failing to file financial reports as required under the company's \$150 million loan agreement. The company had borrowed \$91 million under the facility as of October 2004. By January 2005, the lenders had cut off further borrowing, leaving the company and lenders to negotiate serial extensions of the default date while the company searched for alternative financing.<sup>67</sup> By this point,

65. Id.

<sup>60.</sup> Supra, Part II.B.2.

<sup>61.</sup> Lenders generally need to be gingerly about expressing their druthers too forcefully in this context.

 <sup>62.</sup> Mark Maremont & Rick Brooks, Once-Hot Krispy Kreme Ousts Its CEO Amid Accounting Woes,

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 2005),

 https://www.wsj.com/articles/SB110605594997928805#:~:text=The%20man%20who%20

<sup>transformed%20Krispy,woes%20and%20a%20federal%20probe [https://perma.cc/X8QU-RSF7].
63. Andy Serwer,</sup> *The Hole Story: How Krispy Kreme Became the Hottest Brand in America*, FORTUNE (July 7, 2003), https://archive.fortune.com/magazines/fortune/fortune\_archive/2003/07/07/345535/index.htm

<sup>[</sup>https://perma.cc/Z642-FGAM]. 64. Lynne Miller, Krispy Kreme Replaces Top Bosses, SUPERMARKET NEWS (Jan. 24, 2005), https://www.supermarketnews.com/archive/krispy-kreme-replaces-top-bosses#comment-0 [https://perma.cc/ DJ62-5BLR].

<sup>66.</sup> Floyd Norris, Krispy Kreme Picks Turnaround Specialist, N.Y. TIMES (Jan. 19, 2005), https://www.nytimes.com/2005/01/19/business/krispy-kreme-picks-turnaround-specialist.html

<sup>[</sup>https://perma.cc/2SJ6-6KDS]. At the same time, Krispy Kreme announced that it would delay indefinitely the filing of its fiscal 2004 financial statements, which would have to be restated, with the expectation that net income would be cut by as much as 26% for the fiscal fourth quarter after correction of accounting errors. Mark Maremont & Rick Brooks, Fresh Woes Batter Krispy Kreme; Doughnut Firm to Restate Results, Delay SEC Take 15% Tumble, WALL Filing; Shares а St. J. (Jan. 2005), 5. https://www.wsj.com/articles/SB110484914816116399 [https://perma.cc/H9N5-KTH9].

<sup>67.</sup> By March 25, 2005, Krispy Kreme had not found an alternative lender, though it did succeed in pushing its default date back to April 11, 2005. Associated Press, *Krispy Kreme Gets Extension*, N.Y. TIMES (Mar. 26, 2005), https://www.nytimes.com/2005/03/26/business/krispy-kreme-gets-extension.html [https://perma.cc/MC3C-2UYJ].

needless to say, the lenders were well-positioned to dictate terms. The company announced Livengood's retirement as CEO, board chair, and director in a 2005 January press release.  $^{68}$ 

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Having explained the mechanics of traditional lender governance, the next Part explains the evolution of loan markets over the past few decades, a period that has witnessed tremendous changes in debt markets, lending practices, and the uses of debt, as well as the emergence of new debt instruments.

#### **III. THE NEW LOAN MARKETS**

New loan markets have emerged in the face of major changes to the lending environment. I begin by describing traditional syndicated bank lending. I then explain important changes in banking regulation and bank lending markets that led to the skyrocketing supply and demand for leveraged loans. Financial services deregulation that began in the late 1970s led to increased competition to make loans. At the same time, with the leveraged buyout boom of the 1980s, firms and investors became more comfortable with riskier capital structures, happy to rely on risky debt—both bank loans and high-yield bonds—to finance massive takeovers. Modernization of bank capital rules also ultimately helped push banks toward an originate-to-distribute model of lending. Together these various influences propelled a market for the new risky loans.

#### A. Traditional Syndicated Bank Lending

The typical bank loan to a public company is syndicated. A large money center bank—the "lead" bank—negotiates the loan with the borrower while it assembles the lending syndicate.<sup>69</sup> The lead bank takes the laboring oar in performing due diligence on the borrower, and prospective syndicate members typically rely on the lead bank's documentation in performing their credit analyses.<sup>70</sup> Once the syndicate is assembled and

<sup>68.</sup> Miller, *supra* note 64. The press release also noted the company's recent steep sales declines: For the eight weeks ended December 26, 2004, system wide and average weekly sales per factory store decreased by approximately 18% and 25%, respectively, from the prior year's corresponding weeks. *Id.* The press release also announced the appointment of a consulting and crisis management group to run the company, that the company was barred from further borrowing under its \$150 million credit facility, and that its lenders had agreed to defer the calling of a default pending further discussion. *Id.* 

<sup>69.</sup> See Amir Sufi, Information Asymmetry and Financing Arrangements: Evidence from Syndicated Loans, 62 J. FIN. 629, 633 (2007) (describing the loan syndication process); Kamphol Panyagometh & Gordon S. Roberts, Private Information, Agency Problems and Determinants of Loan Syndications: Evidence From 1987–1999 4 (Apr. 25, 2002) (unpublished manuscript) (on file with author) (examining potential asymmetric information and agency problems in loan syndications). The arranging bank may underwrite the loan as well, in effect committing to extend the specified loan even before the formation of the syndicate is complete.

<sup>70.</sup> See Barry Bobrow et al., An Introduction to the Primary Market, in THE HANDBOOK OF LOAN SYNDICATIONS AND TRADING 155, 179 (Allison Taylor & Alicia Sansone eds., 2007) (describing the information memorandum that is drafted and shared with potential investors); Panyagometh & Roberts, *supra* note 69, at 5; Katerina Simons, *Why Do Banks Syndicate Loans?*, NEW ENG. ECON. REV. 45, 47 (Jan./Feb.

the loan is in place, the lead bank—which typically holds the largest stake in the loan<sup>71</sup>— is granted wide powers to act as agent for the syndicate, for which the lead bank is paid a fee.<sup>72</sup> It takes the lead in administering the loan, monitoring the borrower and communicating with firm management on behalf of the syndicate, and disseminating information within the syndicate.<sup>73</sup> When a borrower violates a covenant or defaults, the lead bank plays a central role in investigating and recommending a course of action to the syndicate.<sup>74</sup>

As the arranger for the loan and its primary monitor and administrator, the lead bank typically enjoys informational advantages over other syndicate members. One might therefore worry that the lead bank could behave opportunistically toward syndicate members—for example by syndicating poor quality loans or shirking on its monitoring duties. As the agent for the syndicate, the lead bank reaps only a pro rata benefit from diligent monitoring—sharing with the entire lender group—while it enjoys all the benefits from shirking.<sup>75</sup> Lead banks and other private lenders may also sell their loans in liquid secondary loan markets. This ready exit option may create moral hazard, encouraging lax credit analysis in the origination process or weaker monitoring after the loan is made.<sup>76</sup>

73. Sufi, supra note 69, at 632-33.

74. See generally Michael R. Roberts & Amir Sufi, *Renegotiation of Financial Contracts: Evidence from Private Credit Agreements*, 93 J. FIN. ECON. 159 (2009) (discussing the outcomes that spur contract renegotiation).

<sup>1993),</sup> https://www.bostonfed.org/publications/new-england-economic-review/1993-issues/issue-january-february-1993/why-do-banks-syndicate-loans.aspx [https://perma.cc/H2KK-NHFK] (comparing the way lead banks syndicate loans of different quality).

<sup>71.</sup> See Baird & Rasmussen, supra note 4, at 1244; Sufi, supra note 69, at 633. But see Kristian Blickle et al., *The Myth of the Lead Arranger's Share*, FED. RES. BANK N.Y., Staff Rpt. No. 922 (May 2020) (using Shared National Credit Program data).

<sup>72.</sup> The credit agreement spells out these relations among syndicate members. *See* Richard Wight et al., *Understanding the Credit Agreement, in* THE HANDBOOK OF LOAN SYNDICATIONS AND TRADING 209, 354 (Allison Taylor & Alicia Sansone eds., 2007). As competition among banks intensified and league tables became a popular device for "keeping score" among banks and ranking them, lead arrangers began carving out new distinguishing roles and accompanying titles to induce participation in their syndicates. New—and largely ceremonial—titles include "administrative agent," "syndication agent," "documentation agent," and "managing agent," which may also indicate some sharing of functions that had traditionally been performed by the sole lead bank. *See* Steve Miller, *Players in the Market, in* THE HANDBOOK OF LOAN SYNDICATIONS AND TRADING 43, 47–50 (Allison Taylor & Alicia Sansone eds., 2007).

<sup>75.</sup> For example, the lead bank might decide to devote more resources to originating new loans—an activity that generates fees for the lead bank—rather than monitoring existing syndicated loans, as to which risk is shared.

<sup>76.</sup> See Gary B. Gorton & George G. Pennacchi, Banks and Loan Sales: Marketing Nonmarketable Assets, 35 J. MONETARY ECON. 389, 391 (1995) (discussing moral hazard in the secondary loan market). Given originating lenders' likely informational advantages over secondary market purchasers, it might not be surprising if lower quality loans were more likely to trade than those of higher quality. Especially given the emerging "originate-to-distribute" model of syndication—in which the lead arranger anticipates selling large portions of a given loan to institutional investors in secondary markets shortly after origination—arrangers may be less concerned about careful credit analysis or subsequent monitoring than if they are expected to hold the loans for longer periods. See Antje Berndt & Anurag Gupta, Moral Hazard and Adverse Selection in the Originate-to-Distribute Model of Bank Credit, 56 J. MONETARY ECON. 725, 741–42 (2009) (measuring underperformance of loans sold to borrowers in the secondary market); Greg Nini, How Non-Banks Increased

Traditionally, lead banks had reputational stakes in their treatment of syndicate members. Far from behaving opportunistically, lead banks would in fact syndicate loans of higher ex ante quality in larger proportions<sup>77</sup> and would retain larger proportions of riskier loans.<sup>78</sup> Lead banks would also syndicate a larger proportion of loans to borrowers whose creditworthiness could be expected to hold up over time, as measured by ex post credit ratings.<sup>79</sup> More generally, lead banks' reputations as faithful agents improved their ability to arrange syndications.<sup>80</sup> These findings suggest that lead banks valued their reputations, which induced them to monitor conscientiously despite the risk diversification from syndication.

The lead bank also typically did not sell its stake,<sup>81</sup> preferring instead to preserve its relationships with both the borrower and its syndicate members, who not only depended on the lead bank for monitoring services<sup>82</sup> but agreed to join the syndicate relying at least in part on the lead bank's continuing involvement in the loan. Lead banks also often constrained resale by syndicate members, imposing requirements that might include lead bank and even borrower consent.<sup>83</sup> Lead banks and borrowers could plausibly be concerned about syndicate size and composition, since all other things being equal, a larger syndicate makes collective decision-making more difficult.<sup>84</sup> Holdout problems also increase with syndicate size, which may be especially troubling when the borrower's

78. See Simons, supra note 70, at 49 tbl.3 (showing that the proportion of a syndicated loan retained by the lead bank increases with the severity of the borrower's credit problems, as subsequently determined by bank examiners' loan quality classifications); Sufi, *supra* note 69, at 633. For more opaque borrowers, which require greater due diligence and monitoring, the lead bank generally retains a larger share of the loan and forms a more concentrated syndicate with lenders that are "closer" to the borrower both geographically and in terms of prior lending relationships. *Id.* 

79. Panyagometh & Roberts, supra note 77, at 24.

80. See Dennis & Mullineaux, supra note 77, at 407 (finding that lead banks' success in syndicating larger percentages of their loans is positively associated with reputational measures).

81. Baird & Rasmussen, *supra* note 4, at 1244.

82. See Panyagometh & Roberts, *supra* note 77, at 3 (describing the lead bank's role as the delegated monitor for the syndicate); Sufi, *supra* note 69, at 632 (noting the lead arranger's role as the syndicate's primary monitor); For their part, borrowers generally expect and prefer a durable relationship with their lead bank, which has specialized knowledge of its borrowers' business and financial condition. If the lead bank exits by selling its loan, the borrower may be left with a different agent bank that it has never worked with and that may not be to its liking.

83. Sang Whi Lee & Donald J. Mullineaux, *Monitoring, Financial Distress, and the Structure of Commercial Lending Syndicates*, 33 FIN. MGMT. 107, 111 (2004). Forty-four percent of the transactions in their sample of syndicates loans from 1987–1995 included a requirement for lead bank consent for loan resale. *Id.* at 117.

84. Modification of a syndicated loan requires a vote among the members. For major changes—in principal, interest, maturity, or collateral—unanimity is typically required. For technical violations or covenant waivers, a simple majority or supermajority will typically suffice. Sufi, *supra* note 69, at 633.

the Supply of Bank Loans: Evidence from Institutional Term Loans (Mar. 18, 2008) (unpublished manuscript) (on file with author) (documenting the boom in syndicating leverage loan tranches to nonbank institutional investors).

<sup>77.</sup> See Steven A. Dennis & Donald J. Mullineaux, *Syndicated Loans*, 9 J. FIN. INTERMEDIATION 404, 424 (testing for ex ante quality); see also Kamphol Panyagometh & Gordon S. Roberts, Loan Syndicate Structure: Evidence from Ex Post Data 3–4 (Jan. 14, 2008) (unpublished manuscript) (on file with author), (finding that lead banks syndicate greater proportions of loans to ex post higher quality borrowers as measured by bond ratings).

distress requires a modification of the loan.<sup>85</sup>

Lenders in general also anticipated potential secondary market purchasers' concerns about moral hazard with respect to monitoring, as well as adverse selection.<sup>86</sup> Selling lenders would not always sell their entire stake in a loan, often retaining a portion to assure purchasers of both the quality of the loan and the seller's continuing stake in monitoring the borrower. Consistent with this implicit assurance, loan sellers typically retained larger portions of riskier loans.<sup>87</sup> Loans that were ultimately sold also contained more restrictive covenants than loans that were not sold.<sup>88</sup> These tighter covenants, by putting borrowers on a tighter leash, helped address both presale moral hazard and adverse selection.<sup>89</sup> Tighter covenants set quick triggers for intervention, so that even a lender expecting to sell its loan would be prompted to investigate earlier and more often than with loose covenants also helped mitigate a loan purchaser's informational disadvantage by offering the same quick trigger for intervention that the seller enjoyed.<sup>90</sup>

Overall, the evidence suggests that while syndication and secondary loan trading might theoretically have dampened banks' monitoring incentives, lead banks and selling banks anticipated and addressed this concern for the benefit of syndicate members and loan purchasers, respectively. Lead banks understood their reputational stakes in refraining from opportunism in a syndication. Both lead banks and selling banks took steps to bond themselves as monitors.<sup>91</sup>

<sup>85.</sup> *See* Lee & Mullineaux, *supra* note 83, at 111. The effect of loan sale restrictions may be ambiguous in terms of reducing holdout problems, however. Originating syndicates tend to be larger and loan concentrations lower for loans with resale constraints. These liquidity constraints make the loan less attractive to participants, who take smaller shares as a result. *Id.* at 120–21.

<sup>86.</sup> That is, potential purchasers may fear that sellers only want to dump their bad loans.

<sup>87.</sup> Gorton & Pennacchi, *supra* note 76, at 408 tbl.5; *cf*. Berndt & Gupta, *supra* note 76 (finding evidence of bank moral hazard insofar as firms whose loans are sold have worse risk adjusted stock returns over the three years following the loan sale compared to firms whose loans are not sold).

<sup>88.</sup> Steven Drucker & Manju Puri, *On Loan Sales, Loan Contracting, and Lending Relationships* 2 (FDIC Ctr. for Fin. Rsch., Working Paper No. WP 2007-04,2007).

<sup>89.</sup> Moreover, tighter covenants help increase borrowers' debt capacity by making their loans more saleable in secondary markets. *Id.* at 5-6.

<sup>90.</sup> More generally, bank monitoring continues to have value in the presence of bank debt trading. Amar Gande and Anthony Saunders find that bank loan announcements are associated with positive stock price reactions, even when the borrower's loans already trade on the secondary market. *See* Amar Gande & Anthony Saunders, *Are Banks Still Special When There Is a Secondary Market for Loans?*, 67 J. FIN. 1649, 1652 (2012). This result holds even for distressed firms, for which reduced incentives for bank monitoring would *ex ante* be expected to have the most adverse effects. *Id.* Additionally, the inception of trading in the borrower's bank debt also elicits a positive stock price reaction, suggesting that bank monitoring and the secondary market offer complementary sources of information about borrower firms. *Id.* 

<sup>91.</sup> Charles Whitehead has offered a reason to embrace loan markets as a facilitator of lender governance. More complete credit markets may improve governance through transparent pricing of credit risk. In the same way that stock prices inform equity holders about the firm's condition and prospects, liquid credit markets may offer price signals to creditors about a firm's creditworthiness, enabling those creditors to adjust their relations with the firm. Creditors might come to rely on these credit market price signals as a supplement to or substitute for traditional covenants and monitoring. *See* Charles K. Whitehead, *The Evolution of Debt: Covenants, the Credit Market, and Corporate Governance*, 34 J. CORP. L. 641, 660 (2009).

#### B. Demand for Leveraged Loans

In this section, I describe the evolution from traditional lending to a new and riskier loan market, driven in part by banking deregulation, in part by the advent of junk bonds and the 1980s leveraged buyout boom, in part by modernized bank capital rules, and in part by the advent of securitization. I also discuss the misgivings of regulators and other debt market observers concerned with the new loan market's appetite for risk.

#### 1. Banking Deregulation and Financial Firms' Consolidation

Banking deregulation had important effects on lenders and lending markets. Beginning in the late 1970s, bank loan markets changed dramatically, and new forms of bank lending emerged as states deregulated intrastate branching and interstate banking.<sup>92</sup> Before deregulation, commercial banking was a relatively clubby, cozy business, with banks operating in fairly protected, geographically segmented markets.<sup>93</sup> Not only was interstate banking prohibited,<sup>94</sup> but most states limited the size and geographical scope of banks operating within their borders.<sup>95</sup> These constraints effectively limited the territorial scope of competition, carving up banking markets within each state. At the start of banking deregulation, only twelve states allowed unrestricted branching.<sup>96</sup> However, by 1990, thirty-eight states and the District of Columbia had removed all intrastate branching restrictions.<sup>97</sup>

Interstate banking received a boost at the federal level in 1982: an amendment to the Bank Holding Company Act<sup>98</sup> sanctioned interstate acquisition of failed banks and thrifts regardless of state law.<sup>99</sup> Many states responded to the Act by entering into reciprocal

94. Interstate banking enables a bank holding company (BHC) to own and operate banks in more than one state. Under the Douglas Amendment to the Bank Holding Company Act of 1956, states enjoyed the power to block interstate banking—barring a BHC from acquiring a bank outside its home state without the approval of the target bank's state. 12 U.S.C. § 1842(d) (2006).

95. See Kevin J. Stiroh & Philip E. Strahan, *Competitive Dynamics of Deregulation: Evidence from U.S. Banking*, 35 J. MONEY, CREDIT & BANKING 801, 806 (2003). In "unit" banking states, branching was strictly prohibited. *Id.* In effect, each bank was permitted only one place of business—its unit bank—within the state. Other states allowed only limited branching. *Id.* 

<sup>92.</sup> See Anthony J. Crawford et al., Bank CEO Pay-Performance Relations and the Effects of Deregulation, 68 J. BUS. 231, 233 (1995) (noting that most states required reciprocity); R. Glenn Hubbard & Darius Palia, Executive Pay and Performance: Evidence from the U.S. Banking Industry, 39 J. FIN. ECON. 105, 109–10 (1995) (describing state-level deregulation of interstate banking beginning in the early 1980s).

<sup>93.</sup> See generally Crawford et al., *supra* note 92 (investigating bank CEO compensation from 1976 to 1988); Vicente Cuñat & Maria Guadalupe, *Executive Compensation and Competition in the Banking and Financial Sectors*, 33 J. BANKING & FIN. 495, 496 (2009) (testing effects of banking deregulation from 1992 to 2002).

<sup>96.</sup> Id.

<sup>97.</sup> Id. at 808 tbl.1.

<sup>98. 12</sup> U.S.C. § 1842.

<sup>99.</sup> See Garn-St. Germain Depository Institutions Act (Garn-St. Germain Act) of 1982, Pub. L. No. 97-320, § 116, 96 Stat. 1469, 1476–79 (codified at 12 U.S.C. § 1823); see also Randall S. Kroszner & Philip E. Strahan, What Drives Deregulation? Economics and Politics of the Relaxation of Bank Branching Restrictions, 114 Q.J. ECON. 1437, 1442 (1999) (describing the impact of the Garn-St. Germain Act). The range of permissible products that depository institutions could offer was broadened beginning in 1980. For example, the Depository Institutions Deregulation and Monetary Control Act of 1980 (DIDMCA) preempted state usury laws

multistate agreements freely allowing bank acquisitions among participant states. By 1989, forty-four states and the District of Columbia allowed some interstate banking.<sup>100</sup> Continuing this trend, the Riegle-Neal Act (RNA) formally unleashed interstate banking across all states in 1994.<sup>101</sup> Then in 1999, the Gramm-Leach-Bliley Financial Services Modernization Act (GLB Act) formally repealed the Depression-era barriers among banking, insurance, and securities activities.<sup>102</sup> This allowed for the formation of multiline financial services firms in the form of bank holding companies.<sup>103</sup> These important deregulatory statutes pushed commercial banks further out of their cozy protected markets,<sup>104</sup> forcing them not only to compete with one another across state lines.<sup>105</sup> but also to compete with investment banks and other diversified financial firms with insurance, securities, and mutual fund businesses. Deregulation initially had salutary procompetitive effects. Increased competition led to greater growth opportunities in commercial banking.<sup>106</sup> At the same time, banks' traditional financial intermediation business model came under stress. Funding became more problematic, as consumers discovered money market funds and other alternatives to bank deposits. On the lending side, as well, commercial banks faced new competition as investment banks began to offer debt financing in non-traditional forms-short-term commercial paper, for example.107

The convergence of activities among banks and securities firms also spurred the

101. Riegle-Neal Interstate Banking and Branching Efficiency Act of 1994, Pub. L. No. 103-328, 108 Stat. 2338 (codified in scattered sections of 12 U.S.C.).

102. Gramm-Leach-Bliley Act, Pub. L. No. 106-102, § 101, 113 Stat. 1338, 1341 (1999).

103. *Id.* Before the GLB Act, BHC structures were permitted through the regulatory discretion of federal banking regulators. Jonathan R. Macey, *The Business of Banking: Before and After Gramm–Leach–Bliley*, 25 J. CORP. L. 691, 692 (2000). Perhaps the most significant effect of the GLB Act was to allow investment banks to acquire commercial banks. *Id.* at 694. Commercial banks were already being allowed by regulators to acquire investment banking operations by the time of the GLB Act's passage. *Id.* 

104. See Cuñat & Guadalupe, supra note 93, at 497 (discussing the impact of the two "quasi-natural experiments").

105. On the heels of the RNA, the total number of bank branches per capita in the United States increased, as did the average number of banks operating at the state level and the average number of states in which a bank operated. Astrid A. Dick, *Nationwide Branching and Its Impact on Market Structure, Quality, and Bank Performance*, 79 J. BUS. 567, 585 (2006).

capping mortgage interest rates, finance charges, and discount points. DIDMCA, Pub. L. No. 96-221, § 501, 94 Stat. 161, 161–63 (codified at 12 U.S.C. § 1735f-7a). The Garn-St. Germain Act authorized depository institutions to offer money market deposit accounts. Garn-St. Germain Act § 327 (codified at 12 U.S.C. § 3503) (directing the Deposit Institutions Deregulation Committee to promulgate rules allowing depository institutions to offer a new deposit account "directly equivalent to and competitive with money market mutual funds"). The Garn-St. Germain Act also preempted state law restrictions on due-on-sale clauses. Garn-St. Germain Act § 341 (codified at 12 U.S.C. § 1701j-3(b)(1)).

<sup>100.</sup> Stiroh & Strahan, supra note 95, at 808 tbl.1.

<sup>106.</sup> The costs and pricing of banking services fell. See Jith Jayaratne & Philip E. Strahan, Entry Restrictions, Industry Evolution, and Dynamic Efficiency: Evidence from Commercial Banking, 41 J.L. & ECON. 239, 249–53 (1998). States that dismantled intrastate branching restrictions saw faster growth after deregulation. See Jith Jayaratne & Philip E. Strahan, The Finance-Growth Nexus: Evidence from Bank Branch Deregulation, 111 Q.J. ECON. 639, 639 (1996). Interstate competition also led to reallocation of assets to more efficient banks. Stiroh & Strahan, supra note 95, at 804.

<sup>107.</sup> Elisabeth de Fontenay, Do the Securities Laws Matter? The Rise of the Leveraged Loan Market, 39 J. CORP. L. 725, 739 (2014).

largest financial firms to grow larger. Deregulation drove extensive consolidation among investment and commercial banks. "The most striking fact about the industry . . . is the amount of consolidation that has taken place."<sup>108</sup> Between 1979 and 1994, the total number of banking organizations dropped by 36.4%, while gross total assets increased by 23.4% in real terms.<sup>109</sup> A "top-ten" group of global securities underwriters remained virtually unchanged from 2001–07,<sup>110</sup> and those ten firms together took in nearly 60% of global proceeds from securities underwriting for 2005–07.<sup>111</sup> The "big three" U.S. banks—JP Morgan Chase, Bank of America, and Citigroup—controlled about 60% of the U.S. syndicated lending market from 2000–07. Around the same time, the "big four" U.S. securities firms—Merrill Lynch, Morgan Stanley, Goldman Sachs, and Lehman Brothers—became active players in the leveraged loan market. That market saw rapid growth in response to investors' demands for higher-yielding investments and private equity firms' need for leveraged buyout financing.<sup>112</sup> Global leveraged lending grew from \$250 billion in 1996 to \$1.6 trillion in 2007.<sup>113</sup> This explosion of leveraged lending fueled a global LBO boom.<sup>114</sup>

#### 2. Junk Bonds and Leveraged Buyouts

Up through the 1970s, public firms' balance sheets were quite conservative. New public bond issues were typically investment grade, implying very low default risk, but also offering financing only for the most creditworthy firms. During this period, bank lending was also fairly straightforward, as described above. Banks generally held their loans to maturity; selling loans was rare. Relationship banking was the norm, and banks' private information gleaned from monitoring their borrowers was an important asset, giving each bank some competitive edge with respect to its familiar borrowers.<sup>115</sup> This

115. See, e.g., Sreedhar T. Bharath et al., Lending Relationships and Loan Contract Terms, 24 REV. FIN. STUD. 1141, 1141–42 (2011) (showing that reduced information asymmetry leads to lower loan spreads,

<sup>108.</sup> Berger Kashyap Scalise, *The Transformation of the U.S. Banking Industry: What a Long, Strange Trip It's Been*, 1995 BROOKINGS PAPERS ON ECON. ACTIVITY, no. 2, 55, 66 (1995).

<sup>109.</sup> Id. at 66–67 tbl.1.

<sup>110.</sup> Arthur E. Wilmarth, Jr., *The Dark Side of Universal Banking: Financial Conglomerates and the Origins of the Subprime Financial Crisis*, 41 CONN. L. REV. 963, 980 (2009). This group was comprised of the "big three" U.S. banks—Citigroup, JP Morgan Chase, and Bank of America—three major foreign banks— Credit Suisse, Deutsche Bank, and UBS—and the "big four" U.S. securities firms—Merrill Lynch, Morgan Stanley, Goldman Sachs, and Lehman Brothers. *Id.* 

<sup>111.</sup> Id. at 981.

<sup>112.</sup> Id. at 982-83.

<sup>113.</sup> COMM. ON THE GLOB. FIN. SYS. WORKING GRP., PRIVATE EQUITY AND LEVERAGED FINANCE MARKETS, 11 graph 2.2 (Bank Int'l Settlements, 2008) https://www.bis.org/publ/cgfs30.pdf [https://perma.cc/LQ63-XM6S]. By 2004, global leveraged lending was at \$700 billion; it hit \$900 billion in 2005 and \$1.2 trillion in 2006. *Id.* 

<sup>114.</sup> See Viral V. Acharya et al., Private Equity: Boom and Bust?, J. APPLIED CORP. FIN.: A MORGAN STANLEY PUBL'N, Fall 2007, at 44–46 (discussing the implications of the growth in private equity and leveraged buyout markets); Edward I. Altman, Global Debt Markets in 2007: New Paradigm or the Great Credit Bubble?, 19 J. APPLIED CORP. FIN.: A MORGAN STANLEY PUBL'N, Summer 2007, at 17, 24–25 (examining leveraged loans and structured collateralized loan obligations). More than half the leveraged loans issued in the U.S. and Europe from 2004–07 were used to finance LBOs and other corporate transactions. Comm. on Glob. Fin. Sys., supra note 113, 14 graph 2.6.

was the traditional "originate-to-hold" model of syndicated lending, as compared to the more recent "originate-to-distribute" model we discuss below.<sup>116</sup>

The advent of junk bonds and the leveraged buyout boom of the 1980s taught companies to get comfortable with riskier capital structures.<sup>117</sup> Rather than simply husbanding debt for operational needs, firms could tap burgeoning debt markets for acquisition purposes. Private equity firms regularized the practice of borrowing large sums to take firms private, typically using a mix of bank loans and junk bonds, thereby increasing demand for both. This demand in turn led to more and more syndicated lending, which enabled banks to diversify risk by sharing the funding of large corporate loans.<sup>118</sup>

One consequence of the greater comfort with more highly leveraged capital structures has been the expansion of leveraged lending—bank lending to below-investment-grade firms. Because leveraged loans face higher default risk than investment-grade loans, borrowers face steeper pricing for both loan spreads and arranger fees. The prospective high returns for lenders attracted significant investor interest beginning in the mid-1990s, as non-bank financial institutions ("institutional lenders," also sometimes called "shadow banks") jumped into the leveraged loan market.<sup>119</sup> CLOs, mutual funds, pension funds, and insurance companies have been the most active institutional lenders in the leveraged loan market.<sup>120</sup>

#### 3. Modernizing Bank Capital

Modernized bank capital rules helped to shape the emergence and contours of the leveraged loan market. Beginning in the 1970s, central bankers in ten economically

especially for opaque borrowers).

<sup>116.</sup> Simons, supra note 70, at 45-46; de Fontenay, supra note 107, at 739.

<sup>117.</sup> So-called "junk bonds," also referred to as high-yield debt, are riskier than investment grade bonds. Bonds with a Standard & Poor's rating below BBB—or a Moody's rating below Baa3 are generally considered below investment grade. S&P GLOBAL, A SYNDICATED LOAN PRIMER 9 (Apr. 2016), https://www.lcdcomps.com/d/pdf/2016%20US%20Loan%20Primer.pdf [https://perma.cc/JDC9-Z28D]. A leveraged buyout is a merger transaction in which a private equity firm pays for control of the target using primarily borrowed funds, much of which is collateralized by the target's assets. *Id.* at 4.

The aggregate leverage ratio (i.e., debt-to-capital) for unregulated U.S. corporations remained low and stable from 1920 to 1945, varying between 10–15%. Leverage more than *tripled* between 1945 and 1970, from 11% to 35%. Since then, leverage has stayed above 35%, peaking in 1992 at 47%. John R. Graham, Mark T. Leary & Michael R Roberts, *A Century of Capital Structure: The Leveraging of Corporate America*, 118 J. FIN. ECON. 658, 659 (2015).

<sup>118.</sup> Bridget Marsh & Tess Virmani, *Loan Syndications and Trading: An Overview of the Syndicated Loan Market, in* LENDING & SECURED FINANCE (Thomas Mellor ed., 2020), https://iclg.com/practice-areas/lending-and-secured-finance-laws-and-regulations/01-loan-syndications-and-trading-an-overview-of-the-syndicated-loan-market [https://perma.cc/HA2R-6DFN].

<sup>119.</sup> See Allison A. Taylor & Ruth Yang, Evolution of the Primary and Secondary Leveraged Loan Markets, in THE HANDBOOK OF LOAN SYNDICATIONS AND TRADING 21, 24 (Allison A. Taylor & Ruth Yang eds., 2007) [hereinafter HANDBOOK OF LOAN SYNDICATIONS] ("These nonbank buyers increased demand for leveraged loan products, thereby enabling the larger agent banks to underwrite and distribute increasingly bigger loans.").

<sup>120.</sup> Jerome H. Powell, Chair, Bd. Of Governors of the Fed. Rsrv., Remarks at the 24th Annual Financial Markets Conference: Business Debt and Our Dynamic Financial System 4 fig. 4 (May 20, 2019).

advanced countries began to meet regularly to craft and coordinate improvements to the quality of banking supervision worldwide. This group became the Basel Committee, <sup>121</sup> which over the past decades has established international standards and practices for banking regulation. Among other things, the Basel Committee introduced and refined bank capital rules. Bank capital acts as a buffer against losses, analogous to corporate equity, and banking regulations specify minimum capital requirements for banks to operate. The minimum capital requirements are expressed as a ratio of capital to assets. During the 1980s, the Basel Committee introduced risk weighting for assets. Different types of assets implicate different types and levels of risk, so the Basel risk-weighted assets (RWA) approach assigns bank assets to various risk categories, with riskier categories requiring more capital. For example, under Basel I, commercial loans were weighted at 100%; residential mortgages were weighted at only 50%; and sovereign debt incurred a 0% weighting-that is, sovereign debt required no corresponding capital buffer. Over time, the Basel Committee set three important minimum capital-to-RWA ratios: one for "core" or "tier 1" capital; a similar ratio for total capital, which includes tier 1 capital plus additional items;<sup>122</sup> and a "common equity tier 1" or "CET1" ratio, which uses a definition of capital narrower than tier 1.<sup>123</sup>

Consistent with the modern portfolio theory behind these risk-based capital rules, banks were pushed to diversify their loan portfolios.<sup>124</sup> The new capital rules deterred banks from holding just a relative handful of large loans confined to a particular region or locality. Instead, banks were incentivized to hold larger passels of smaller loans that were geographically more balanced.<sup>125</sup> More generally, by the early 2000s, with portfolio management being the order of the day, a bank could no longer simply originate loans

123. *Id.* at 4. Basel III and the Dodd-Frank Act also created "capital buffers" for the large banks. A capital conservation buffer (CCB) precludes large banks from making capital distributions if their capital is less than 2.5% above the minimum ratio. Global systematically important banks (GSIBs) face a special surcharge meant to offset systemic risk. GSIBs are also required to meet a total loss absorbing capacity (TLAC) threshold, which is a minimum ratio of equity plus long-term debt. The requirement for a countercyclical capital buffer (CCyB) is meant to raise banks' capital requirements during an economic expansion, essentially to moderate a potentially overheating economy. *Id.* at 5.

124. See, e.g., Basel Committee on Banking Supervision, International Convergence of Capital Measurement and Capital Standards: A Revised Framework, Comprehensive Version 23–24 (2006), https://www.fsb.org/2006/06/cos\_060601/ [https://perma.cc/XF52-6LN3] (stating the granularity criterion for a regulatory retail portfolio—claims should be "sufficiently diversified to a degree that reduces risks in the portfolio"); see also de Fontenay, supra note 107, at 739–41.

125. See Whitehead, *supra* note 91, at 654–65 (noting that "new regulatory capital requirements made it more expensive for banks to continue the lending business as they had before," and "many [banks] turn[ed] to a defensive, portfolio-based strategy in order to minimize their overall credit cost.").

<sup>121.</sup> The Committee has since expanded to include 45 institutions from 28 jurisdictions. *History of the Basel Committee*, BANK OF INT'L SETTLEMENTS, https://www.bis.org/bcbs/history.htm [https://perma.cc/G2LB-CBZX].

<sup>122.</sup> Tier 1 includes common stockholders' equity, noncumulative perpetual preferred stock, minority interests in consolidated subsidiaries, and some other items. Total capital incorporates tier 2 capital, which includes allowances for loan losses, cumulative preferred stock, long-term preferred stock, and some subordinated debt. Tier 2 capital also cannot exceed tier 1 capital. Joseph G. Haubrich, *A Brief History of Bank Capital Requirements in the United States*, FED. RSRV. BANK OF CLEVELAND 4, 6 n.6 (2020), https://www.clevelandfed.org/en/newsroom-and-events/publications/economic-commentary/2020-economic-commentaries/ec-202005-evolution-bank-capital-requirements.aspx [https://perma.cc/K9CJ-BRMB].

based on a one-time risk assessment and hold the loans to maturity. Instead, portfolio rebalancing meant some amount of loan selling. So, rather than continuing with a straight originate-to-hold approach to lending, banks began to pare their portfolios to reduce regulatory capital costs. A 2002 survey of 41 prominent banks explored their experience with the nascent practice of portfolio management. The survey showed that 73% of respondents had transferred a loan to a CLO, and that "regulatory capital" concerns were the most important motivation.<sup>126</sup> Asked to rank four tools for loan portfolio management, respondents ranked "loan sales and trading" as the second most important tool after "approval/ disapproval of new business and renewals/ nonrenewal of existing business."<sup>127</sup> With new technology to measure risk and diversification, banks learned to optimize their portfolios and enhance their returns with the judicious selling of loans.<sup>128</sup> A secondary loan market thus emerged, with originate-to-distribute lending and plenty of non-bank lenders to populate that market.

#### 4. Securitization: Collateralized Loan Obligations (CLOs)

CLOs deserve special mention. Sixty-some percent of outstanding leveraged loans are securitized:<sup>129</sup> the loan is sold to a special purpose vehicle (SPV), which succeeds to the loan's cash flow and control rights. The SPV buys many loans, or slices of syndicated loans, and then issues securities—"collateralized loan obligations," or CLOs—to investors, backed by the cash flows of the loans in the SPV.<sup>130</sup> The CLO securities are tranched such that the senior-most securities are the safest and most highly rated. More junior tranches enjoy a higher interest rate for having to shoulder greater risk. The lowest tranches typically suffer the first losses in the collateral pool. Securitization is an ever-expanding tool of modern finance, in both its sheer dollar volume and the steadily growing variety of its sources of cash flows.

CLOs have become the major holders of leveraged loans. A conventional wisdom suggests that CLO loans face weak covenants and anemic monitoring, though existing

2015/08/investigating-the-trading-activity-of-clo-portfolio-managers.html [https://perma.cc/VT89-C9G5].

<sup>126.</sup> Charles Smithson et al., *Results from the 2002 Survey of Credit Portfolio Management Practices* 5 (2002), https://studylib.net/doc/8175108/2002-survey-of-credit-portfolio-management-practices [https:// perma.cc/8HSR-H7KA]. Most of the institutions (81%) were commercial banks headquartered in North

America or Europe. *Id.* at 2.

<sup>127.</sup> *Id*. The mean rank for "loan sales and trading" was 2.74. The mean rank for "approval/disapproval of new business" was 1.10. *Id*.

<sup>128.</sup> See Whitehead, *supra* note 91, at 655–56 n.103 (noting the development of credit portfolio modeling and new methods for measuring loan portfolios' risk and return characteristics).

<sup>129.</sup> See Powell, supra note 120, at 4 (noting that 62% of then-outstanding leveraged loans were held by CLOs). Mutual funds, the next largest holders of leveraged loans, own about 20% of the market. *Id.* 

<sup>130. &</sup>quot;CLO" is generally used to refer to not only the loan-backed bonds but also the entire structured finance transaction or entity. A typical CLO may include over a hundred different loans, with the average loan size ranging from \$2 million to \$3 million. Efraim Benmelech et al., *Securitization Without Adverse Selection*, 106 J. FIN. ECON. 91, 94 (2012). In 2015, the average CLO held \$500 million to \$600 million in principal amount of loans spread over an average of 140 borrowers. Stavros Peristani & João A.C. Santos, *Investigating the Trading Activity of CLO Portfolio Managers*, LIBERTY ST. ECON. (Aug. 3, 2015), https://libertystreeteconomics.newyorkfed.org/

evidence appears mixed and a lively debate has ensued.<sup>131</sup> In any event, it is notable that CLO securitization is an important driver of the leveraged loan market.

#### C. The Shape of Leveraged Lending

With the metamorphosis to syndicated originate-to-distribute lending and loan trading, it was a short step to creating different types of loans for different types of lenders for the leveraged loan market. While banks still typically act as arrangers, they prefer to hold what is known as "pro rata" debt, a package that includes a revolving loan with traditional financial covenants<sup>132</sup> and an amortizing term loan (typically referred to as the TLA).<sup>133</sup> The package is pro rata insofar as each lender in the syndication commits to a share of the revolver equal to its share of the TLA.<sup>134</sup> Institutional lenders, by contrast, prefer riskier loans, typically non-amortizing term loans, called TLBs. The "B" refers to the "bullet" nature of the loan. Maturity is typically longer for the TLB than for the TLA loan, and in the absence of amortization, the borrower makes only regular periodic interest payments over the life of the loan. The entire principal amount (the "bullet") is due at maturity.<sup>135</sup> Institutional lenders fund the lion's share of leveraged loans.<sup>136</sup> Loan credit ratings and secondary market trading standards have greatly

133. An amortizing loan is a loan with a repayment schedule of equal periodic payments over the life of the loan. Each periodic payment includes some repayment of principal, as well as interest on the remaining principal amount. Payments early on the life of the loan are comprised primarily of interest, with just a small principal repayment component. With each succeeding payment, the interest component decreases-because the unpaid principal amount decreases with each payment-while the principal repayment component increases. The very last payment, which retires the loan, is comprised almost entirely of principal, with just a sliver of interest. See Julia Kagan. Amortized Loan, INVESTOPEDIA (Oct. 30, 2020). https://www.investopedia.com/terms/a/

amortized\_loan.asp [https://perma.cc/T79M-BNQZ].

134. See S&P GLOBAL, LEVERAGED COMMENTARY & DATA (LCD): LEVERAGED LOAN PRIMER 6 (2020), https://www.spglobal.com/marketintelligence/en/documents/lcd-primer-leveraged-loans\_ltr\_updated.pdf [https://perma.cc/D9ZU-SBSP]. By the late 2000s, amortizing term loans became less common, as institutional lenders preferred the revolver/ institutional term loan (i.e., non-amortizing) arrangement. *Id.* at 6.

135. Id. at 37; See HANDBOOK OF LOAN SYNDICATIONS, supra note 119, at 717. This "bullet" feature is not necessarily as draconian as it may sound. Corporate borrowers will typically honor their repayment commitment by refinancing—taking out a new loan to repay the maturing loan. When multiple institutional term loan tranches are created at the same time, they are typically named in alphabetical order, which coincides with maturity order. For example, the TLB may mature in six years, the TLC in seven years, and so on.

136. Banks held less than 8% of leveraged loans as of the end of 2018. Powell, supra note 120, at fig.4.

<sup>131.</sup> Compare Yihui Wang & Han Xia, Do Lenders Still Monitor When They Can Securitize Loans?, 27 REV. FIN. STUD. 2354, 2354 (2014), and Vitaly M. Board & João A.C. Santos, Does Securitization of Corporate Loans Lead to Riskier Lending?, 47 J. MONEY, CREDIT & BANKING 415, 415 (2015) (finding that securitized leveraged loans perform worse than non-securitized loans), with Berlin, Nini & Yu, infra note 132, at 251, and Benmelech et al., supra note 130 (finding no consistent evidence that securitized leveraged loans performed worse than unsecuritized loans).

<sup>132.</sup> Mitchell Berlin et al., *Concentration of Control Rights in Leveraged Loan Syndicates*, 137 J. FIN. ECON. 249, 250 (2020) (noting that the line of credit in a leveraged loan deal nearly always contains traditional financial covenants, even if no term loan does). A revolving loan is an unfunded loan that allows the borrower repeatedly to draw and then repay funds as the borrower wishes during the life of the loan, up to a specified aggregate limit, much like a credit card. Interest is charged only for the periods and amounts that funds are outstanding. Banks typically originate and manage revolving loans.

facilitated institutional trading.<sup>137</sup>

Institutional lenders can take on these riskier loans because they are free of the capital requirements and stringent regulations applied to commercial banks. This regulatory differential has led to a symbiotic arbitrage, where banks arrange risky loans that they are not willing to hold on their own books, but instead sell to institutional lenders.<sup>138</sup> This approach has facilitated the "originate-to-distribute" model of loan syndication. While continuing their traditional relationship lending, banks also create institutional tranches for the shadow banks in the form of riskier TLBs. Like the revolving loans, leveraged term loans are typically secured by first priority liens on collateral, sharing equal priority with the revolving loan.<sup>139</sup> As syndicated lending has become more specialized, it has also become common that banks hold only revolvers, leaving the borrower's term loans to the shadow banks.

With debt investors continually on the hunt for higher yields, the U.S. leveraged loan market has exploded since the financial crisis, more than doubling in size,<sup>141</sup> as Figure 1 shows below. By the end of 2019, the leveraged loan market was worth \$1.2 trillion, with institutional lenders holding 90% of that market.<sup>142</sup> At the same time, on the borrower's side, 70% of U.S. companies are rated below investment grade,<sup>143</sup> including household names like Wendy's, Hertz, Hilton Worldwide Holdings, Jaguar, and United Airlines.

See also Andrew Berlin, *Regulated Banks Soften Stance on Leveraged Lending Guidance*, REUTERS (Apr. 19, 2018), https://www.reuters.com/article/us-lev-regulation/regulated-banks-soften-stance-on-leveraged-lending-guidance-idUSKBN1HQ2XV [https://perma.cc/N72K-X4S6] (explaining the regulatory easing by the Fed and OCC enabling debt packages with leverage of up to 7.75 times in 2018, as compared to the six-times leverage cap in 2013).

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<sup>137.</sup> Victoria Ivashina & Zheng Sun, *Institutional Demand Pressure and the Cost of Corporate Loans*, 99 J. FIN. ECON. 500, 501 (2011) ("In 2007, institutional lenders funded 62% of primary leveraged loan issuance, up from 15% in 2001.").

<sup>138.</sup> See Bratton & Levitin, supra note 18, at 104. Moreover:

There is only so much the safety and soundness regulators can do about this, for much of the market is populated by nonbank lenders and nonbank purchasers and so lies outside of their immediate reach.... [R]egulatory initiatives against the banks are thought to have played a causative role in the nonbank surge.

<sup>139.</sup> Berlin et al., *supra* note 132, at 250 n.5.

<sup>140.</sup> Edison Yu, Banking Trends: Measuring Cov-Lite Right, 3 ECON. INSIGHTS 1, 3 (2018).

<sup>141.</sup> From the end of 2008 to Q1 2019, outstanding institutional leveraged loans grew by 101%. See Frank Martin-Buck, Leveraged Lending and Corporate Borrowing: Increased Reliance on Capital Markets, with Important Bank Links, 13 FDIC Q. 41, 43 (2019).

<sup>142.</sup> Sierra, *supra* note 8; *see* Martin-Buck, *supra* note 141, at 44–45 ("In the mid-1990s, U.S. and foreign banks funded more than 70 percent of institutional leveraged loans.").

<sup>143.</sup> SIFMA, LEVERAGE LENDING FACT SHEET 2 (June 2021), https://www.sifma.org/wp-content/uploads/2019/03/Leverage-Loans-Fact-Sheet.pdf [https://perma.cc/68TU-VSC2].

# FIGURE 1: GROWTH IN LEVERAGED & COV-LITE LOANS 2000–2019 (JULY)

# Outstanding U.S. Leveraged Loans Are Almost Double Their Pre-Crisis Level, and Covenant-Lite Share Is Near an All-Time High



Source: S&P Leveraged Commentary and Data.

Notes: Outstanding loan data cover loans included in the S&P/Loan Syndications and Trading Association Leveraged Loan Index and thus underestimate the full market. Covenant-lite share is of institutional leveraged loan issuance. Data are through July 2019.

#### D. Fear of Flying: Regulators' View

Debt markets have become far more comfortable with riskier loans than in previous years. Regulators, rating agencies, and other debt market observers worry that market demand for leveraged loans has enabled borrowers to cut deals with increasingly weaker covenants.<sup>144</sup> Historically, leveraged loans typically included financial maintenance covenants. The borrower committed to maintaining a certain ratio of debt to cash flow, for example, or a cap on total debt. Virtually all leveraged loans included maintenance covenants in the early 2000s.<sup>145</sup> By 2007, 29% of new loans—so-called "covenant-lite" or "cov-lite" loans—omitted these covenants. Instead, loans might include "incurrence" covenants, which require compliance with caps or ratios only when the borrower pursues a specified significant action like issuing new debt or dividends, or making an acquisition. While the proportion of cov-lite loans fell in the aftermath of the financial crisis, cov-lite roared back through 2018 to comprise 85% of new loans.<sup>146</sup>

In addition to weakened covenants and the associated corporate governance implications, other risk-enhancing practices have emerged as well in recent years. Not only has reported leverage increased, but the growing practice of earnings "add-backs"

<sup>144.</sup> William W. Bratton, *Bond and Loan Covenants, Theory and Practice*, 11 CAP. MKTS. L.J. 461, 478–79 (2016). *See also* Aaron Weinman, *Demand for Leveraged Loans Ignites Market, Concerns on Risk*, REUTERS (Feb. 5, 2020, 7:01 AM), https://www.reuters.com/article/lineage-loantlb/demand-for-leveraged-loans-ignites-market-concerns-on-risk-idUSL1N2A50OK [https://perma.cc/CA5R-L52H] ("Investors' pockets are flush with cash looking for a home, and borrowers have leveraged this to either reprice their debt at ultra-low rates or obtain cheap new cash for acquisitions that may have been difficult to execute a year ago.").

<sup>145.</sup> Martin-Buck, *supra* note 141, at 44. *See* Michael R. Roberts & Amir Sufi, *Control Rights and Capital Structure: An Empirical Investigation*, 64 J. FIN. 1657, 1662 (2009). (One study of public company credit agreements from 1996–2005 found that almost 97 percent included at least one financial covenant.).

<sup>146.</sup> Martin-Buck, supra note 141, at 44.

suggests that actual leverage may be even more worrisome. With acquisitions, private equity buyouts, and other extraordinary transactions, sponsors and targets naturally expect to show synergies or operational improvements that justify valuations exceeding the costs of the deal. With the understandable aim of presenting a fair picture of the borrower's future earnings following an extraordinary transaction, the borrower often adds back non-recurring items that affect cash flows or accruals.<sup>147</sup>

Lenders in turn will concur with borrowers' upward adjustments to EBITDA to reflect this assumed augmentation of value. Borrowers of course may end up overstating adjusted EBITDA through add-backs, which then understates the target's debt-to-EBITDA ratio, a typical baseline leverage measure.<sup>148</sup> Add-backs are becoming more and more common. Their magnitudes have raised concerns from regulators and credit market observers.

[W]hat we view as the root of all (or almost all) evil in credit agreements [is] the definition of EBITDA. As investors know only too well, the corruption of this definition . . . weakens financial ratios, which to a large extent govern the borrower's permitted actions. . . . The ability to add back to EBITDA one-time expenses was initially intended to allow borrowers to "smooth out" their earnings so investors could get a better sense of their cash flow. Unfortunately, this tool has now devolved to the point at which borrowers are adding back costs that are not one-time but ongoing, like management fees. . . . The biggest culprit in the unwarranted inflation of EBITDA is the amount that borrowers are adding back as anticipated cost savings.<sup>149</sup>

While Federal Reserve Chair Jerome Powell has expressed confidence that the banking system is "fundamentally stronger and more resilient" than during the financial crisis, he also offers some caution in mid-2019:

Business debt has clearly reached a level that should give businesses and investors reason to pause and reflect. . . . Many measures confirm that the

<sup>147.</sup> For example, as part of the spin-off of Engility Holdings, Inc. by L-3 Communications Holdings, Inc. in July, 2012, Engility entered into a \$400 million credit agreement with Bank of America, as Administrative Agent. Engility's definition of Consolidated EBITDA runs for 520 words, and includes addbacks not only for interest, taxes, depreciation, and amortization. It also adds back certain "non-cash stock-based compensation expenses ... " certain "cost savings, operating expense reductions and synergies projected by the Borrower in good faith to be realized ... " certain "extraordinary or non-recurring charges, expenses or losses ... " and certain "other non-cash charges, expenses or losses." CREDIT AGREEMENT, ENGILITY HOLDINGS, INC., ENGILITY CORPORATION, BANK OF AMERICA 7-8 (July 17, 2012), https://www.sec.gov/Archives/edgar/data/1544229/

<sup>000119312512309118/</sup>d381537dex101.htm [https://perma.cc/NEH8-P6EA].

<sup>148.</sup> FINANCIAL STABILITY BOARD, VULNERABILITIES ASSOCIATED WITH LEVERAGED LOANS AND COLLATERALISED LOAN OBLIGATIONS 9, 9 (2019), https://www.fsb.org/wp-content/uploads/P191219.pdf [https://perma.cc/NL3X-9AZT].

<sup>[</sup>https://perma.cc/NL3X-9AZT]. <sup>149</sup> Creditflux, CLO Yearbook 2018, Ch. 4: 14-15; available at https://indd.adobe.com/view/45af1af6-f547-461d-8a8b-

b984d216039a?utm\_source=Creditflux&utm\_medium=web&utm\_campaign=CLO%20Yearbook%202018%20 Chapter%204.

business sector has significantly increased its borrowing as the economy has expanded over the past decade. Business debt relative to the size of the economy is at historic highs.... And investment-grade corporate debt has shifted closer to the edge of speculative grade.... Among investment-grade bonds, a near-record fraction is at the lowest rating.... [U]nderwriting standards have weakened. With leveraged loans, covenants intended to protect lenders may be an endangered species; more loans now feature high debt-to-earnings ratios; and the use of optimistic projections ... is becoming more common.<sup>150</sup>

In his 2015 speech on financial stability, then-Fed Board Member Powell made similar remarks about the dearth of covenants, noting that "[p]rice and nonprice terms in the syndicated leveraged loan market have been highly favorable to borrowers . . . . The share of loan agreements that lack traditional maintenance covenants increased to historic highs."<sup>151</sup>

Earlier, in spring of 2013, U.S. bank regulators had issued "Interagency Guidance on Leveraged Lending" (IGLL), offering "sound practices for leveraged finance activities." The Guidance cautioned that financial institutions "should . . . not unnecessarily heighten risks by originating poorly underwritten loans," and bemoaned that "debt agreements have frequently included features that provided relatively limited lender protection including . . . the absence of meaningful maintenance covenants in loan agreements" and "the participation of unregulated investors."<sup>152</sup>

152. Memorandum from the Bd. of Governors of the Fed. Rsrv. Sys., Fed. Deposit Ins. Corp. & Off. of the Comptroller of the Currency on Interagency Guidance on Leveraged Lending 1-2 (March 21, 2013) (emphasis added). In addition, "[t]he capital structures and repayment prospects for some transactions ... have at times been aggressive," and "management information systems (MIS) at some institutions have proven less than satisfactory in accurately aggregating exposures on a timely basis." Id. Studies show that banks generally did not react when IGLL was first issued. Instead, only with the Fed's issuance of a clarifying FAQ on November 7, 2014 did banks respond. Memorandum from the Bd. of Governors of the Fed. Rsrv. Sys., Fed. Deposit Ins. Corp. & Off. of the Comptroller of the Currency on Frequently Asked Questions (FAQ) for Implementing March 2013 Interagency Guidance on Leveraged Lending (Nov. 7, 2014). The most heavily supervised banks (subject to oversight by the Large Institution Supervision Coordinating Committee (LISCC) reduced leveraged lending activity significantly, to levels below the pre-IGLL period. Market share for LISCC banks declined by 11 (5) percentage points in number (volume) of leveraged loans from November 2014—December 2015. Non-LISCC banks did not change their leveraged lending levels in response to the IGLL or the subsequent clarifying FAQ. Nonbanks increased their leveraged lending throughout, taking significant market share away from banks. By number of loans, nonbanks increased market share by over 50%; dollar volume more than doubled. This should not be too surprising, since supervisory guidance directly affects only banks. Post-FAQ, borrowers from a LISCC bank were also more likely to switch to nonbank lenders. Sooji Kim et al., Macroprudential Policy and the Revolving Door of Risk: Lessons from Leveraged Lending Guidance, 34 J. FIN. INTERMEDIATION 17, 17-18 (2018). Similar results obtain for US and foreign banks versus nonbanks. Paul Calem et al., Prudential Policies and Their Impact on Credit in the United States, 42 J. FIN. INTERMEDIATION 1, 14, 15 tbl.11 (2020). Of course, moving risky lending away from banks and toward nonbanks may not have reduced financial system

<sup>150.</sup> Powell, *supra* note 120, at 2–4. At the same time, Chairman Powell noted that capital levels and liquidity are much higher at bank holding companies than before the financial crisis, and more generally that the financial system is better prepared for an economic downturn, should it arise. *Id.* at 8, 11.

<sup>151.</sup> Jerome H. Powell, Member, Fed. Rsrv. Bd. Of Governors, Remarks at N.Y.U. Stern Sch. of Bus.: Financial Institutions, Financial Markets, and Financial Stability at 11, fig.9, fig.10 (Feb. 18, 2015), https://www.federalreserve.gov/newsevents/speech/files/powell20150218a.pdf [https://perma.cc/Q2UD-F88V].

The Kansas City Fed has also recently raised concerns with the growing absence of covenant protections:

[M]any observers' concerns stem from reduced credit enhancement protections on syndicated loans. Covenants and other borrower protections have declined during the post-crisis period, likely leaving lenders with less monitoring authority and fewer recourse channels should borrowers default on their loans... Declining borrower protections could also lead to lower recovery rates than in the past if firms were to default.<sup>153</sup>

#### IV. THE NEW LENDER GOVERNANCE

The rise in leveraged and cov-lite loans, and the increasing packaging of these loans into CLOs, has created concerns about systemic risk and the future of lender governance. Law and finance scholars worry that the beneficent effects of lender governance may fall by the wayside as the explosive demand for leveraged loans seems to lead to weakened covenants and enforcement. The larger and more diverse institutional syndicates associated with leveraged loans may create greater holdout opportunities and renegotiation frictions. Going cov-lite tends to avoid these holdout problems, thereby potentially streamlining the resolution of conflict among syndicate members and the borrower.<sup>154</sup> Lender governance could weaken, however.

Over the past few decades, covenant, loan structure, and strategy have evolved in ways that may address the perceived increased risks from excessive leverage and cov-lite lending. Privately ordered loan contracts may ameliorate regulators' concerns with respect to both the perceived dearth of covenant constraints and the potential excesses of add-backs.

Split control rights enable the application of traditional financial maintenance covenants to leveraged loan deals. The traditional covenants are contained in the bank lenders' revolving loan agreement that typically accompanies leveraged and cov-lite term loans in a multi-loan deal. The bank lenders enjoy traditional covenant protections vis-avis to the borrower, even though other lenders involved in the deal may not. Only the

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risk overall.

The 2013 Interagency Guidance on Leveraged Lending was thrown into legal limbo in October 2017, when the Government Accountability Office ruled that the guidance amounts to a rule, and should be subject to the Congressional Review Act, which requires approval of both houses of Congress. Yu, *supra* note 10, at 5. The Office of Comptroller of the Currency and the Federal Reserve have since signaled that the Guidance would no longer be enforced. *Monetary Policy and the State of the Economy: Hearing before the H. Comm. On Fin. Servs.*, 115<sup>th</sup> Cong. 30-31 (2018) (statement of Jerome Powell, chairman of the Federal Reserve); *OCC Head Says Banks Not Bound by Lending Guidelines, Expects Leverage to Increase*, Debtwire (Feb. 27, 2018), *available at* https://www.debtwire.com/info/occ-head-says-banks-not-bound-lending-guidelines-expects-leverage-increase.

<sup>153.</sup> W. Blake Marsh & Seung Jung Lee, *What's Driving Leveraged Loan Spreads*, FED. RES. BANK OF KANSAS CITY: THE MACRO BULLETIN 4 (Feb. 27, 2019), https://www.kansascityfed.org/documents/491/macrobulletins-What%E2%80%99s%20Driving%20Leveraged%20Loan%20Spreads%3F.pdf [https://perma.cc/4JLD-GQYE].

<sup>154.</sup> See Matthew T. Billett et al., Bank Skin in the Game and Loan Contract Design: Evidence from Covenant-Lite Loans, 51 J. FIN. QUANT. ANALYSIS 839, 839 (2016) (discussing holdout problems and how covlite loans work around them).

bank lenders on the revolving loan typically enjoy the right to renegotiate or waive violations of the covenants in the deal. Split control facilitates renegotiation by concentrating control rights with a smaller, more cohesive subset of lenders—the bank lenders on the revolving credit agreement—to discipline the borrower. Contractual innovations have also emerged to facilitate renegotiation of institutional loans. "Amend-and-extend" provisions and "refinancing facilities" enable institutional loan borrowers to extend maturities or refinance with only a subset of their lenders. These innovations often appear as part of a package of terms along with split control rights.<sup>155</sup>

While add-backs may naturally cause trepidation for regulators, upward adjustments to EBITDA may do more than simply massage borrowers' leverage ratios. New research by Badawi, Dyreng, de Fontenay, and Hills (BDDH) suggests that permissive use of add-backs may improve the informativeness of signals to lenders about the borrower's condition. Better information with respect to EBITDA may eliminate noisy features of accounting earnings, such that add-backs may facilitate tighter covenants while also *reducing* the incidence of false positive violations, thereby avoiding costly renegotiation.<sup>156</sup> Permissiveness with respect to add-backs correlates with covenant tightness. Whether the overall benefit of add-back informativeness is worth the higher leverage remains to be seen.

More generally, covenants appear to have become more efficient. Cash flow covenants have largely replaced balance sheet covenants in private loan agreements. Cash flow covenants are more discriminating. Financial covenants have also become less restrictive in terms of both the number of covenants in a given loan agreement and their strictness, leading to fewer reported violations, as well as fewer false positives.<sup>157</sup>

#### A. Split Control, Monitoring, and Renegotiation Costs

Simply tracking the presence or absence of covenants in a particular loan may not accurately characterize the covenant constraints at play. In a world of leveraged lending with different types of lending institutions pursuing different loan structures, a loan deal may incorporate multiple loans with non-uniform features, such as varying maturity or covenant structure.<sup>158</sup>

In an important recent study, Berlin, Nini & Yu (BNY) show that while institutional leveraged loans and cov-lite loans have proliferated in recent years, very few loan *deals*—which involve contemporaneous or near-contemporaneous origination of multiple loans to a single borrower—are issued without traditional maintenance covenants.<sup>159</sup> Banks are partial to revolving loans, which typically include financial maintenance covenants. But whether they do or not, only the *banks*, and not the institutional lenders, enjoy the

<sup>155.</sup> See Matthew See infra notes 175–177 and accompanying text.

<sup>156.</sup> See Adam B. Badawi et al., *Contractual Complexity in Debt Agreements: The Case of EBITDA* 4 (Duke L. Sch. Pub. L. & Legal Theory Series, Working Paper No. 2019-67, 2021) [hereinafter BDDH], (discussing permissiveness scores and false positive signals).

<sup>157.</sup> Infra Part IV.C.

<sup>158.</sup> S&P GLOBAL, LEVERAGED COMMENTARY & DATA (LCD): LEVERAGED LOAN PRIMER 6 (2020), https://www.lcdcomps.com/d/pdf/LCD%20Loan%20Primer.pdf [https://perma.cc/NR9J-NF95].

<sup>159.</sup> Berlin et al., supra note 132, at 250.

right to renegotiate the covenants or waive violations.<sup>160</sup> BNY call this "split control," which allows a *subset* of lenders—the revolver lenders, typically—to discipline the borrower firm. Other lenders in the deal—typically, the institutional lenders—have no say in the renegotiation. This split control is meant to *concentrate control rights* with a smaller group of lenders. This pared-down set of bank lenders offers a tighter and more cohesive workout group to negotiate with the borrower firm, thereby reducing holdout and bargaining costs.<sup>161</sup>

BNY study loans from 2005-14.<sup>162</sup> Completely cov-lite *deals* comprise less than 2% of their sample.<sup>163</sup> Contrast this with the proportion of cov-lite *loans* in the sample. In 2005, cov-lite term loans were close to zero; by 2014, close to 40% were cov-lite. And as earlier noted, by 2018, cov-lite loans comprised about 85% of the leveraged loan market by volume.<sup>164</sup> At the same time, the frequency of deals with no maintenance covenant is only 1% and has not increased in recent years.<sup>165</sup> So almost *all* leveraged loan borrowers are subject to financial covenants in at least one of their loans, typically the revolving line of credit.

Consistent with the specialized monitoring that split control hopes to accomplish, leveraged loan syndicates are structured to facilitate monitoring in the presence of split control rights. Compared to deals without split control, the revolving loan syndicate is more concentrated (has fewer lenders), the mean lender's commitment is larger, and most importantly, the mean agent's commitment is larger, both by dollar amount and share of the total commitment,<sup>166</sup> similar to traditional syndicated lending.<sup>167</sup> Moreover, borrowers subject to split control rights violate covenants at the same rate as other firms,<sup>168</sup> which suggests that split control rights do work to enforce the discipline of financial covenants.

Split control enables the covenants, monitoring, and renegotiation that are customary in traditional syndicated lending. The agent bank leads the syndicate, taking a significant stake in the loan to ensure other syndicate members against moral hazard. As earlier described, covenants act as a screening mechanism ex ante and as a tripwire ex post, causing the agent to assess the borrower's situation and either renegotiate the covenant or waive the violation. This applies even for loans held by CLOs.<sup>169</sup> This monitoring

<sup>160.</sup> In no case were the revolving lenders excluded from control in the BNY sample. So "split control" essentially means that a term loan was excluded from the control features provided by covenants. *Id.* at 255. Term loans also include a cross-default provision, such that a default in the revolver also triggers a default in the term loan(s). *Id.* at 250.

<sup>161.</sup> Id. at 256.

<sup>162.</sup> BNY's sample is limited to deals that include both a revolving line of credit and a term loan. *Id.* at 250 fig.1. For that sample, 65% of deals involve a revolver and term loan with identical financial covenants. Email from Greg Nini, Professor, Drexel Univ., to Author (Jan. 29, 2021). An Online Appendix extends the sample period through the second quarter of 2018, showing about a 20% increase in the frequency of split control rights from 2014. Berlin et al., *supra* note 132, at 12–13 fig.1.

<sup>163.</sup> Berlin et al., supra note 132, at 250.

<sup>164.</sup> Martin-Buck, supra note 141, at 44.

<sup>165.</sup> Berlin et al., *supra* note 132, at 255.

<sup>166.</sup> Id. at 258-59 tbl.4.

<sup>167.</sup> See supra notes 69–74 and accompanying text.

<sup>168.</sup> Id. at 250.

<sup>169.</sup> Id. at 251.

benefits not only the banks but also bondholders and equity holders.<sup>170</sup>

Split control helps address bargaining frictions among leveraged lenders induced by the large presence of institutional lenders. The institutional tranches of a leveraged loan deal typically involve *far* more lenders and more diverse lenders than does a bank tranche.<sup>171</sup> Institutional lenders also experience fewer repeat interactions with each other, so relationships among them will be less likely. Finally, a lively secondary market in institutional leveraged loans means that syndicate members will change over the life of the loan. These various features imply that institutional loans are more difficult to renegotiate.<sup>172</sup> In BNY's sample, the incidence of split control rights is almost four times more likely among deals with an institutional tranche.<sup>173</sup> Split control rights have emerged to reduce renegotiation costs, and are far more prevalent with institutional deals than deals without an institutional tranche.<sup>174</sup>

Additional contractual innovations have emerged to reduce renegotiation frictions as well. "Amend-and-extend" provisions allow a borrower to extend the maturity of any consenting lender's slice of the syndicated loan, subject to the terms of the lender's extension offer, including an increase in rate or fees and/or modification of the amortization schedule. This feature enables the borrower and particular lenders to tailor their loan slice to the particular circumstances they face, without having to obtain unanimous consent of lenders, as would be customary. A "refinancing facility" enables a borrower to create an additional term loan tranche based on an existing credit agreement, provided that the proceeds are used to refinance part of the existing loan. This allows the borrower to refinance with a subset of lenders, typically to obtain a lower rate. Without such flexibility, the borrower would be required to make any prepayments on a pro rata basis to all existing lenders.

The relative novelty of split control rights, amend-and-extend provisions, and refinancing facilities makes it difficult to predict how loan markets will ultimately respond. However, while split control reserves covenant renegotiation for only the bank lenders, amend-and-extend provisions and refinancing facilities appear primarily in deals

<sup>170.</sup> James, supra note 4, at 219; Nini et al., supra note 5; Datta et al., supra note 4, at 437.

<sup>171.</sup> In BNY's sample, the mean number of lenders in an institutional term loan (defined as a deal containing an institutional tranche) is *nine* times greater than those of other term loans (191 versus 20). Berlin et al., *supra* note 132, at 261 tbl.6.

<sup>172.</sup> See Cem Demiroglu & Christopher M. James, Bank Loans and Troubled Debt Restructurings, 118 J. FIN. ECON. 192, 192–93 (2015) (finding "financially troubled firms that owe more of their debt to banks are more likely to succeed in restructuring their debt out of court" and avoid bankruptcy); see generally Matthew G. Osborn, The Cost of Easy Credit: Loan Contracting with Non-Bank Investors Working Paper, Nov. 3, 2014), https://ssrn.com/abstract=2499798; Mehdi Beyhaghi et al., Institutional Investors and Loan Dynamics: Evidence from Loan Renegotiations, 56 J. CORP. FIN. 482, (2019) (showing that nonbanks are more likely to exit a syndicate than participate in renegotiation).

<sup>173.</sup> Berlin et al., *supra* note 132, at 251 (ruling out alternative explanations for the rise of split control rights).

<sup>174.</sup> *Id.* at 258–61 fig.3 & tbl.5; BNY note that during the financial crisis, the average fee for a covenant modification following a violation was 80% higher for institutional loans than for noninstitutional loans, before the widespread use of split control rights. *Id.* at 262–23 tbl.7; In an online appendix, BNY extend their sample though the second quarter of 2018, showing that the frequency of split control rights has increased significantly. Online App. at 13–14, fig.1 & tbl.4.

<sup>175.</sup> Berlin et al., *supra* note 132, at 263, Online App. 10–11.

with an institutional tranche.<sup>176</sup> Borrowers and their institutional lenders may therefore also pursue avenues for the reduction of renegotiation frictions. The frequency of split control rights increases among deals that include an amend-and-extend provision or a refinancing facility, suggesting that these various provisions mean to address the same underlying issue of renegotiation friction.<sup>177</sup>

We may be cautiously optimistic that these contractual innovations to facilitate renegotiation in the leveraged loan market would benefit both bank- and institutional lenders, such that distress and conflicts among lenders would be less common. In addition to these innovations, institutional term lenders enjoy protection through cross-default and cross-acceleration provisions and shared first priority in collateral.<sup>178</sup> Though the interests of term lenders may not always align with those of the revolving lenders ex post,<sup>179</sup> term lenders may be compensated ex ante in their loan pricing. Term lenders also enjoy the option to sell into a robust and liquid secondary loan market. How the various contractual innovations ultimately affect overall risk in the leveraged loan market, however, still remains to be seen.

#### B. Earnings Add-backs and Informativeness

In addition to growth in leveraged and cov-lite loans, earnings add-backs have caused concern with regulators.<sup>180</sup> Add-backs may exacerbate the trend toward higher leverage, given EBITDA's key role in leverage measures for financial covenants.<sup>181</sup> Private debt contracts often include bespoke accounting provisions that allow for adjustments to financial performance covenant earnings. According to one study, such adjustments to FASB-GAAP-based net income and FASB-GAAP-based EBITDA increase projected income by economically large amounts. Performance covenant earnings exceed FASB-GAAP net income for more than 99% of loan contracts and exceed FASB-GAAP EBITDA for more than 84% of contracts. Magnitudes are also large: for the median firm, FASB-GAAP net income is about 87% lower than performance covenant earnings, and FASB-GAAP EBITDA is lower by about 10%.<sup>182</sup>

180. See BDDH, supra note 156, at 26 n.22 BDDH's sample is not comprised solely of leveraged loans, but mean spread of their sample is 170 bps, so leveraged loans predominate.

181. Inflated EBITDA in the numerator of a financial ratio overstates the borrower's ability to cover upcoming payment obligations, like fixed charges or interest payments. When inflated EBITDA is in the denominator, the ratio understates borrower leverage.

182. "Overall, the descriptive evidence suggests that, on average, the contractual adjustments made in debt

<sup>176.</sup> An amend-and-extend provision or refinancing facility appears about twice as often in deals with an institutional tranche as compared to deals without. *Id.* at 263-64 & fig. 4.

<sup>177.</sup> Id. at 264–65 & tbl. 8.

<sup>178.</sup> See supra note 139.

<sup>179.</sup> Conflicts among lenders may arise. For example, the term lender cares in particular about getting its existing loan repaid. By contrast, banks continually renew their revolving loans with their borrowers, which generates ongoing relationship rents. With these continuing relationships, a bank may be reluctant to strictly enforce a financial covenant that leads to borrower default. Especially with a loan package involving a small revolver and a large term loan, the small size of the revolver only exacerbates the conflict with the larger term lender, since the revolver's share of any financial loss from weak enforcement is small. Yu, *supra* note 10, at 4. When the bank's share of the loan is very small, the conflict among lenders may be so severe that the best course is to eliminate covenants entirely. And with no covenant protections, lenders will demand a higher interest rate. *Id.* 

The Financial Stability Board estimates EBITDA adjustments of 15-30% for incurrence covenants in current deals.<sup>183</sup> Studies by both Standard & Poor's and Moody's show that firms' rosy EBITDA projections often fall materially short in the two years post-closing.<sup>184</sup>

Standard & Poor's tracked a sample of large M&A and LBO deals from 2016. Over the ensuing two years, *most* of the companies missed EBITDA targets by at least 25%; about one-third missed by more than 50%.<sup>185</sup> Using a larger data set including 258 M&A and LBO deals originated between 2015 and 2018 and exceeding \$50 million in size, the authors find that each year, on average, "synergies/ cost savings" was the largest category of add-back adjustment, peaking in 2016 at close to 39%, and averaging 31% over the four-year period.<sup>186</sup>

The three industries with the most add-back-inflated EBITDA were:

(i) media, entertainment and leisure (34.2%);

(ii) technology (33%); and

(iii) healthcare (32.1%).<sup>187</sup>

The three sectors with the least add-back-inflated EBITDA were:

(x) business and consumer services (19.4%);

(y) forest products (19.7%); and

(z) aerospace (20.7%).<sup>188</sup>

The average for all sectors was 27.6%.<sup>189</sup>

Also not surprising, for every category of add-back, B-rated firms' EBITDA included greater percentages of add-backs than did BB-rated firms; and BB-rated firms performed better on projected earnings than did B-rated firms.<sup>190</sup>

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contracts are economically large and income increasing." Scott D. Dyreng et al., Direct Evidence on the Informational Properties of Earnings in Loan Contracts, 55 J. ACCT. RSCH. 371, 373 (2017).

<sup>185.</sup> See Financial Stability Board, supra note 148 at 9. "Current deals" covers deals through the end of 2018. Id. at n.31.

<sup>186.</sup> See Honeyman & Wilkinson, supra note 150; S&P GLOBAL, Comments, supra note 150; FREDERIC DURANSON & MARTIN ROBERT HALLMARK, EMEA SPEC-GRADE FIRMS ARE MAKING HIGHER EARNINGS ADJUSTMENTS TO ATTRACT INVESTORS (2018), https://www.moodys.com/research/Moodys-EMEA-spec-grade-firms-are-making-higher-earnings-adjustments--PR\_385895 [https://perma.cc/2S4E-H62B] (reporting on data that shows many companies failing to achieve EBITDA adjustments).

<sup>187.</sup> S&P GLOBAL, *Comments, supra* note 150 at 4, 4 tbl.1.

<sup>188.</sup> Id. at 17-18 tbl.6. For additional categories of add-back adjustments, see *infra* note 194 and accompanying text.

<sup>189.</sup> Id.

<sup>190.</sup> Id.

<sup>191.</sup> Id. at 18–19 & tbl.7.

Overall, the Standard & Poor's report concludes that:

EBITDA add-backs continue to be substantial and overstated. . . . Aggressive EBITDA adjustments have understated high leverage and purchase price multiples. . . . [M]arketing EBITDA including add-backs is generally not a good indicator for future EBITDA and companies tend to overestimate debt repayment. These effects understate future leverage and credit risk, and add-backs also present incremental credit risk in the form of future event risk since covenants that rely on EBITDA may provide additional flexibility under negative covenants and restricted payments . . . . When the credit cycle turns, it will be interesting to observe the default and recovery performance of entities with substantial EBITDA add-backs as the legitimacy of several add-backs comes into question and suggests that the implied pro forma leverage for such deals is a misleading indicator of credit risk.<sup>191</sup>

Despite the magnitudes of these missed targets and the report's gloomy conclusion, permissiveness with add-backs may have compensating benefits. Permissiveness improves the informativeness of EBITDA-based contract terms like financial covenants. Contractual accounting rules for performance covenant earnings are generally better at predicting future cash flows than are GAAP measures.<sup>192</sup>

[N]on-recurring items are often excluded from adjusted EBITDA when the firm has previously incurred non-recurring items, but they are included when they are informative of future performance.... [S]tudies suggest that FASB GAAP does not sufficiently fulfill the informational needs of debt contracting parties and the shortcomings are addressed through contractual tailoring.<sup>193</sup>

Badawi, Dyreng, de Fontenay, and Hills (BDDH) create a permissiveness index to track seven different categories of add-backs used in private loan agreements to augment EBITDA.<sup>194</sup> "Permissiveness" in this context refers not to the magnitudes of EBITDA adjustments, but to the adjustment categories below:

- Non-cash charges
- Cash charges for extraordinary or non-recurring items
- Cash charges for restructuring
- Projected cash savings from synergies, restructurings, etc.
- Fees and expense related to acquisitions, investments, equity or debt issuances, etc.
- · Management/advisory fees payable to sponsor

<sup>191.</sup> Id. at 24–25.

<sup>192.</sup> Scott D. Dyreng et al., *supra* note 183, at 374.

<sup>193.</sup> *Id.* at 376. It also appears that conservative accounting for earnings, once thought to be useful for lenders in mitigating downside risk, induces too many false positive violations, which fail to predict future distress and instead trigger costly renegotiations and inefficient wealth transfers. *Id.* at 372.

<sup>194.</sup> BDDH, supra note 156.

• Miscellaneous additional addbacks

The use of an adjustment category increases a loan's permissiveness score by one. Summing up adjustment categories for a loan generates a score between one and eight for that loan,<sup>195</sup> with one being the least permissive (no add-back category used) and eight being the most permissive (all seven add-back categories used). Mean permissiveness (standard deviation) from their sample is 3.61 (1.74).<sup>196</sup> BDDH find that permissiveness increases with deal size, maturity, leverage, and collateral, suggesting more permissive definitions of EBITDA with larger and riskier loans, as well as the importance of the parties' negotiation over permissiveness to lenders by allowing the borrower to exclude noisy information not reflective of the borrower's earnings potential or ability to honor future payment obligations. Add-backs for extraordinary or non-recurring items, for example, may offer a clearer picture of the borrower's future earnings than leaving those extraordinary charges unaddressed.

Also, rather than assuming standardized financial covenants, BDDH use a mix of machine learning techniques and hand collection to create a dataset that captures actual covenant thresholds and realized covenant violations. They show that relying on standardized covenant measures risks overestimating realized violations, and that the likelihood of overestimating a violation increases with the level of permissiveness.<sup>199</sup>

BDDH show a number of interesting results. Contractual EBITDA is more permissive with accrual volatility, consistent with findings that accruals may not otherwise usefully translate into informativeness for lenders with respect to borrowers' financial condition.<sup>200</sup> Conversely, cash flow volatility is negatively associated with permissiveness, suggesting that cash flow volatility reflects useful information about the borrower's ability to honor its payment obligations.

Permissiveness is also increasing in the ex ante costs of renegotiation. Covenant violations may be costly to the parties, so they have an incentive to contract in a way that triggers a violation only when the borrower's performance signals actual deterioration. Especially when renegotiation costs are high, as with institutional leveraged loan tranches, reducing the incidence of false positive violations is key.<sup>201</sup>

Consistent with the improved informativeness that high permissiveness brings, the market response to a covenant violation with high permissiveness is more severe than with low permissiveness, since the violation is less likely to be a false positive and more

<sup>195.</sup> Id. at 57.

<sup>196.</sup> Id. at 2.

<sup>197.</sup> Id. at 19-21, 45.

<sup>198.</sup> The most common EBITDA adjustments remove transitory earnings items, affecting about one-fifth of contracts. *See generally* Ningzhong Li, *Negotiated Measurement Rules in Debt Contracts*, 48 J. ACCT. RES. 1103 (2010); Peter R. Demerjian, *Accounting Standards and Debt Covenants: Has the "Balance Sheet Approach" Led to a Decline in the Use of Balance Sheet Covenants?*, 52 J. ACCT. ECON. 178 (2011); Anne Beatty et al., *Nonrecurring Items in Debt Contracts*, 36 CONTEMP. ACCT. RES. 139 (2019).

<sup>199.</sup> BDDH, supra note 156, at 28-30, 50 tbl.9.

<sup>200.</sup> Patricia M. Dechow & Ilia D. Dichev, *The Quality of Accruals and Earnings: The Role of Accrual Estimation Errors*, 77 ACCT. REV. 35, 53 (2002).

<sup>201.</sup> BDDH, supra note 156, at 27-28, 38 fig.2.

likely to reflect the borrower's true distress. The equity market reaction to a covenant violation is, therefore, more negative when permissiveness is high.<sup>202</sup> Moreover, permissiveness is negatively related to *both* covenant slack and covenant violations. That is, covenants are tighter *and* false positive violations are fewer.<sup>203</sup> This suggests that permissiveness improves the signal to lenders concerning the borrower's true condition by removing less informative features of accounting earnings from the EBITDA definition contracted for in the loan agreement. Finally, credit spreads also increase with permissiveness, suggesting that lenders may charge for the risk of false negatives, and that permissiveness is not free.<sup>204</sup>

BDDH do not find sufficient evidence for alternative explanations for highly permissive EBITDA definitions—the general decline in underwriting standards in U.S. loan markets as interest rates have remained at historical lows; or private equity borrower and underwriter agency costs that obscure a borrower's true leverage with permissive and complex EBITDA definitions. They do note, however, the general increase in permissiveness over their sample period and that private equity-sponsored borrowers exhibit higher levels of permissiveness.<sup>205</sup>

Ultimately, potential costs and benefits of permissive EBITDA definitions are something of a mixed bag. On the one hand, add-backs can improve earnings informativeness, thereby reducing false positive violations and improving contracting efficiency. On the other hand, regulators' fears of excessive add-backs have clear

Almost two decades into the debates over dueling corporate governance indices, for example, scholarly consensus on what matters for corporate governance remains elusive. Gompers, Ishii, and Metrick (GIM) proposed the first widely debated governance index-the G-index-which relies on twenty-four equally weighted governance features, attempting to measure governance quality and the degree of managerial entrenchment. GIM found a significant inverse correlation between management entrenchment and firm value and performance, using Tobin's Q, stock returns, and operating performance as their dependent variables. Paul A. Gompers et al., Corporate Governance and Equity Prices, 118 Q.J. ECON. 107, 144 (2003) (finding a relationship between an index of corporate governance measures and stock performance during the 1990s). Bebchuk, Cohen, and Ferrell (BCF) criticized GIM's findings, asserting instead that only six of GIM's twentyfour governance features mattered. Those six features make up BCF's E-index; for them, the other features are just noise. Lucian Bebchuk et al., What Matters in Corporate Governance?, 22 REV. FIN. STUD. 738, 823-24 (2008). Other governance indices and criticism of the G-index and the E-index followed. See John E. Core et al., Does Weak Governance Cause Weak Stock Returns?: An Examination of Firm Operating Performance and Investor Expectations, 61 J. FIN. 655, 684-85 (2006) (challenging GIM's findings on stock returns); Sanjai Bhagat & Brian Bolton, Corporate Governance and Firm Performance, 14 J. CORP. FIN. 257, 258-59 (2008) (finding no correlation between governance measures and stock returns for either the G-index or E-index); Miroslava Straska & H. Gregory Waller, Antitakeover Provisions and Shareholder Wealth: A Survey of the Literature, 49 J. FIN. & QUANTITATIVE ANALYSIS 933, 946-50 (2014) (arguing that the eighteen measures BCF would drop from the G-index predict takeover likelihood); Jonathan M. Karpoff et al., Do Takeover Defense Indices Measure Takeover Deterrence?, 30 REV. FIN. STUD. 2359, 2389-90 (2017) (proposing an index using instrumented versions of the G-index and E-index that predict takeover likelihood).

206. BDDH, supra note 156 and accompanying text.

<sup>202.</sup> Id. at 23-25, 48 tbl.7.

<sup>203.</sup> Id. at 4.

<sup>204.</sup> *Id.* at 25–27, 49 tbl.8. One potential caveat is that indices are often tricky to interpret. Capturing the specific mechanisms that drive empirical results based on indices is sometimes a fraught endeavor. With the BDDH permissiveness index, for example, equal weighting may be a convenient default position, but it offers a somewhat blunt metric to capture the interesting results they find. Magnitudes of add-backs within specific categories, or other prospective mechanisms, for instance, may help capture additional nuance.

justification.<sup>206</sup> Hoped-for future EBITDA gains might never appear. Add-backs may simply overstate earnings, increasing the risk of false negatives, facilitating excessive risk taking, and again reducing contract efficiency. Time will tell.

#### C. The Turn Toward Efficient Covenants

At first blush, weaker covenants may seem like a bad idea. They may encourage moral hazard, leaving borrowers too free to take ill-advised risks and blunting lenders' ability or incentive to monitor. Strict covenants, on the other hand, offer responsive tripwires to alert the lender when the borrower's performance deteriorates or it strays toward a risky path. Regular feedback in this regard may enable both lender and borrower to gain new information about each other and set expectations about the future of the borrower's business. This information acquisition and expectation setting will be especially useful for new lending relationships.<sup>207</sup>

At the same time, however, strict covenants come with costs. They constrain the borrower's latitude to run its business ex ante,<sup>208</sup> and they require more regular lender intervention ex post, since violations become more frequent.<sup>209</sup> Granted, waiver is the most common response, but even that requires action on the lender's part. Generally, the lender must investigate, decide on the severity of the violation, negotiate with the borrower, and then document the resolution. Over the life of a loan, the task of managing violations of varying severity may not be worth the candle. Ultimately, the lender simply seeks to guard against the prospect of the borrower's payment default. Parties to loan agreements may pursue optimal covenants to minimize these costs.

Over the last few decades, covenants have evolved. Balance sheet covenants have become more scarce relative to cash flow covenants in private debt contracts.<sup>210</sup> Peter Demerjian hypothesizes that changes in accounting standard-setting have contributed to making the balance sheet less useful for loan contracting.<sup>211</sup> Standard-setting shifted focus from the determination of net income to the valuation of assets and liabilities (the balance sheet approach), and new accounting standards emerged. With this balance sheet approach came balance sheet adjustments, which embrace estimates of asset and liability

<sup>207.</sup> See supra notes 183-190 and accompanying text.

<sup>207.</sup> See generally Nicolae Garleanu & Jeffrey Zwiebel, *Design and Renegotiation of Debt Covenants*, 22 REV. FIN. STUD. 749 (2009) (The new lender may later relax covenants as the borrowing relationship generates new information about the borrower.); Wouter Dessein, *Information and Control in Ventures and Alliances*, 60 J. FIN. 2513 (2005) (discussing informational asymmetry between investors and privately informed entrepreneurs).

<sup>208.</sup> Smith & Warner, *supra* note 1, at 123–24.

<sup>209.</sup> Mitchell Berlin & Loretta J. Mester, *Debt Covenants and Renegotiation*, 2 J. FIN. INTERMEDIATION 95, (1992); Garleanu & Zwiebel, *supra* note 207; Valeri V. Nikolaev, *Scope for Renegotiation in Private Debt Contracts*, 65 J. ACCT. & ECON. 270, 274 (noting the tradeoff with renegotiation, which enables monitoring of the borrower, but also allows the lender to interfere with management decisions and hold up the firm's investments).

<sup>210.</sup> See Demerjian, supra note 198 (In 1996, more than 80% of deals included balance sheet covenants. By 2007, balance sheet covenant usage had dropped to 32%. Cash flow covenants showed no similar declining trend.).

<sup>211.</sup> Demerjian is careful not to overstate the claim. There may be other factors that also affect the observed changes in covenant use. *Id.* at 196.

values, as well as discretion in the timing of recognition of changes in value, among other things. These adjustments may limit the utility of balance sheets for debt contracting parties, who rely on conservative balance sheets and high verifiability in determining the lower bound of a firm's liquidation value. Not all adjustments can be verifiably measured.<sup>212</sup> Error or bias may result.<sup>213</sup>

The turn away from balance sheet covenants has been auspicious. Cash flow covenants turn out to be more efficient than balance sheet covenants. Cash flow covenants trigger false positives—where the borrower violates but only a low likelihood of distress exists—far less often than balance sheet covenants. Griffin, Nini, and Smith (GNS) confirm the trend toward cash flow covenants and away from balance sheet covenants that Demerjian identifies, as well as showing the relative efficiency of cash flow covenants.<sup>214</sup> Over GNS's twenty-year sample period, the use of balance sheet covenants has given way to cash flow covenants, as Figure 2 shows. By 2016, cash flow covenants predominated.

<sup>212.</sup> For example, new standards include wider use of fair value accounting. But one form of fair value accounting allows for unobservable inputs into the valuation. *Id.* at 182.

<sup>213.</sup> In addition, researchers have offered evidence that managers use discretion opportunistically across a number of accounting contexts. See generally Anne Beatty & Joseph Weber, Accounting Discretion in Fair Value Estimates: An Examination of SFAS 142 Goodwill Impairments, 44 J. ACCT. RES. 257 (2006); Patricia M. Dechow et al., Fair Value Accounting and Gains from Asset Securitizations: A Convenient Earnings Management Tool with Compensation Side-Benefits, 49 J. ACCT. & ECON. 2 (2010); Jennifer Francis et al., Causes and Effects of Discretionary Asset Write-Offs, 34 J. ACCT. RSCH. 117 (1996); Karthik Ramanna & Ross L. Watts, Evidence on the Use of Unverifiable Estimates in Required Goodwill Impairment, 17 REV. ACCT. STUD. 749 (2012); Edward J. Riedl, An Examination of Long-Lived Asset Impairments, 79 ACCT. REV. 823 (2004).

<sup>214.</sup> Thomas P. Griffin et al., Losing Control?: The 20-Year Decline in Loan Covenant Restrictions 3 (Dec. 2019) (unpublished manuscript) (on file with author).

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FIGURE 2: BALANCE SHEET AND CASH FLOW FINANCIAL COVENANTS<sup>215</sup> The figure plots the annual mean fraction of loans that contain a financial covenant based on a balance sheet item (red) and based on a cash flow item (blue). covenantsCare classified as cash flow if they are written on EBITDA and balance sheet otherwise. The groups are not mutually exclusive because loan packages often contain more than one covenant.

Financial covenants have also become less restrictive, as captured in Figure 3. The number of financial covenants for a given loan has decreased roughly by half in the two decades from 1997 to 2017. The remaining covenants are more than *twice* as slack as covenants two decades prior in terms of distance to the covenant threshold at origination. Even revolver-only leveraged loan packages show less restrictive covenants.<sup>216</sup> Reported



violations are correspondingly fewer: the annual proportion of public firms reporting a loan covenant violation dropped by nearly 70%.<sup>217</sup>

- 215. Id. at 42 fig.4.
- 216. Id. at 30.
- 217. Id. at 1, 40 fig.2.

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4 of covenants 2.5 to threshold D. # in vi 2 S C 1997 1999 2001 2003 2005 2007 2009 2011 2013 2015 Number of covenants Distance to violation

The figure plots the annual mean number of covenants (blue line, measured on left axis) and the annual mean number of standard deviations to violation for the tightest covenant (red line,

measured on right axis) at contract origination. The sample is a large set of loans in Dealscan issued to U.S. nonfinancial firms in Compustat.

This shift to less restrictive covenants is driven by removal of the less informative balance sheet covenants, relying instead on the more efficient cash flow covenants. GNS show a secular decline in false positives, without a large increase in false negatives.<sup>219</sup> So although the overall use of covenants has declined, covenants seem to be more discriminating in differentiating distress from non-distress situations. Violations that result only in a waiver (referred to as "foot faults") are also far more prevalent in the early part of the sample period. In 1997, foot faults account for almost two-thirds of new covenant violations. By 2016, foot faults are closer to one-third of new violations. Overall, balance sheet covenants were also 40% more likely to result in foot faults than cash flow covenants.<sup>220</sup>

The trends toward lower ex ante covenant strictness and fewer ex post violations seem to be driven by lenders' evolution to covenant structures with higher "signal-to-

<sup>218.</sup> Id. at 39 fig.1.

<sup>219.</sup> A false negative in this context arises when a borrower becomes distressed without having triggered a covenant violation. Griffin et al., *supra* note 214, at 2.

<sup>220.</sup> Id. at 4.

noise" ratios. The optimal covenant threshold will be tighter as the probability of distress increases, and looser in the relative costs of false positives to false negatives.<sup>221</sup> In this way, financial covenants can better differentiate healthy from distressed borrowers. These trends seem to offer unalloyed improvement in covenant technology. They do not appear to be driven by changes in renegotiation costs related to changes in the number or type of corporate lenders (i.e., bank versus non-bank institutional lenders) or the growth of covlite loans. GNS uncover no evidence that the presence of leveraged loans, loans marketed to institutional investors, private equity deals, improved credit quality, or increased credit supply explain the results.<sup>222</sup>

#### V. CONCLUSION

In this Article, I have explained the rise of the leverage loan market and regulators' concerns about excessive risk in that market. Eighty-five percent of leveraged loans are covenant-lite: they contain no financial maintenance covenants. Reported covenant violations have dropped. This seeming dearth of guardrails in a risky market implicates both systemic risk and corporate governance concerns. The new lender governance described above, however, offers interesting new avenues for addressing both systemic risk concerns and governance. Lenders seem to have innovated in important ways to curb risk and facilitate renegotiation by resort to private ordering in loan agreements.

In deals that include split control rights, bank lenders—and only the bank lenders enjoy discretion to apply, renegotiate, or waive traditional financial maintenance covenant constraints with respect to the loans that are part of the deal. The banks enjoy discretion to constrain their borrowers, while reducing holdout problems and facilitating renegotiation. Covenant coverage for borrowers will not disappear. For institutional lenders, "amend-and-extend" provisions and refinancing facilities have emerged to facilitate renegotiation as well. These features enable institutional loan borrowers to extend maturities or refinance with only a subset of their lenders. These features also often appear in a suite of terms that includes split control rights, suggesting a common goal of reducing renegotiation frictions. Covenant constraints and less friction in renegotiations may hopefully work together to curb risk in the leveraged loan market.

Add-backs are somewhat trickier. Permissive use of add-backs may improve the informativeness of EBITDA-based contract terms like financial covenants, reducing the number of false positive covenant violations and improving contracting efficiency. At the same time, the general trend has been toward continuing and substantial overstatement of add-backs and understatement of projected leverage and credit risk. Regulators are right to be concerned with this trend. Hoped-for future earnings gains may never arrive. Instead, add-backs may simply overstate earnings, increasing the rate of false negatives, encouraging excessive risk taking, and again reducing contract efficiency.

More generally, lenders have recrafted covenants in another way as well. The last few decades have witnessed a secular trend toward looser and more efficient covenants. Financial covenants overall have become less restrictive, both in terms of the number of

<sup>221.</sup> Id. at 2.

<sup>222.</sup> Id. at 4–5, 31. More generally, the secular trend that GNS identifies does not focus solely on the leveraged loan market.

covenants in a given loan and their tightness. Reported violations are correspondingly fewer. This efficiency is driven in large measure by a turn away from balance sheet covenants in favor of cash flow covenants, which are far more discerning than balance sheet covenants. Cash flow covenants trigger false positive violations far less frequently, and with only a negligible increase in false negatives. Covenant structures have essentially become better at discriminating distress from non-distress states. These covenants with higher signal-to-noise benefit lenders and borrowers alike, hitting a tripwire only when the firm is near distress, and reducing costs overall.

Together these evolving trends suggest some optimism that private innovations in lending arrangements may enhance lender governance, facilitate lower-cost renegotiation, and reduce risk in leveraged lending markets.