The Case for a Market in Debt Governance

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Scholars have long lamented that the growth of modern finance has given way to a decline in debt governance. According to current theory, the expansive use of derivatives that enable lenders to trade away the default risk of their loans has made these lenders uninterested, even reckless, when it comes to exercising creditor discipline. In contrast to current theory, this Article argues that such derivatives can prove a positive and powerful influence in debt governance. Theory has overlooked those who sell credit protection to lenders and assume default risk on the borrower. These protection sellers are left holding the economic risk of a loan without any legal control rights to safeguard their exposure. This Article demonstrates that the interests of lenders and protection sellers are not necessarily adversarial, as theory conventionally assumes. Rather, each side has considerable incentive to cooperate as a way to reduce its own costs of participating in the debt market and to preserve reputational capital.

Recognizing this potential for cooperation, this Article proposes a market for creditor control as a cure to the crisis in debt governance. Such a market would allow lenders and protection sellers to trade control rights in debt to ensure that they are held by those with real economic skin in the game. This market aims to offer a fix to an otherwise difficult and costly problem: the misalignment seen in modern markets between those who bear the economic risk in debt and those best able to control it.

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I. INTRODUCTION

According to conventional wisdom, lenders have left corporate America in crisis.[1] Scholars are increasingly recognizing the powerful

1. In the literature, the seminal work here has been undertaken by Professors Henry T.C. Hu and Bernard C. Black. The "empty creditor" account proposed by Professors Hu and Black, studied and well-established in law as well as in the finance literature, is analyzed in depth *infra* Part IV.A. Henry T.C. Hu & Bernard Black, *Debt, Equity and Hybrid Decoupling: Governance and Systemic Risk Implications*, 14 EUR. FIN. MGMT. 663, 680–82 (2008) [hereinafter Hu & Black, *Debt Decoupling*]; Henry T.C. Hu & Bernard Black, *Equity and Debt Decoupling and Empty Voting II: Importance and Extensions*, 156 U. PA. L. REV. 625, 728–35 (2008) [hereinafter Hu & Black, *Empty Voting II*]; Henry T.C. Hu & Bernard Black, *Hedge Funds, Insiders, and the Decoupling of Economic and Voting Ownership: Empty Voting and Hidden (Morphable) Ownership*, 13 J. CORP. FIN. 343 (2007) [hereinafter Hu & Black, *Hedge Fund Insiders*]; *see also* Patrick Bolton & Martin Oehmke, *Credit Default Swaps and the Empty Creditor Problem*, 24

role lenders[2] can play in corporate life.[3] But despite its importance, lender influence is growing weaker.[4] The consequences are costly for all concerned: reckless lenders exercise poor oversight, borrowers are forced towards liquidation in great numbers, and economic value is destroyed through an inefficient allocation of credit.[5] The blame, current theory suggests, must be laid firmly at the door of credit derivatives[6] like credit default swaps ("CDSs").[7] These instruments allow lenders to trade away the economic risk of a loan or a bond without affecting the legal contract between the borrower and lender.[8]

REV. FIN. STUD. 2617, 2617–24 (2011) (introducing a finance-theory viewpoint modeling the operation of the empty creditor problem from a formal financial model)*;* Andras Danis, Do Empty Creditors Matter? Evidence from Distressed Exchange Offers 3, 36 (Dec. 2, 2013) (unpublished manuscript), *available at* http://perma.cc/78AD-XMYJ (reporting that participation by creditors in distressed debt exchanges declines by twenty-nine percent where a firm has CDS traded on its debt); Stephen J. Lubben, *Credit Derivatives and the Future of Chapter 11*, 81 AM. BANKR. L.J. 405, 423–27 (2007) (discussing the incentives of lenders using credit derivatives in restructurings); Frederick Tung, *Leverage in the Board Room: The Unsung Influence of Private Lenders in Corporate Governance*, 57 UCLA L. REV. 115, 167–69 (2009) (discussing how credit default swaps may encourage creditors to vote against the best interests of their debtors).

2. When referring to "lenders," this Article means both investors in bonds as well as those who extend bank loans to a borrower. Similarly, "borrowers" can refer to both bank debtors as well as bond issuers.

3. *See generally* Douglas G. Baird & Robert K. Rasmussen, *Private Debt and the Missing Lever of Corporate Governance*, 154 U. PA. L. REV. 1209 (2006) (examining the role of creditors in corporate governance decisions); George G. Triantis & Ronald J. Daniels, *The Role of Debt in Interactive Corporate Governance*, 83 CALIF. L. REV. 1073 (1995) (arguing that debtholders can signal their perception of a company's creditworthiness by exiting their credit relationship); Tung, *supra* note 1 (arguing that private debtholders can gain influence on the board of directors through covenants in the loan documentation, contingencies, and conditions stipulated by lenders).

4. *See, e.g.*, Marti G. Subrahmanyam et al., Does the Tail Wag the Dog? The Effect of Credit Default Swaps on Credit Risk 24–39 (Feb. 16, 2012) (unpublished manuscript), *available at* http://perma.cc/63WY-TF8H (an empirical study of 901 firms with CDS trading on their debt to show these are more susceptible to default or a decline in credit quality attributable, authors suggest, to poor lender monitoring).

5. There are numerous reported cases where lenders behave in a manner that shows perverse incentives vis-à-vis their debtors. For further detail, see discussion *infra* Part IV.B.

6. In addition to credit default swaps, other examples of credit derivatives include total return swap, credit-linked notes, and credit spread options. While separate, these instruments allow traders to engineer their credit exposures by trading credit risk to a third party. *See* JP MORGAN & RISKMETRICS GROUP, THE JP MORGAN GUIDE TO CREDIT DERIVATIVES 7–30 (1999), *available at* http://perma.cc/9BXN-YY45 (providing a detailed description of various kinds of credit derivatives).

7. *See generally* Hu & Black, *Debt Decoupling*, *supra* note 1 (exploring the financial risks posed by separating the rights usually associated with debt from the debtholders via credit derivatives); Hu & Black, *Empty Voting II*, *supra* note 1 (describing risks of the decoupling of share ownership rights that credit derivatives create and examining parallels in debt markets); Hu & Black, *Hedge Fund Insiders*, *supra* note 1 (describing the mechanics and potential consequences of equity decoupling). These accounts are discussed *infra* Part IV.A.

8. *See, e.g.*, René M. Stulz, *Credit Default Swaps and the Credit Crisis*, 24 J. ECON. PERSP. 73, 73–74 (2008) (discussing key features of the CDS markets, their social benefits as well as

CDSs can leave lenders with weak incentives to exercise sound judgment and diligent discipline over the loans they extend. On this view, financial innovation is killing good governance.

This Article argues that, rather than dooming governance to failure, credit derivatives can motivate good behavior in the borrower-lender relationship. In critiquing current theory, this Article proposes a new perspective contesting the notion that debt governance[9] necessarily suffers in the face of credit derivatives. It shows that lender incentives, when properly harnessed, can work to optimize debt governance, helping improve the allocation of credit to the real economy.

Interestingly, the stated demise of debt governance comes at a time when its importance is gaining recognition in law and policy. Recent scholarship has shifted away from shareholder-centric accounts of corporate governance. Scholars increasingly highlight the powerful role that creditors now play as the "missing lever" in corporate governance.[10] Professors Baird and Rasmussen, for instance, point out that lenders can influence all aspects of corporate life, including decisions as to personnel, a company's investments, and

costs); René M. Stulz, *Demystifying Financial Derivatives*, MILKEN INST. REV., Sept. 2005, at 20, 20–31 [hereinafter Stulz, *Demystifying*] (providing an overview of derivative markets, including their benefits to lenders); Yesha Yadav, *The Problematic Case of Clearinghouses in Complex Markets*, 101 GEO. L.J. 387, 395–415 (2013) (critically examining the regulation of credit derivatives in the Dodd-Frank Act). *See generally* Frank Partnoy & David A. Skeel, Jr., *The Promises and Perils of Credit Derivatives*, 75 U. CIN. L. REV. 1019 (2007) (examining the key characteristics of credit derivatives, their uses, and the possible risks that their use creates, for example, the potential to foster reckless extension of credit); Lynn A. Stout, *The Legal Origin of the 2008 Financial Crisis* (UCLA Sch. of Law, Law-Econ. Research Paper No. 11-05, 2011), *available at* http://perma.cc/RK2N-99L3 (noting that the deregulated over-the-counter ("OTC") derivatives markets were one of the key causes leading up to the 2008 Financial Crisis). Under the Dodd-Frank Act, credit default swaps are excluded from the definition of "insurance contract." Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203, § 767(a)(4), 124 Stat. 1376, 1800 (2010) (to be codified at 15 U.S.C. § 78bb(a)(4)). For an insightful perspective on the problems with the tendency to refer to credit derivatives as insurance, see M. Todd Henderson, *Credit Derivatives Are Not "Insurance,"* 16 CONN. INS. L.J. 1, 22–55 (2009), which argues that credit derivatives should not be regulated as insurance. *See also* Robert F. Schwartz, *Risk Distribution in the Capital Markets: Credit Default Swaps, Insurance and a Theory of Demarcation*, 12 FORDHAM J. CORP. & FIN. L. 167, 181–89 (2007) (providing useful context on the debates as to whether or not CDS should be conceptualized and regulated as insurance contracts).

9. Hu & Black, *Debt Decoupling*, *supra* note 1, at 665–67 (defining debt governance as "the interactions between creditors and firms (or other debtors), such as negotiations to address loan terms and conditions").

10. *See generally* Baird & Rasmussen, *supra* note 3 (arguing that creditors play a significant role in major decisions made by troubled corporations).

business strategies. Crucially, this engagement can come at all stages of a borrower's life, not just when a borrower finds itself in distress.[11]

Beyond simply ensuring repayment on their debt, these interventions can prove lucrative for lenders. Lenders gain access to the inner workings of management, cementing client relationships and assuring future business.[12] For example, small breaches in the loan contract[13] can prompt renegotiations in the lender's favor.[14] The market has also witnessed a series of so-called loan-to-own deals, allowing lenders to transform their debt into an equity stake and to profit when a company makes a return to form.[15]

That credit derivatives might diminish lender enthusiasm for governance is unsurprising. CDSs allow lenders to shift the credit risk of a loan from the lender's books to those of another firm without requiring the lender to sell the loan outright. Under the CDS, a lender pays a protection seller a regular premium—much like an insurance premium—to protect the lender against the risk of the borrower defaulting.[16] If the borrower defaults, the protection seller must make the lender whole. The CDS thus achieves an important innovation: it separates the economic risk of a loan, which shifts to the protection seller, from the legal rights attached to the loan, which remain with

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11. *Id.* at 1212.

12. *See generally* Tung, *supra* note 1 (noting that lenders often have inner access to company boards and are equipped with high granularity of information).

13. The tools available to lenders are vast, as discussed in this Article. They can include legal rights to monitor a debtor, to stipulate conditions as to how it uses secured assets, and to discipline management.

14. *See* sources cited *infra* note 37 (exploring the extent of creditors' potential control over borrower corporations).

15. Loan-to-own strategies involve lenders making loans to struggling companies and subsequently using their rights as creditors to transform their debt into an equity stake. *See, e.g.*, Michelle Harner, *Trends in Distressed Debt Investing: An Empirical Study of Investors' Objectives*, 16 AM. BANKR. INST. L. REV. 69, 84–87 (2008) [hereinafter Harner, *Trends in Distressed Debt Investing*] (empirically showing that specialist activist investors are well capitalized and often successful in their interventions, engaging in opportunist purchase of debt to exercise governance rights, for example, extending financing to facilitate acquisition of an ownership stake in the company); Michelle Harner, *The Corporate Governance and Public Policy Implications of Distressed Debt Investing*, 77 FORDHAM L. REV. 703, 725–27 (2008) [hereinafter Harner, *Implications of Distressed Debt Investing*] (detailing the Kmart case, where hedge funds engaged in debtholder activism to push for ownership and control).

16. Ordinarily, the Lender pays the Firm a fee for this arrangement. The Firm has come to be popularly perceived as a type of insurer. The Lender pays the Firm a regular premium. If the Lender suffers a loss, the Firm agrees to make the Lender whole for the loss that it suffers. The amount of the fee is usually expressed as a percentage of the notional amount of the debt obligation. *See generally* Henderson, *supra* note 8 (showing the risks of characterizing CDS as insurance).

the lender.[17] With no economic risk, a lender becomes an "empty creditor" with limited incentives to monitor and discipline its borrower. In fact, the lender might be motivated to push its borrower into liquidation and trigger repayment under the CDS, cheaply exiting the investment.[18]

This Article makes several contributions. First, it shows that conventional theories of debt governance hew to a narrow definition of "lender." In the established account, scholars focus on the incentives of a company's lenders of record—in other words, those who extend a loan to a company and enjoy the benefit of debt governance through the loan contract. Remarkably, scholarship entirely overlooks the role played by those who sell credit protection to lenders and assume the risk of a loan. These protection sellers suffer from a key deficit: though they assume economic risk on an underlying loan, they enjoy none of the benefits of debt governance. These "economic lenders" cannot rely on the loan contract to monitor and discipline a misbehaving borrower. Protection sellers, then, should have powerful incentives to seek out and engage in debt governance to protect their investment. Harnessing these incentives can co-opt players with actual skin in the game to become engaged in credit risk management.

Second, lenders and protection sellers have strong incentives to cooperate in matters of debt governance. At first blush, the interests of lenders who buy protection appear to be entirely in opposition to those of protection sellers: protection buyers are repaid under the CDS upon default, while protection sellers must pay out on default. Whereas protection buyers can benefit when borrowers engage in risky conduct, protection sellers must internalize the costs of poor lender discipline. But looking deeper, it becomes clear that lenders and protection sellers enjoy a more complex relationship than first meets the eye.

This Article demonstrates that lenders and protection sellers have incentives that are cooperative as much as adversarial. Importantly, lenders do not necessarily wish to see their borrowers fail. A bad loan book damages a lender's reputation. It also invites

17. These mechanics are slightly more complicated than described here. This is discussed in greater detail *infra* Part III.A.

18. *See* Hu & Black, *Debt Decoupling*, *supra* note 1, at 681–84 (explaining this incentive structure and considering possible examples in the market); Hu & Black, *Empty Voting II*, *supra* note 1, at 728–34 (describing the mechanics of debt decoupling and the incentives it creates for creditors, including negative economic ownership). *See generally* Danis, *supra* note 1 (concluding, based on an empirical examination, that CDSs change bondholder incentives in a way that makes it more difficult for troubled firms to restructure debt).

public sanction and scrutiny for mismanagement and recklessness.[19] These consequences should motivate lenders to share governance responsibilities with protection sellers. Cooperation can reduce the costs that lenders face. It can also help shift the costs of oversight to actors that hold economic risk in debt and are driven to exercise robust supervision.

The concentrated and specialized nature of the CDS market reinforces this potential for cooperation. The CDS market is dominated by Wall Street's largest and most sophisticated outfits, including banks, investment banks, mutual funds, hedge funds, and insurers.[20] CDS traders routinely buy and sell credit protection from and to each other. And most institutions both buy and sell credit protection as part of their business. In other words, Bank *A* might buy protection from Firm *F* one day, and on another occasion, Firm *F* might buy credit protection from Bank *A*. At the same time, the market broadly divides between those that are net buyers of credit protection and those that specialize as net sellers. Whereas banks tend to buy protection on a net basis, others, such as pension funds, mutual funds, and insurers, have emerged as net protection sellers in the market.[21] These dynamics point to a market that depends heavily on mutual reliance between its players for continued trading in credit protection. It also suggests that a niche group of protection sellers can end up holding enormous risks on underlying borrowers without any legal control rights to protect themselves.

These interconnections offer pathways to foster cooperation between CDS traders in matters of debt governance. Protection buyers and sellers should wish to maintain good relations with each other.

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19. *See* Lubben, *supra* note 1, at 425 ("[L]enders may . . . have an incentive to separate lending and hedging operations in order to protect their reputations."); Subrahmanyam et al., *supra* note 4, at 10–11 (describing the potential impact on a bank's reputation in that bank's relationship with a borrower firm).

20. *See* KATHRYN CHEN ET AL., FED. RESERVE BANK OF N.Y., STAFF REP. NO. 517, AN ANALYSIS OF CDS TRANSACTIONS: IMPLICATIONS FOR PUBLIC REPORTING 5–8 (2011). Trading activity in CDS markets is focused on a small market of approximately 50–100 market participants trading daily in single-name CDS and around 135 trading daily in indices of CDS. *Id.* More than half (approximately sixty percent) of all activity was undertaken by the largest G14 dealers. *Id.*; *see also* Jesse Eisinger, *Swap Market Like LIBOR Is Vulnerable to Manipulation*, http://perma.cc/V7ST-Z73M (dealbook.nytimes.com, archived Feb. 5, 2014) (discussing the small number of key banks involved in the CDS market and in the private regulation of the CDS market through the International Swaps and Derivatives Association ("ISDA")).

21. As discussed in this Article, certain actors like banks and hedge funds are net buyers of credit protection, even though they sell protection as part of their business. Mutual funds and insurers are generally specialist net sellers of credit protection. *See* sources cited *infra* note 111 (discussing protection sellers).

These friendly relations can reduce the costs of credit protection to the point where parties can place greater trust in one another's behavior. Significantly, cooperative instincts between market players can help to improve outcomes in Main Street debt governance. Where CDS traders are able to cooperate with one another, they can work together to shift the costs and opportunities of debt governance to those who need them—in particular, to those firms with large net exposures on underlying borrowers. In short, CDS traders can help themselves by helping each other. From a game-theoretic perspective, the market works like a classic assurance game:[22] parties can optimize their private gains when they cooperate with one another.[23]

Building on this argument, this Article proposes the creation of a new market for corporate debt governance as a cure to the problem of "empty creditors" in corporate America. This market would harness cooperative incentives and allow lenders and protection sellers to trade their debt governance rights with one another. In so doing, the market would help ensure that these rights come to be used by those who need them and can utilize them most effectively.

The market in debt governance centers on trades in creditor control rights. These rights typically give lenders considerable control over a borrower's affairs. Through the loan agreement, lenders are able to exercise control rights to maintain a borrower's continuing creditworthiness and to preserve its enterprise value. For example, loan covenants allow lenders to monitor a debtor, to demand information, and to limit a range of borrower activities. These agreements can also restrict borrowers from disposing of certain assets, incurring additional debt, declaring dividends, or making large capital expenditures. Borrowers must pay taxes, comply with any

22. The assurance game, also known as the "Stag Hunt," refers to a game in which members of a group achieve a greater prize through cooperation. While members of the group can individually achieve a smaller prize (a rabbit) by pursuing their own interests, the Pareto-optimal strategy is for the members of the group to cooperate in order to collectively achieve a larger prize (the stag). As later described in this Article, where lenders and protection sellers cooperate in the management of the underlying debtor, they can achieve gains for all parties, including the debtor. This cooperation reduces costs for lenders, by reducing default rates, ensuring that protection sellers can manage their risks and debtors face more careful oversight of the debt they assume. In the meantime, of course, lenders and protection sellers may be distracted by smaller gains, for example, by becoming empty disruptive creditors that might yield a short-term gain at the expense of better credit management overall. For a discussion of these principles, see Eric A. Posner et al., *Divide and Conquer* 4–5 (Harvard Pub. Law Working Paper No. 09-24, 2009), *available at* http://perma.cc/5T6T-2MQX.

23. *See* discussion *infra* Part IV.C (discussing the mutual desire to keep costs low by cooperating).

applicable regulatory requirements, and maintain insurance and other permissions.[24]

Lenders can lose motivation to exercise these control rights once they purchase credit protection. However, these same lenders may be unwilling to see loans fall into outright default.[25] At the same time, protection sellers harbor strong motivations both to monitor and discipline borrowers, and to control credit risk.[26] A market for debt governance would bring lenders and protection sellers together to "trade" rights in debt governance. In this market, lenders and protection sellers could agree with each other on how a protection seller might monitor, discipline, and intervene in the affairs of a debtor company. In acquiring the ability to engage in debt governance, credit protection sellers would be able to make use of rights that might otherwise fall into disuse in the hands of reckless or lazy lenders. To curb abuse, protection sellers would also become subject to the usual duties and accountability constraints applicable to lenders in their exercise of creditor control.

Surprisingly, policymakers have not meaningfully addressed the costs of poor debt governance arising from the use of derivatives.[27] Post–Great Recession reforms have focused on reducing the impact of derivatives on the financial system—not on Main Street corporate governance.[28] This Article seeks to offer a cure to the debt governance

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24. *See* sources cited *infra* note 37 (examining creditors' control mechanisms over borrower entities).

25. As discussed earlier, lenders risk suffering a variety of negative consequences, such as loss of reputation, higher costs of obtaining credit protection as well as public sanctions on account of having a distressed loan book. For a detailed discussion, see *infra* Part IV.B.

26. Described in greater detail in this Article, credit protection sellers can face enormous credit risks in selling protection to lenders. Firms can purchase CDS protection on debt that they do not necessarily hold on their books. This means firms can purchase "naked" swaps, meaning swaps where they do not actually hold the loans or bonds on which the credit protection is written. The amount of credit protection can often vastly exceed the actual debt outstanding. This means that the credit protection seller can become subject to extensive liability. The ability to acquire control rights in debt to manage the debtor more actively can yield great gains and help the protection seller manage the large liability. By engaging in active debt governance, protection sellers can ensure that a debtor company benefits from better debt discipline. The key example here is that of Delphi Corporation, a car company. When Delphi went into bankruptcy in 2005, it had approximately $25 billion in CDS outstanding against around $5 billion in actual bond and loan debt. For more detail explaining of the reallocation of risk to protection sellers in the CDS, see Satyajit Das, *The Credit Default Swap ("CDS") Market—Will It Unravel?*, http://perma.cc/U35K-S2TA (wilmott.com, archived Feb. 5, 2014) (explaining the reallocation of risk to protection sellers in the CDS market).

27. In informal bankruptcy process, Federal Rule of Bankruptcy 2019 makes room for great disclosure of lenders' economic interests. However, the reach of this provision is limited. For discussion, see source cited *infra* note 174 and accompanying text.

28. *See* sources cited *infra* note 98 & 102 (discussing regulation of the derivatives market via private means).

problem and the costs that it creates. This proposal's guiding rationale is simple. It seeks to ensure greater alignment between economic risk in debt and legal control rights that manage this risk. By closing the nexus between economic risk and its legal safeguards, a market in debt governance helps to empower those best incentivized to exercise debt governance to actually do so. More broadly, this market challenges conventional definitions of "lenders" and "credit providers" to reflect the realities of a complex market. Identifying "real" economic lenders enables the law to hold these actors accountable. Invariably, these insights have far-reaching implications for common-law lender-liability regimes, as well as for bankruptcy law.

A market in debt governance might appear radical at first. However, trade in control rights has long been a part of the equity markets. For example, firms have long been able to enter into corporate-vote-lending arrangements to briefly acquire the legal rights in share ownership without also burdening themselves with the risk. The expansive use of equity derivatives, such as equity swaps, to disentangle the legal benefits of share ownership (e.g., voting rights) from their economic risk is also well-known.[29] This ability to selectively acquire control rights indicates the enormous economic advantages presented by a market able to commoditize control rights for trade between interested parties.

Finally, one might question why such a market does not already exist, particularly if the incentives of market actors are primed towards cooperating on matters of debt governance. A possible response to this query is that such a market might, in fact, already operate in some form. It is certainly possible that CDS market participants might be bilaterally agreeing with one another behind the scenes as to how lenders should behave vis-à-vis the debtor. But there are numerous legal constraints that presently prevent such a market from flourishing and market participants from openly admitting to cooperating on debt governance. For example, such bilateral discussions might raise concerns that lenders are breaching their confidentiality undertakings towards the borrower. They might insinuate that participants are involved in some form of insider dealing in a borrower's securities, or colluding in breach of antitrust rules. Moreover, the CDS industry presently lacks documentary mechanisms to facilitate trades in control rights alongside credit risk,

29. *See generally* Hu & Black, *Empty Voting II*, *supra* note 1 (describing the phenomenon of equity decoupling, where traders seek to specifically acquire control rights in equity to influence key corporate decisions). For a fuller discussion of this phenomenon, see Part IV.C.

making it harder and costlier for parties to negotiate with one another.

A market in debt governance would formalize such dealings, removing legal and regulatory constraints. Most importantly, it would ensure that CDS traders negotiate and transact in the open, in the full light of a formal market rather than bilaterally on an ad hoc basis. Clearly, this Article is only the first step in the larger project of designing and developing a market in debt governance. It seeks to start the conversation—to offer a way forward in solving a serious dilemma facing both Main Street and Wall Street: how to ensure that parties can allocate credit risk efficiently, without also compromising the levers of debt governance that help control this risk in the market.

This Article proceeds as follows. Part II analyzes the emerging role of debt governance as a force in modern corporate life. It examines the importance of creditor control for lenders as a risk management tool and as a means of garnering revenue and influence for lenders. The variety of control rights and their ability to be used in a tailored, nuanced manner ensures that debt governance has come to be prized by lenders.

Part III introduces credit derivatives and their key legal and economic features. CDSs separate the economic risk in debt from the legal control rights traditionally used by lenders to manage this exposure. Part III analyzes current theory on the incentives of "empty creditors," who have purchased CDS protection on their debt. It is well established that lenders without skin in the game possess limited motivation to behave responsibly vis-à-vis a debtor, creating challenges to restructuring and sending companies needlessly into bankruptcy.

Part IV presents a new theory of governance to show that CDS traders have incentives to aim for sounder outcomes in governance. Contesting current theory, this Part demonstrates that the interests of lenders and protection sellers can fall in alignment towards better debt governance. It highlights the role of reputation in CDS markets to outline the potential for cost sharing and cooperation between lenders and protection sellers.

Part V proposes a new model for a market in debt governance. It sets out the rationales for and necessary mechanics of this market. In ensuring that protection sellers can acquire levers of control in debt, a market in debt governance closes the gap between economic risk and legal control rights in debt, in the interests of sounder credit allocation through the economy. Part VI concludes.

II. A NEW DEBATE

Scholars have long debated the question of who holds the levers of power within a corporation. Ever since Berle and Means's insight into the separation of a company's ownership from its locus of control,[30] scholarship has yielded a vast literature into the significance of this disconnect. It is a long-cherished principle of corporate law that directors run a company as caretakers for shareholders.[31] Shareholders are widely viewed as the indisputable owners of the company, providers of its long-term capital, and the engine of control driving essential decisionmaking.[32] However, times are changing. Increasingly, scholars are recognizing the powerful role of lenders in corporate decisionmaking. This Part begins by examining this shift to recognize the impact of debt governance. It also analyzes traditional common-law constraints on corporate control that regulate creditor activism in corporate governance.

A. Creditors and Corporate Control

Scholarship has traditionally regarded shareholders as the key unit of control in corporate governance, with directors as agents to manage their capital. Shareholders have the power to elect directors, to approve important corporate decisions, and to change the company's constitution.[33] In return, directors owe fiduciary duties to the company

30. ADOLF A. BERLE, JR. & GARDINER C. MEANS, THE MODERN CORPORATION AND PRIVATE PROPERTY 1–126 (1932).

31. *See* Douglas G. Baird & M. Todd Henderson, *Other People's Money*, 60 STAN. L. REV. 1309, 1309–10 (2008) (discussing the tendency in judicial decisionmaking and scholarship to assume that directors owe fiduciary duties exclusively to shareholders); *see also* Margaret M. Blair & Lynn A. Stout, *A Team Production Theory of Corporate Law*, 85 VA. L. REV. 247, 248 & n.1 (1999) (reiterating the shareholder-as-owner principle and tracing its development in economics to various articles).

32. N. Am. Catholic Educ. Programming Found. v. Gheewalla, 930 A.2d 92, 98 (Del. 2007) ("It is well established that the directors owe their fiduciary obligations to the corporation and its shareholders."); FRANK H. EASTERBROOK & DANIEL R. FISCHEL, THE ECONOMIC STRUCTURE OF CORPORATE LAW 91–92 (1991); Michael C. Jensen & William H. Meckling, *Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure*, 3 J. FIN. ECON. 305, 312–30 (1976) (discussing the agency costs that arise where managers are responsible for managing shareholder capital for the firm). *See generally* LOUIS BRANDEIS, OTHER PEOPLE'S MONEY AND HOW BANKERS USE IT (1914) (discussing the role of directors of banking corporations).

33. Richard Squire, *Shareholder Opportunism in a World of Risky Debt*, 123 HARV. L. REV. 1151, 1182 (2010). *See generally* Richard Squire, *Strategic Liability in the Corporate Group*, 78 U. CHI. L. REV. 605 (2011) (arguing that shareholders exhibit correlation risk, increasing their levels of leverage to maximize returns through this leverage, but knowing they will not bear the costs of this risk-taking).

and to its shareholders[34] as a promise to safeguard against mismanagement and misuse of their equity capital.[35]

Increasingly, however, scholars argue that this singular focus on shareholders as the decisive actors in corporate control is incomplete. Looking through a wider lens, some academics propose focusing on the role of creditors in corporate governance.[36] This influence, they claim, can be more intense than shareholder monitoring, because informed lenders can exercise tight control through strict, narrowly defined covenants.[37] While this Article does not purport to enter into the long-standing debate on the effectiveness

34. *See* Koehler v. Black River Falls Iron Co., 67 U.S. 715, 720–21 (1862) ("[Directors] hold a place of trust, and . . . are obliged to execute it with fidelity . . . for the common benefit of the stockholders of the corporation."); EASTERBROOK & FISCHEL, *supra* note 32, at 91–92 (describing why directors hold fiduciary duties and how they keep director behavior in check); Henry T.C. Hu & Jay Lawrence Westbrook, *Abolition of the Corporate Duty to Creditors*, 107 COLUM. L. REV. 1321, 1331–40 (2008) (arguing that directors owe their fiduciary duties to equity holders until the onset of bankruptcy).

35. *See* Stephen M. Bainbridge, *Director Primacy: The Means and Ends of Corporate Governance*, 97 NW. U. L. REV. 547, 580–82 (2003) (discussing the risks directors may take with shareholders' equity and the incentive structures that prevent them from doing so); Lucian Arye Bebchuk, *The Case for Increasing Shareholder Power*, 118 HARV. L. REV. 833, 837–39 (2005) (proposing that shareholders have the power to initiate changes in corporate governance as a means of rectifying director mismanagement); Thomas A. Smith, *The Efficient Norm for Corporate Law: A Neotraditional Interpretation of Fiduciary Duty*, 98 MICH. L. REV. 214, 217–18 (1999) (explaining that investors may be diversified, and be shareholders in one company but debtholders in others, thereby able to balance their gains and losses, nullifying the concept that fiduciary duties are tied to maximizing shareholder gains). *But see* Margaret M. Blair & Lynn A. Stout, *supra* note 31, at 251–55 (describing how, under the team production model of the firm, directors' duties exist not to protect shareholders exclusively but to encourage investment in the firm by all of its constituencies); Alon Chaver & Jesse M. Fried, *Managers' Fiduciary Duty upon the Firm's Insolvency: Accounting for Performance Creditors*, 55 VAND. L. REV. 1813, 1831–35 (2002) (discussing the role of "performance creditors," creditors who are owed performance under a contract, rather than money, and that they be considered in any analysis of fiduciary duties).

36. *See generally* Baird & Rasmussen, *supra* note 3 (focusing on the importance of creditor control in corporate governance).

37. *See* Kenneth M. Ayotte & Edward R. Morrison, *Creditor Control and Conflict in Chapter 11*, 1 J. LEGAL ANALYSIS 511, 537–39 (2009) (suggesting that creditors exert considerable control over the affairs of a debtor before and during bankruptcy); Douglas G. Baird & Robert Rasmussen, *The End of Bankruptcy*, 55 STAN. L. REV. 751, 777–88 (2002) (discussing creditor control rights in the twilight before bankruptcy); Greg Nini et al., Creditor Control Rights, Corporate Governance, and Firm Value 10–30 (Dec. 2011) (unpublished manuscript), *available at* http://perma.cc/E4VS-HRV3 (empirical discussion of the influence of creditors following violations of financial covenants). *See generally* Baird & Rasmussen, *supra* note 3 (discussing the impact of creditors on corporate governance decisions in and out of bankruptcy); Triantis & Daniels, *supra* note 3 (arguing that debtholders can signal their perception of a company's creditworthiness by exiting their credit relationship); Tung, *supra* note 1 (arguing that private debt holders can gain influence on the board of directors, through covenants in the loan documentation, contingencies, and conditions stipulated by lenders).

of shareholder scrutiny, the emergence of lenders as a key unit in corporate governance is difficult to dispute.[38]

The power exercised by lenders can be expansive[39]—and highly visible, backed by detailed information on a company.[40] On the advice of lenders, underperforming but well-regarded CEOs may be summarily removed,[41] management practices transformed, and capital structure changes undertaken. This is all to ensure the continuation of the borrower's creditworthiness and the future of the lending relationship. As a last resort, lenders retain the ability to place a borrower in insolvency, a nuclear option to motivate good behavior from management.

The loan contract gives lenders access to an array of precise tools that limit the latitude managers have in how they deploy a firm's cash flows and other assets.[42] As Professor Jensen notes, such restrictions constrain the ability of managers to usurp cash flows or misuse assets for private gain: managers must repay lenders and provision accordingly.[43] This check on agency risks limits the debtor company's abilities to invest in high-risk projects, ensuring that lenders are repaid. Of course, such "underinvestment" might also result in companies missing out on risky, albeit lucrative, projects. But the aim is straightforward: to assure repayment, at a minimum.

Loan contracts contain detailed covenants that allow lenders to extract information from borrowers, restrict their borrowing, prevent disbursement of cash to shareholders through dividends, and protect collateral values. Borrowers may be asked to refrain from making capital expenditures, issuing additional debt, or from engaging in

38. Baird & Rasmussen, *supra* note 3, at 1209–12 (arguing for the increasing recognition of lender influence in corporate governance).

39. This power depends on whether it is actually used. Professors Triantis and Choi discuss that when credit is plentiful, loan contracts can be light in their covenants, or these may never be enforced. *See* George G. Triantis & Albert Choi, *Market Conditions and Contract Design: Variations in Debt Covenants and Collateral*, 88 N.Y.U. L. REV. 52, 61 (2013) (questioning why lenders adjust covenants instead of changing interest rates).

40. Tung, *supra* note 1, at 130–40.

41. Baird & Rasmussen, *supra* note 3, at 1209–10 (citing the case of the CEO of Krispy Kreme Donuts, who, though long-serving and popular, was removed after the company ran into trouble by failing to deliver accounts as required by loan covenants). For an excellent recent account of creditor control and intercreditor conflict, see Mark J. Roe & Federico Cenzi Venezze, *A Capital Market, Corporate Law Approach to Creditor Conduct*, MICH. L. REV. (forthcoming) (manuscript at 8–16), *available at* http://perma.cc/H7GU-Z725.

42. Michael C. Jensen, *Agency Costs of Free Cash Flow, Corporate Finance, and Takeovers*, 76 AM. ECON. REV. 323, 324–26 (1986) (noting that debt covenants control managerial use of free cash flows).

43. Triantis & Daniels, *supra* note 3, at 1078–79.

changes to their corporate structure without lender permission. Lenders also expect borrowers to show full compliance with applicable laws, regulations, and permissions.[44] While such contract terms vary depending on a debtor's risk profile, most debt contracts also include a set of key tried-and-tested boilerplates. These allow lenders to monitor borrowers through information demands and notification requirements. They also assure lenders that their investments cannot be devalued through further borrowing, changes of control, or an unexpected change in the order of priority among creditors.[45] Given these evident benefits, it is understandable that lenders covet creditor control mechanisms.

Access to a borrower's corporate apparatus also represents a powerful source of financial gain for lenders. In addition to providing credit, financial firms offer an array of services to their clients, from management advice to underwriting services. Such expertise usually comes with a hefty price tag.[46] More lucratively, lenders can convert their debt investment into equity ownership, potentially generating enormous upsides through so-called loan-to-own strategies. These have predominated in recent years via cheap investments in distressed debt, which later transform into profitable stakes in second-chance success stories.[47] Historically, while banks are limited by regulation in their ability to invest in commercial corporations,[48] investment firms, hedge funds, private equity, and other capital providers have greater freedom in this regard.[49]

Bank debt. Loan covenants are tightly drafted. Unsurprisingly, failure to comply is common, even expected, irrespective of how

44. Nini et al., *supra* note 37, at 6–10.

45. Triantis & Choi, *supra* note 39, at 106–09.

46. *See* Tung, *supra* note 1, at 140 (noting the pressure that borrowers face from lenders that provide a variety of important financial and advisory services).

47. Kmart's Chapter 11 proceedings were a case in point. There, ESL Investments and Third Avenue Trust, two important hedge funds, became the largest two creditors of Kmart by purchasing its pre-petition and bankruptcy debt. They were able to use their debtholder rights to make significant decisions on Kmart's management, business, and reorganization plans to emerge as dominant equity holders in the restructuring. *See* Harner, *Implications of Distressed Debt Investing*, *supra* note 15, at 725–27 (noting that, while Kmart still has challenging issues ahead, its immediate postbankruptcy performance increased its stock value).

48. *See* Saule T. Omarova, *The Merchants of Wall Street: Banking, Commerce, and Commodities*, 98 MINN. L. REV. 265, 281–92 (2013) (discussing in detail the regulatory restrictions facing banks in their investments in commercial companies, their history, rationales, and impact).

49. *See* Harner, *Implications of Distressed Debt Investing*, *supra* note 15 (providing a detailed review of recent cases of debt-based takeovers and the implications for regulation).

creditworthy a borrower may be.[50] Mostly, such legal "trip-wires"[51] offer an opportunity for borrowers and lenders to renegotiate loan terms, allowing lenders to make suggestions regarding the borrower's management, governance, and capital allocation arrangements.[52] Scholars report that violations of financial covenants are often followed by sharp falls in capital expenditures, acquisitions, sell-offs of plant and property, shareholder payouts, and changes in company management.[53] Sometimes negotiation can relax the stringency of loan terms.[54] In addition to hard power, lenders also exercise soft influence. For example, lenders can suggest changes to management, product lines, the appointment of turnaround specialists, or perhaps, likely suitors or takeover targets.[55]

Bondholders. Scholars have generally focused their attention on bank lenders in framing the governance discussion. Bondholders, by contrast, present a problem: they are usually too dispersed to exert any control over corporate debtors. However, scholars note that insights regarding creditor control also apply vis-à-vis bondholders, albeit with nuances. Scholars argue that the intensity of bondholder intervention is multifaceted—and indeed faces notable challenges. First, bond investors are often widely dispersed and cannot easily communicate with one another. This creates collective action challenges, coordination difficulties, and differences in incentives

50. Michael R. Roberts & Amir Sufi, *Control Rights and Capital Structure: An Empirical Investigation*, 4 J. FIN. 1657, 1660 (2009) (showing that only about four percent of defaults resulted in the termination of a lending relationship by the lender, and arguing that default is a gateway to further negotiation, rather than termination).

51. George G. Triantis, *Debt Financing, Corporate Decision Making, and Security Design*, 26 CAN. BUS. L.J. 93, 101–02 (1996) (discussing how lenders influence governance by acting when covenants are breached).

52. Nini et al., *supra* note 37, at 2–3 (reporting that, in any given year, almost ten to twenty percent of creditors report a violation of their financial covenants); Raghuram Rajan & Andrew Winton, *Covenants and Collateral as Incentives to Monitor*, 50 J. FIN. 1113, 1113–16 (1995) (discussing the capacity of covenants to incentivize monitoring).

53. Nini et al., *supra* note 37, at 3 (noting, for example, that in their dataset CEO turnover was sixty percent higher in the quarter of a covenant violation).

54. Charles Whitehead, *The Evolution of Debt: Covenants, the Credit Market, and Corporate Governance*, 34 J. CORP. L. 641, 650–54 (2009) (discussing that the strength of covenants is determined by a variety of factors, including agency costs and the riskiness of borrower); *see also* Saul Levmore, *Monitors and Freeriders in Commercial and Corporate Settings*, 92 YALE L.J. 49, 67 (1982) (noting that agency costs arise from risk alteration by a manager-shareholder due to the fixed debt obligations).

55. *See* Baird & Rasmussen, *supra* note 3, at 1212–13 (arguing that lenders have multiple options to avoid hurting business value); Triantis, *supra* note 51, at 101–02 (discussing how lenders influence debtor governance); George G. Triantis, *The Interplay Between Liquidation and Reorganization in Bankruptcy: The Role of Screens, Gatekeepers, and Guillotines*, 16 INT'L REV. L. & ECON. 101, 102–05 (1996) (explaining how private lenders control managers).

between various bondholders, which can paralyze action.[56] Second, though bondholders in the public markets benefit from an indenture trustee[57] under the Trust Indenture Act, scholars agree that the trustee's ability and volition to act is patchy at best and completely ineffective at worst.[58] Third, bondholder covenants vary in the wiggle room they allow borrowers, with the general consensus being that bank covenants tend to be narrower, better monitored, and better enforced. Bank lenders are usually much smaller in number and are able to both coordinate with one another and benefit from a larger bundle of rights in the loan agreement.[59]

While they may not enjoy the same intensity of control vis-à-vis an issuer, bondholders still retain power to affect governance and impact the organizational apparatus of a borrower. This is especially true for private placements. These private issues of bond debt are often undertaken by issuers who are more risky.[60] Private placements usually carry larger denominations and end up being held by a small number of repeat, specialist players like hedge funds.[61] Private placement debt can carry tougher covenants, negotiated between a smaller group of investors and the issuer.[62] Such covenants are usually designed as negative clauses that limit a borrower's freedom to act. For example, such restrictions can include limitations on the ability of a company to borrow more money, sell key assets, acquire new businesses, or declare dividends that divert wealth away from bondholders.[63] Taken together, private placement bond debt can facilitate the exercise of creditor control.

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56. *See* Yakov Amihud et al., *A New Governance Structure for Corporate Bonds*, 51 STAN. L. REV. 447, 469–70 (1999) (proposing the creation of a supertrustee to overcome the coordination and collective action challenges).

57. 15 U.S.C. § 77jjj(a)(1) (2012). An indenture trustee is important in bond issues to perform key administrative duties on behalf of the investors, to ensure that interest payments are made, as well as to ensure that all investors receive key information with respect to the issue. For discussion, see Steven L. Schwarcz & Gregory M. Sergi, *Bond Defaults and the Dilemma of the Indenture Trustee*, 59 ALA. L. REV. 1037, 1038–43 (2008) (explaining the role and purpose of the indenture trustee).

58. Amihud et al., *supra* note 56, at 473.

59. *Id.* at 457–62.

60. William Bratton, *Bond Covenants and Creditor Protection: Economics and Law, Theory and Practice, Substance and Process* 25–28 (Georgetown L. & Econ., Research Paper No. 902910, 2006) (arguing that, while protection is incomplete for bondholders, the number and quality of covenants varies by the risk of the borrower).

61. Amihud et al., *supra* note 56, at 458.

62. Bratton, *supra* note 60, at 18–19.

63. Bondholders may use such transactions as leverage to extract concessions from the issuer. In the case of Jean Coutu Group's sale of Rite Aid, a group of bondholders (comprising hedge funds mainly) insisted that the bondholder covenants prohibited the issuer from undertaking the sale, as the sale represented "substantially all" of the assets of the issuer. In

Bondholder governance remains a clear force, even if it may not in all cases be as strong and coordinated as bank debt. A small number of debtholders can be effective in their ability to monitor borrowers, approve waivers, and propose amendments. Professors Kahan and Tuckman argue that bondholders can often coordinate well to deal with an issuer of securities.[64] Critically, the impact of interventions made by these private bondholders helps shareholders and other investors. Public investors are deeply affected by the existence of restrictions in privately held debt or bank debt.[65] Where these restrictions exist, they affect the company as a whole. Public investors can thus free ride off the monitoring capacity provided by holders of private debt.[66] The emergence of sophisticated investors, such as hedge funds, vulture funds,[67] and asset management companies, has increased this intensity of bondholder scrutiny and enforcement. Professors Rock and Kahan acknowledge that hedge funds in particular have raised the bar in bondholder vigilance and enforcement of contract terms that may once have gone unnoticed.[68]

B. Constraints on Creditor Control

The common law has long recognized that lenders can be held liable where their interventions exhibit an unduly high intensity of

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holding out and delaying the sale, bondholders were able to obtain early repayment on the bonds in return for providing their consent. Complaint for Declaratory Judgment at 1–2, 5–6, Jean Coutu Group (PJC) Inc. v. Wells Fargo Bank, No. 06-CV-14301 (S.D.N.Y. Dec. 8, 2006) (No. 1), 2006 WL 4069805.

64. Marcel Kahan & Bruce Tuckman, *Do Bondholders Lose from Junk Bond Covenant Changes?,* 66 J. BUS. 499, 500–01 (1993); Marcel Kahan & Bruce Tuckman, *Private vs. Public Lending: Evidence from Covenants* 11–13 (UCLA Anderson Grad. Sch. Mgmt., Paper No. 13-93, 1993) (contrasting the relative ability of private debt agreements to influence management versus public debt covenants).

65. Tougher covenants may not always be beneficial for the borrower. For example, tight restrictions in the way a borrower runs his or her business can hamper its ability. The loan document thus seeks to arrive at an optimal balance, or at least, at an optimally intense exercise of monitoring authority.

66. See Bratton, *supra* note 60, at 10–13, for an insightful discussion.

67. A feature of vulture fund action manifests in buying up distressed bonds at a discount then using bondholder rights to enforce terms, for example, to demand full payment on the debt or to block efforts to restructure debt, where restructuring might require consent of all bondholders. For a discussion on the costs of opportunistic holdout investors in sovereign restructuring, see William Bratton & Mitu Gulati, *Sovereign Debt Reform and the Best Interest of Creditors*, 57 VAND. L. REV. 1, 21–23 (2004).

68. *See* Marcel Kahan & Edward Rock, *Hedge Fund Activism in the Enforcement of Bondholder Rights*, 103 NW. U. L. REV. 281, 284–92 (2009) (examining the greater vigilance exercised by bondholders in corporate governance, as seen in the more active enforcement of indenture covenants).

control. The law can—and has—imposed fiduciary responsibilities on lenders, through such devices as the law of agency, alter ego, or the doctrine of instrumentality.[69] Lenders that exercise an overly intensive level of control can be deemed as principals and the debtor as agent.[70] In such cases, the lender can become subject to general duties of fairness and due diligence with respect to the debtor, its directors, and its other creditors. Yet, as Professors Triantis and Daniels note, courts are usually reluctant to find such liability. Moreover, lenders are careful to package their interventions as soft suggestions rather than hard edicts to avoid legal scrutiny.[71]

Bankruptcy laws work to recoup value lost through opportunistic and reckless conduct by debtors and lenders alike. Voidable preference rules and limits on transactions at undervalue constitute a way for a debtor's estate to retrieve value.[72] These actions constitute a formal means to return value to a debtor's estate once a debtor is in or otherwise nearing bankruptcy. Notwithstanding its importance, the reach of the insolvency process can perhaps appear remote to a lender, especially where a debtor company is in sound financial health. Thus, the immediate effectiveness of such rules to limit everyday lender conduct may be weak.

Although the impact of legal constraints may be patchy, lenders also face private discipline from one another. Where a company takes out loans from multiple creditors, each has some incentive to ensure that the overall investment remains viable. Take for instance the age-old conflict between senior-secured creditors and those junior to them in priority. Junior creditors face the possibility of seeing their investment devalued through the actions of secured creditors. Secured creditors, whose interests lie in ensuring the continuing value of their collateral, can act in ways that lower the value of the estate while preserving or enlarging the value of the

69. Krivo Indus. Supply Co. v. Nat'l Distillers & Chem. Corp., 483 F.2d 1098, 1105 (5th Cir. 1973) (determining that liability under the alter ego or instrumentality doctrine requires a more intense level of control than between agent and principal).

70. Gay Jenson Farms Co. v. Cargill, Inc., 309 N.W.2d 285, 291 (Minn. 1981) (holding that control by Cargill was sufficiently intense to establish a principal-agent relationship between the lender and the debtor); Adelphia Commc'ns Corp. v. Bank of Am., 365 B.R. 24, 63 (Bankr. S.D.N.Y. 2007) (reasoning that a lender's ability to force the borrower undertake certain transactions created fiduciary duties for the lender).

71. Triantis & Daniels, *supra* note 3, at 1100–02; *see also* Capmark Fin. Grp. Inc., v. Goldman Sachs Credit Partners L.P., 491 B.R. 335, 344–46 (Bankr. S.D.N.Y. 2013) (determining Goldman did not constitute an "insider" because there was no indication of "extensive control").

72. 11 U.S.C. § 547 (2012).

security.[73] This can happen, for example, when a secured creditor monitors only the secured asset rather than the estate as a whole.[74] Here, junior lenders must pick up the slack to ensure better discipline for the debtor's entire estate.

Lenders routinely share the responsibilities of oversight to maximize the relative expertise and interest of each lender. This is most clearly exemplified by loan syndications: where a group of lenders share the risk and monitoring responsibilities relating to a large loan. Professor Triantis notes the gains of such "cooperative monitoring" between creditors. Cooperative monitoring can work to optimize the effectiveness of monitoring when creditors harness their specialist advantages in supervising a debtor. One creditor, for instance, may be best placed to oversee a debtor's plants and machinery, whereas another may have deeper knowledge of a debtor's securities holdings. Such divisions of labor are especially valuable when lenders are specialists in one or other area and privy to differing pools of information on a debtor's business.[75] To prevent defection from the collective monitoring agreement, creditors must monitor each other to assure performance and to fill in the gaps. Such monitoring might not be perfect. Strategic pressures and transaction costs can make optimal monitoring impossible, and lenders may defect from time to time.[76] Nevertheless, cooperative monitoring agreements illustrate the significance of debt governance for all creditors. These agreements underscore the role of cooperation in intercreditor relationships to overcome agency costs created where a single powerful lender can extract private rents at the expense of the debtor's estate.

To summarize, debt governance represents a potent—and undertheorized—force in corporate governance today. While not perfect, and constrained by laws to limit lender interference, the exercise of creditor discipline constitutes an important tool to help lenders protect the risks they assume. The growth of credit derivatives has had a dramatic impact on corporate life, as CDSs have shown

73. Ayotte & Morrison, *supra* note 37, at 537–40 (discussing conflicts in creditor control in Chapter 11); Anthony J. Casey, *The Creditors' Bargain and Option-Preservation Priority in Chapter 11*, 78 U. CHI. L. REV. 759, 761–62 (2011) (analyzing the conflicting incentives of junior- versus senior-secured creditors in restructuring).

74. George G. Triantis, *Secured Debt Under Conditions of Imperfect Information*, 21 J. LEGAL STUD. 225, 240–43 (1992) (noting that creditors can face differing monitoring pressures).

75. *Id.* at 241–43.

76. *Id.*

themselves capable of reshaping the borrower-lender relationship and the effectiveness of this risk-management mechanism.

III. THE ECONOMICS OF CREDIT DERIVATIVES

This Part describes the key features of credit derivatives and their core economic functions.[77] While CDSs radically reshape the borrower-lender relationship, current literature has largely focused, somewhat narrowly, on the ways CDSs function in the financial markets. Despite the profound impact of CDSs on corporate lending, scholarship and policy has been surprisingly silent about fully analyzing the interaction between the CDS market and everyday corporate governance.

A. Key Features and Market Design

1. What Is a Credit Derivative?

A derivative is a contract that "derives" its value from an underlying reference entity, benchmark, or asset.[78] Credit derivatives are financial contracts whose value is linked to a change in the credit quality of an underlying reference asset or entity.[79] A typical CDS trade can be illustrated as follows. If the Lender extends a loan to the Company and no longer wishes to hold the credit risk of this debt on its books, it can off-load this risk to the Firm using a credit derivative. Legally, ownership of the loan does not change hands, and the Company may be completely unaware of this transaction.

The trade relates only to the economic risk of this loan. The Lender and the Firm enter into a CDS that shifts the economic risk of

77. *See, e.g.*, Anurag Joshi, *Reserve Bank of India Introduces Credit Default Swaps: Limits Market Scope*, http://perma.cc/U6J6-NM77 (bloomberg.com, archived Feb. 5, 2014) (summarizing the basic function of credit default swaps while reporting that India introduced credit default swaps to its market). *See generally* Subrahmanyam et al., *supra* note 4 (providing an empirical study of 901 firms with CDS trading on their debt to show these are more susceptible to default or a decline in credit quality, attributable, authors suggest, to poor lender monitoring).

78. *See, e.g.*, Partnoy & Skeel, *supra* note 8, at 1019 (defining derivatives and summarizing the role derivatives play in financial markets); Stulz, *Demystifying*, *supra* note 8, at 20–31 (describing, in detail, financial derivatives). The assets that derivatives may reference are considerable, and can include commodities such as wheat, sugar, cocoa, or oil, as well as such benchmarks as inflation, or even the weather. For insightful discussion on credit default swap features see generally, Kristin N. Johnson, *Things Fall Apart: Regulating the Credit Default Commons*, 82 U. COLO. L. REV. 167 (2011).

79. *Product Descriptions and Frequently Asked Questions*, http://perma.cc/QY9A-2APW (isda.org, archived Feb. 5, 2014). For other examples of credit derivatives, see JP MORGAN & RISKMETRICS GROUP, *supra* note 6, at 7–30, and Partnoy & Skeel, *supra* note 8, at 1019.

the loan from the Lender to the Firm.[80] The Firm agrees to protect the Lender in the event that the Company defaults. To compensate the Firm for holding the risk associated with the Company's default, the Lender pays the Firm a regular and periodic fee. The amount of the fee varies depending on the Company's perceived risk of default.[81] Conversely, protection providers like the Firm must demonstrate to protection buyers that they can provide the protection they promise. Lenders typically demand collateral from protection sellers to reflect the risk presented by the Company, the underlying reference entity. Like the periodic fees the Lender provides the Firm, the amount and quality of this collateral varies depending on how risky the contract becomes through its term.[82]

This CDS transaction can achieve several objectives. First, from the Lender's perspective, the CDS helps the lender shift the risk of the Company's loan off its books. The loan may be expensive if the lender must provision for the loan by setting aside some capital, which would generate opportunity costs if the lender wishes to invest this capital elsewhere. Or, the Lender may wish to diversify its portfolio of loans—for example, if it has overinvested in a particular sector or corporate type (such as start-ups). In this case, the Lender may be worried about the credit risk posed by the Company and wishes to protect itself from this risk materializing.

Second, from the Firm's perspective, the CDS ensures a regular payment from the Lender for protection. This income stream can be profitable if the Company is not considered risky. Importantly, the Firm gets "synthetic" exposure to the Company without having to actually make a loan, buy the Company's bonds, transact with the

80. For critical perspectives on referencing credit derivatives as insurance, see Henderson, *supra* note 8. Under the Dodd-Frank Act, credit default swaps are excluded from the definition of "insurance contract." Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203, § 767(a)(4), 124 Stat. 1376, 1800 (2010) (to be codified at 15 U.S.C. § 78bb(a)(4)). *See also* Schwartz, *supra* note 8, at 181–88 (providing context on debates as to whether CDS should be conceptualized as insurance).

81. This periodic fee is usually expressed as a fraction of the notional value of the asset.

82. For example, AIG, a key protection provider for CDS for the financial markets, rapidly collapsed when it faced continuous collateral calls as the mortgage-backed securities it was protecting grew toxic through 2007–2008. FIN. CRISIS INQUIRY COMM'N, THE FINANCIAL CRISIS INQUIRY REPORT 243–45 (2011); *see also* William Cohan, *How Goldman Killed AIG*, http://perma.cc/J4P3-Z3BS (nytimes.com, archived Feb. 5, 2014). Cohan argues that Goldman Sachs placed AIG's in peril by issuing a $1.61 billion dollar collateral call in 2007 on the CDS that AIG had written to protect Goldman Sachs. *Id.* This collateral call was issued in 2007, prompting others—for example, Merrill Lynch—to issue their own calls. *Id.* The value of this call was subsequently reduced to $450 million, but then it was followed by another $2.8 billion collateral call in late 2007. *Id.*

Company, or invest in building a relationship with the Company. This arrangement allows the Firm to obtain exposure to a company, industry, or corporate type relatively inexpensively.[83] Similarly, if the Firm agrees to protect the Lender against default on a pool of bonds, the Firm benefits from its exposure to these securities without a high capital outlay (in other words, without having to actually pay for the bonds). The Firm should believe that the Company is unlikely to default. Or it wishes to get higher fees for covering the Company's risk when it becomes a shaky prospect.[84]

Like any market for securities, CDS trading is facilitated by market intermediaries that help connect protection buyers with protection sellers. "Dealers" facilitate trading by matching trading parties as well as keeping the market liquid by purchasing credit protection themselves when a trading party is unavailable or for their own hedging purposes. By making a market for CDSs, dealers can help ensure that prices remain stable to prevent sudden spikes and crashes with fluctuating demand for credit protection.[85]

2. Rationales for Using Credit Derivatives

These rationales illustrate the three functionalities of credit derivatives: (i) hedging, (ii) speculation, and (iii) information extraction. First, credit derivatives provide a means for lenders to reduce the risks on their books without selling an asset outright.[86] This happens when firms can sell off part or all of the economic risk on a loan but retain the legal rights that they have vis-à-vis an underlying entity.[87] Hedging allows firms to maintain their existing relationships with clients, tailor their exposure to these clients, and participate in the credit market while still knowing that their exposures can be synthetically engineered to suit their investment inclinations. Hedging also allows firms to price the costs of credit ex

83. As explained in this Article, it can be cheaper for protection sellers to take on the risk of a loan using a CDS rather than buying an underlying security outright. When buying a loan or a bond, the protection seller must expend the full capital cost of the investment. When taking on the risk of the underlying Company using a CDS, the protection seller can take on the exposure (and the income that comes with it) without buying the underlying security.

84. *See* HAL SCOTT & ANNA GELPERN, FINANCE: TRANSACTIONS, POLICY AND REGULATION 890–95 (18th ed. 2011) (providing a descriptive overview).

85. Marco Avellaneda & Rama Cont, Transparency in Credit Default Swap Markets 9–10 (unpublished manuscript), *available at* http://perma.cc/W25Y-7JYA (describing the role of dealers in CDS markets).

86. Partnoy & Skeel, *supra* note 8, at 1021–22 (showing that bank protection holders were able to avoid billions in losses owing to clever use of CDS).

87. *Id.* at 1023.

ante, to provision for this participation (e.g., by retaining sufficient capital), and to reduce the externalities generated for the market.[88] In theory, by ensuring that risks are held by those best able to internalize their costs, credit derivatives can be seen as promoting a more efficient allocation of capital and a reduction in market-wide systemic risks.

Second, the speculative nature of credit derivatives—and the deleterious impact that speculation can have—has generated considerable debate in the wake of the Financial Crisis.[89] A key driver in the debate is that credit derivatives allow traders to take a position on assets when neither party owns the underlying asset.[90] Firms take a bet to reflect their view of the Company's future creditworthiness. A financial firm might purchase credit protection on debt issued by the Company because it believes that the Company is likely to default. The transaction here is purely speculative: the Company's debt constitutes a reference for the CDS contract, rather than a real interest held by a credit protection buyer. Moreover, the Company's lenders might buy more credit protection than the value of the debt that they hold. Such extra protection ensures that lenders benefit in the event that the Company defaults, over and above the value of the debt on their books. From the perspective of the protection seller, those who take on the risk of the Company defaulting usually do so where they believe the Company is likely to survive. They wish to avoid paying out wherever they can. The ability of market participants to accumulate "naked," or speculative, exposures has sometimes resulted in CDS exposures on the Company's debt that are far in

88. Firms that cannot fully hedge their risks may find themselves carrying loans that their balance sheet cannot sustain. For example, a bank or investment firm may overinvest in a particular sector or region. When this happens and it must hold the risk on its books, its balance sheet becomes overly dependent on these loans performing. Where such loans fail and create conditions for the failure of the lender, this can generates risk for the financial system where a firm's collapse impacts other financial firms in the system. Such hedging can allow lenders to skirt potentially disastrous defaults on their loan books. *See id.* at 1023–26 (noting the role of CDS as "shock absorbers" for lenders.).

89. *See, e.g.*, Stout, *supra* note 8, at 5–9 (noting that speculation in unregulated derivatives contributed to the development of leverage underlying the Crisis); *see also* Lynn Stout et al., *Regulate OTC Derivatives by Deregulating Them* 30 (UCLA Sch. of Law, Law-Econ. Research Paper No. 09-22, 2009) (stating that excessive speculation in the field of credit default swaps leads to economic ills). In an early Article, Professor Stout noted that speculative derivatives had the potential to lead to bubbles. Lynn A. Stout, *Why the Law Hates Speculators: Regulation and Private Ordering in the Market for OTC Derivatives*, 48 DUKE L.J. 701, 753–62 (1999).

90. Erik F. Gerding, *Credit Derivatives, Leverage, and Financial Regulation's Missing Macroeconomic Dimension*, 8 BERKELEY. BUS. L.J. 29, 37–38 (2011) (noting that "pure bet" derivatives can be used to take a position on an asset where the buying party does not hold any economic risk).

excess of the actual debt outstanding.[91] There are further complicating factors. Notably, protection sellers, too, can purchase credit protection on the CDS protection they have agreed to provide. In other words, protection sellers can shift the credit risk of the Company's debt to yet another protection seller. In such cases, the original protection seller becomes a protection buyer in the market. Daisy chains of credit derivatives, with protection sellers at various stages buying protection on their own exposures through CDSs, are now infamous for adding webs of complexity to the market—and for making it impossible to determine where the risks came to rest.[92] Speculative traders make finding a trading party easier for those who wish to hedge an actual risk. At the same time, the provision of greater liquidity to the market comes with societal and macroeconomic implications, resulting in increasing risk through the financial system.[93]

Third, credit derivatives transmit information on underlying securities and entities. They indicate the market's perception of the risk posed by an underlying asset. This perceived risk is reflected in the price at which protection buyers are able to purchase the swap, with higher prices (or "spreads") indicating that the transaction entails risks for the protection seller. Increasingly filling the vacuum left by credit rating agencies, CDS spreads have become important methods of forecasting the default risk of an underlying asset. Scholars argue that CDS spreads can often be more accurate than traditional mechanisms of predicting default and market risks.[94] In

91. In the case of Delphi Corporation, the amount of CDS outstanding on Delphi's debt was almost five times more than the amount of the outstanding underlying debt. *See* Das, *supra* note 26 (discussing Delphi Corp, where Delphi ended up subject to $28 billion worth of CDS outstanding against $5.2 billion worth of its bonds and loans when it entered bankruptcy).

92. Gerding, *supra* note 90, at 38–40.

93. Margaret M. Blair & Erik F. Gerding, *Sometimes Too Great a Notional: Measuring the "Systemic Significance" of OTC Credit Derivatives*, 1 LOMBARD STREET 10, 12–14 (2009), *available at* http://perma.cc/57U-2SJ4. One way in which traders can hedge their bets, or indicate their negative view of the market is through short selling. However, a short sale of bonds, for example, requires a trader to eventually return the bonds subject to the short sale. This can be problematic in a market that is not very liquid. Studies have shown that the market for corporate bonds, especially those that are investment grade (i.e., rated higher than BBB) can be illiquid. *See* Jack Bao et al., Liquidity of Corporate Bonds 19–22 (July 9, 2008) (unpublished manuscript), *available at* http://perma.cc/4DN-68EA (demonstrating that a bond's illiquidity decreases with its rating); *see also* Ekkehart Boehmer & Julie Wu, Short Selling and the Price Discovery Process 2 (July 16, 2012) (unpublished manuscript), *available at* http://perma.cc/NED5-EM2Z (arguing that there is greater information efficiencies when short sellers are more active).

94. Thomas Daula, Do Credit Default Swaps Improve Forecasts of Real Economic Activity? 2–3 (Apr. 18, 2011) (unpublished manuscript), *available at* http://perma.cc/5Q5C-R6NZ (arguing that the CDS market provides an important indicator to forecast economic risk affecting the real economy, and may provide a more accurate way to model such risk than Treasuries); Mark J. Flannery et al., *Credit Default Swap Spreads as Viable Substitutes for Credit Ratings*, 158 U. PA.

the run-up to the Crisis, CDS indices came to the fore as early warning mechanisms of the coming decline in the housing market,[95] even when credit rating agencies[96] signaled that the market remained robust and on an upward trajectory.[97]

Despite the benefits offered by CDSs, there are reasons for caution. In analyzing the risks posed by the CDS market, policymakers have focused on the impact of CDSs on the financial system.[98] In other words, little attention has been given to the role of CDS markets on corporate Main Street governance. Generally speaking, reform has addressed the opacity of CDS markets, their ad hoc reporting mechanisms,[99] and the risk-mitigation mechanics[100] governing their trading.[101] These reforms represent significant

L. REV. 2085, 2086–90 (2010) (noting that CDS spreads incorporate information far quicker than credit ratings).

95. *See, e.g.*, Gary B. Gorton, *The Subprime Panic* 1–2 (Yale ICF Working Paper No. 08-25, 2008), *available at* http://perma.cc/J7YP-ZDVZ (arguing that the ABX indices, reflecting baskets of CDS, provided an early indicator of the downturn in the housing market).

96. *See, e.g.*, Howell Jackson, The Role of Credit Rating Agencies in the Establishment of Capital Standards for Financial Institutions in a Global Economy 5–11 (unpublished manuscript), *available at* http://perma.cc/335V-RZUY (discussing the reliance on credit rating agencies in the Basel Capital Accords for calculating how much capital banks are required to keep).

97. *See, e.g.*, John Patrick Hunt, *Credit Rating Agencies and the 'Worldwide Credit Crisis': The Limits of Reputation, the Insufficiency of Reform, and a Proposal for Improvement*, 2009 COLUM. BUS. L. REV. 109, 113–14 (noting the poor performance of rating agencies despite their reputation in the market).

98. Derivatives traders have come to rely heavily on industry-standard master agreements that express general consensus on definitions, industry conventions, and risk-mitigation mechanisms (e.g., close-out netting). These master agreements have reduced legal uncertainties between parties and cut transaction costs. They can be modified by parties to suit the terms of their deal. *See* Bushan Jomadar, The ISDA Master Agreement—The Rise and Fall of a Major Financial Instrument 4–9 (Aug. 24, 2007) (unpublished manuscript), *available at* http://perma.cc/44FD-U8U8 (discussing the standardization efforts generated by the widespread use of the ISDA Master Agreement); Frank Partnoy, *ISDA, NASD, CFMA, and SDNY: The Four Horsemen of Derivatives Regulation*? 6–10 (Univ. of San Diego Sch. of Law Pub. Law & Legal Theory Working Paper, Paper No. 39, 2001), *available at* http://perma.cc/7RZF-DZ2R (discussing the private regulation of the derivatives market through ISDA).

99. Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203, § 723, 124 Stat. 1376, 1800 (2010) (to be codified at 7 U.S.C. § 2) (requiring that swaps be traded on swap execution facilities and be subject to mandatory clearing).

100. Dodd-Frank Act §§ 731, 766(b). The Dodd-Frank Act mandates that CDS trading move, as far as possible, to be traded on swap execution facilities (put simply, exchanges) and cleared using clearinghouses. Clearinghouses match trades and ensure trade completion. By proceeding through clearinghouses and exchanges, regulators seek to bring transparency and systemic stability to CDS markets.

101. Robert P. Bartlett, III, *Inefficiencies in the Information Thicket: A Case Study of Derivative Disclosures During the Financial Crisis*, 36 J. CORP. L. 1, 3–4 (2010) (noting the complexities of data relating to credit derivatives that impede the ability of the market to absorb its implications). It should be noted that the Dodd-Frank Act mandates greater transparency for

changes for CDS markets and the way its participants internalize and pay for the risks they assume.[102] However, they do not explain or address the costs that CDS markets create for borrowers that see CDS trading on their debt.

B. Distributive Impact of CDS Trading

CDSs trade extensively on the debt of single corporate entities. Bank lenders and bondholders purchase CDS protection on the corporate debt they take on. On the other side, CDS protection sellers acquire "synthetic" exposure to the underlying company by assuming the risk of this debt. Around two-thirds of CDS trading occurs on CDSs that reference the debt of one underlying reference entity, such as a sovereign or a corporate entity. Approximately fifty-seven percent of all single-name CDS trades reference a corporate entity.[103]

Buyers and sellers of credit protection generally comprise Wall Street's largest financial firms.[104] In addition to size and sophistication, these firms provide credit to the financial system, both to other financial firms as well as to companies, through direct loans and purchases of bonds or commercial paper.[105] This particular composition of firms in the CDS market is no accident. By legislative

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derivatives markets under Title VII through mandatory trade reporting. However, the fact of reporting may not necessarily reduce informational deficits where this information remains difficult to understand.

102. THE G-20 PITTSBURGH SUMMIT, LEADER'S STATEMENT 9 (2009), *available at* http://perma.cc/EW4G-GYLM (The G-20 consensus is reflected in Title VII of the Dodd-Frank Act that sets out a reform strategy for OTC derivatives. In the European Union, the European Markets Infrastructure Regulation implements the G-20 consensus on derivatives reform.); COMM. ON CAPITAL MARKETS REGULATION, THE GLOBAL FINANCIAL CRISIS: A PLAN FOR REGULATORY REFORM 48 (2009), *available at* http://perma.cc/SDA3-562N; Michael Barr, Professor, Univ. Mich. Law Sch., Speech to the Pew/NYU Stern Conference on Financial Reform: Dodd-Frank Act, One Year On (July 21, 2011), *available at* http://perma.cc/85HS-EVP8 (discussing the role of OTC derivatives in increasing debt bubbles in the financial system). *See generally* CHRIS BRUMMER, SOFT LAW AND THE GLOBAL FINANCIAL SYSTEM: RULEMAKING IN THE 21ST CENTURY (2012) (presenting an excellent and comprehensive analysis of the governance and regulatory framework for global finance, its decisionmaking processes, and the key bodies driving the reform agenda globally).

103. CHEN ET AL., *supra* note 20, at 7–8; *CDS FAQ*, http://perma.cc/k223-keyq (isdacdsmarketplace.com, archived Feb. 5, 2014).

104. CHEN ET AL., *supra* note 20, at 7.

105. Commercial paper means bonds that are of a short maturity (under one year, and often shorter). They are used by companies of all sizes to maintain operations (e.g., to make payroll, buy inventory etc.). Without purchases of commercial paper ongoing, companies can face a major credit crunch. During the Crisis, the Fed set up the Commercial Paper Funding Facility to incentivize investment in commercial paper. *See Commercial Paper Funding Facility*, http://perma.cc/AA9P-87M8 (federalreserve.gov, archived Feb. 5, 2014) (explaining why the Federal Reserve created the Commercial Paper Funding Facility).

intent, only the most sophisticated financial firms have been permitted to enter the over-the-counter ("OTC") trading space.[106] Significantly, the risks inhering in CDSs, as well as the complexities in valuing them,[107] have reduced the number of firms institutionally equipped to engage in this market. This is evidenced in part by the fact that the number of CDS traded by nonfinancial firms is virtually negligible.[108] The demand and supply for these instruments is basically confined to a cohort of sophisticated financial firms. Beyond their sizeable stature, however, there are a few other notable trends among the institutions that comprise the CDS market.

Protection buyers. Research has uncovered that, on a net basis, banks tend to buy protection on their exposures rather than sell it. Banks have historically been the biggest users of CDSs.[109] This is not surprising when one considers their role in originating credit to the corporate and financial sector. Studies note that, while not all banks use CDSs to hedge their exposures, the ones that do increase their use of CDSs when they increase their lending to corporate and industrial borrowers and to larger debtors.[110]

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106. Commodities Futures Modernization Act of 2000, Pub. L. No. 106-554, §§ 103, 120, 114 Stat. 2763 (2000) (codified at 7 U.S.C. §§ 2(h), 25(a)(4) (2012)).

107. *See* Houman B. Shadab, *Credit Risk Transfer Governance: The Good, the Bad, and the Savvy*, 42 SETON HALL L. REV. 1009, 1020–21 (2012) (discussing the unique nature of credit risk and challenges in valuation); Charles Smithson & David Mengele, *The Promise of Credit Derivatives in Nonfinancial Corporations (and Why It's Failed to Materialize)*, 18 J. APPL. CORP. FIN. 54, 55–56 (noting that corporates frequently use currency and interest rate derivatives but show a low use of CDS); *see also* BANK FOR INT'L SETTLEMENTS, SEMIANNUAL OTC DERIVATIVES STATISTICS AT END-DECEMBER 2011 (2012), *available at* http://perma.cc/E8LK-BXVU (showing that nonfinancial institutions do not use credit derivatives, whereas they do use other types of OTC derivatives such as interest rate swaps).

108. Smithson & Mengele, *supra* note 107, at 57–58 (noting that corporations were reluctant to use CDS owing to uncertainties as to whether CDS can achieve the desired hedge and challenges in how to provision for entering into the CDS).

109. *See* FIN. CRISIS INQUIRY COMM'N, PRELIMINARY STAFF REPORT: CREDIT DERIVATIVES AND MORTGAGE-RELATED CREDIT DERIVATIVES 4 (2010), *available at* http://perma.cc/8Q8S-FA92 (noting that commercial and investment banks composed the majority of CDS users); CRAIG VARRELMAN & LEWIS TATTANNI, CREDIT DEFAULT SWAPS: INTO THE MAINSTREAM, GE ASSET MANAGEMENT WHITE PAPER (2005).

110. BEVERLY HIRTLE, FED. RESERVE BANK OF N.Y., STAFF REPORT NO. 318, CREDIT DERIVATIVES AND BANK CREDIT SUPPLY 6–7 (2008) (noting that CDS were shown to increase lending, particularly when loans were made to the commercial and industrial sector); Bernadette A. Minton et al., *How Much Do Banks Use Credit Derivatives to Reduce Risk?* 4–5 (Fisher Coll. of Bus., Working Paper No. 2006-03-001, 2006) (reporting that banks are net buyers of credit protection and that CDS use correlates positively with banks with poorer capital reserves, equity capital and net income); *see also* THE BRITISH BANKERS ASS'N, BBA CREDIT DERIVATIVES REPORT 17–18 (2006) (surveying market practitioners in the credit derivatives market through the use of a detailed questionnaire).

Protection sellers. By contrast, the net sellers of credit protection include insurers, pension funds, and more surprisingly, mutual funds, alongside a collection of specialist broker–dealers.[111] The involvement of insurance firms as protection sellers tallies with their historic expertise in risk valuation (though as seen in the demise of AIG, insurer participation has also generated a concentrated source of risk). That pension and mutual funds are engaged in selling credit protection to Wall Street's highest sophisticates is perhaps more revelatory.[112]

Hedge funds. The arrival of hedge funds to the market has been transformative. From a modest start in 2001, when hedge funds comprised approximately 3% of buyers and 5% of sellers of protection, their participation grew to 28% of buyers and 32% of sellers at the height of the credit bubble in 2006.[113] Correspondingly, the hold of commercial and investment banks on the market fell from 63% of buyers and 81% of sellers in 2001 to 59% of buyers and 44% of sellers in 2006.[114] More recently, an important 2011 report notes that hedge funds[115] have (on a net basis) tended to buy protection. This might suggest that, post-Crisis, they harbor a more negative view of the future creditworthiness of underlying companies.[116] These shifting

111. BANK OF INT'L SETTLEMENTS, BIS QUARTERLY REVIEW 86 (Dec. 2011), *available at* http://perma.cc/32JY-L2CB; *see* Lisa Pollack, *Meet the Credit Derivative End Users*, http://perma.cc/6ZZA-2DR5 (ft.com, archived Feb. 5, 2014) (noting that it is logical that broker–dealers are net protection sellers); Houman Shadab, *Hedge Funds Transfer Risk to Derivatives Dealers*, http://perma.cc/D3BQ-AZP3 (lawbitrage.typepad.com, archived Feb. 5, 2014) (explaining that "CDS dealers on net bought protection from all other types of counterparties except for hedge funds"). Where hedge funds are concerned, dealer firms tend to sell protection to hedge funds, even though dealers tend to hold an overall protected position in the market.

112. For example, a recent study of the hundred largest corporate-bond mutual funds notes the increased use of CDS by mutual funds. In particular, the study highlights that sixty percent of these funds use CDS and are net sellers of CDS protection. Funds that underperform in the first half of the year evidence a greater tendency to use CDS in the second half. Some mutual funds were reported to hold CDS positions that were, in notional value, larger than the value of their total net assets. *See* Tim Adam & Andre Guettler, The Use of Credit Default Swaps in Fund Tournaments 25 (Aug. 16, 2013) (unpublished manuscript), *available at* http://perma.cc/6U5R-EY5F (comparing fund characteristics and CDS usage).

113. THE BRITISH BANKERS ASS'N, *supra* note 110, at 17–18.

114. FIN. CRISIS INQUIRY COMM'N, *supra* note 82, at 301.

115. Section 619 of the Dodd-Frank Act, otherwise known as the Volcker Rule, prohibits short-term proprietary trading for banks. This prohibition may impact the extent to which banks engage in speculative credit derivative trading. While invariably important, this Rule is unlikely to significantly diminish the attraction of CDS as strategic governance tools. Professor Charles Whitehead argues that activities like CDS trading (especially protection selling) will likely end up with investors such as hedge funds, permitted to engage in proprietary trades and relatively less regulated than banks. Charles Whitehead, *The Volcker Rule and Evolving Financial Markets*, 1 HARV. BUS. L. REV. 39, 42 (2011).

116. BANK OF INT'L SETTLEMENTS, *supra* note 111, at 8.

parameters of hedge funds in the CDS market suggest that hedge funds use CDSs strategically to maximize gains in current market conditions.

Moving beyond these trends, the allocation of risk between market actors and institution type can be highly asymmetric. The larger banks tend to operate as net protection buyers. But they do not buy protection all the time, and in the earlier days of CDS trading, banks dominated as protection sellers. However, as the market has grown, a niche cohort of pension funds, insurers, mutual funds, and some broker dealers has emerged to specialize in selling credit protection. The asymmetry here creates the potential for an uneven distribution of risk in the market, which concentrates risk in the hands of a specialized group of actors. In broad strokes: a niche number of pension and mutual funds, insurers, and a subset of broker–dealers can hold enormous swathes of credit risk vis-à-vis the rest of the market, and in particular, the federally insured banking sector.[117] Where markets are stressed, it becomes much harder for this niche group of actors to sell or share this risk with others. Put differently, the higher the chances of CDSs paying out, the lower the likelihood that protection sellers can shift or share their own exposure to other actors. They thus face a challenging proposition. Protection sellers are left holding vast amounts of risk on underlying borrowers without any legal tools to control the conduct of these debtors. Such an imbalance spells danger not only for individual protection sellers but also for the financial system as a whole, which depends on protection sellers to manage credit risk.

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117. This analysis is necessarily imperfect. In the absence of fulsome data on the CDS market, the interpretations above are open to nuancing. For example, not all banks buy equal levels of protection. Some frequent users may dominate by volume. A small number of banks may be buying up a disproportionately large level of protection. Conversely, it is possible that banks, when they sell protection, reference higher risk underlying debtors. Arguably, the ability of banks (in particular) to access Federal Reserve discount windows and deposit insurance might spur a search for risky yield. *See* Christine A. Parlour & Andrew Winton, Laying off Risk: Loan Sales v Credit Default Swaps 4–5 (Apr. 23, 2009) (unpublished manuscript) (suggesting that of US bank holding companies with over $1 billion in assets, twenty-three used credit derivatives, and these twenty-three accounted for approximately sixty percent of sample assets). As an example of dealer banks referencing high risk underlying debt, see Yalman Onaran, *Selling More CDS on Europe Debt Raises Risk for U.S. Banks*, http://perma.cc/TJR7-KL6N (bloomberg.com, archived Feb. 5, 2014) (reporting that, in acting as protection sellers, the notional CDS exposure for US banks rose from $80.7 billion to $518 billion on Italian, Greek, Spanish, Irish and Portuguese government and corporate debt in the first half of 2011); *see also* Beverly Hirtle, *Credit Derivatives and Bank Credit Supply*, 18 J. FIN. INTERMEDIATION 125 (2009) (using a microdata set of individual corporate loans to explore whether use of credit derivatives is associated with an increase in bank credit supply); Minton et al., *supra* note 110, at 2 (examining the use of credit derivatives by US bank holding companies from 1999 to 2003).

In summary, CDSs have emerged as a remarkable innovation in modern financial markets, allowing firms to finely parse and share the credit risks of lending to Main Street companies. CDSs generate important benefits when they help lenders hedge their risks. But they can also be dangerous when market actors cannot fully understand and provision for the risks they assume. However, while the literature and regulation has focused on the risks posed by CDSs for financial stability, there has been little focus on the risks posed by the CDS's ability to separate the economic risk in debt from the legal rights traditionally used by lenders to control that risk.

IV. SEPARATING OWNERSHIP AND CONTROL IN DEBT

This Part challenges and reconceptualizes current theory regarding the impact of credit derivatives on debt governance.[118] CDSs effect a separation between those who hold economic risk in debt and those who possess the control rights to that risk. Akin to corporate law's traditional separation of ownership and control, moral hazard can arise when the lender holding control rights has no skin in the game to exercise those rights in a diligent manner. However, this Part offers a new perspective. It suggests that lenders and protection sellers have powerful incentives to try to cure this moral hazard. This Part lays the groundwork for a proposed market in debt governance. This market seeks to overcome the costs that CDSs can extract from companies through lender mismanagement and rent seeking. At the same time, the market seeks to place control rights in the hands of those who are best incentivized to exercise them effectively.

A. The Costs of Separation

Traditional theory argues that lenders who purchase credit protection lose interest in exercising the levers of control available to them through their loan or bond agreement. Professors Hu and Black, in a series of leading articles, theorize that CDS trading diminishes lender incentives to exercise control rights in debt. Moreover, CDS trading motivates lenders to pursue inefficient outcomes as debtors enter financial distress and insolvency. In short, traditional theory

118. *See, e.g.*, Subrahmanyam et al., *supra* note 4, at 4 (an empirical study of 901 firms with CDS trading on their debt to show these are more susceptible to default or a decline in credit quality, attributable, authors suggest, to poor lender monitoring); Anurag Joshi, *Reserve Bank of India Introduces Credit-Default Swaps: Limits Market Scope*, http://perma.cc/HN4C-FCP2 (bloomberg.com, archived Feb. 5, 2014) (detailing the Reserve Bank of India's introduction of CDS).

suggests the following: (i) lenders that protect themselves using CDSs have limited interests in exercising debt governance vis-à-vis the borrower; (ii) such lenders are likely to behave recklessly, increasing the chances that a debtor falls into distress; and (iii) as debtors approach distress, hedged lenders are likely to push borrowers towards bankruptcy in order to recoup payment on the CDS and exit their investment.[119]

Briefly stated, where lenders hold credit risk on their books, they are motivated to exercise their control rights in debt to ensure that the borrower remains creditworthy. By exercising these control rights, lenders pursue outcomes that better promote a borrower's economic value, limiting the risks that the borrower takes on and assuring repayment on the debt. Effective debt governance is also evidenced by lenders taking steps to preserve a borrower's enterprise value through debt restructuring—for example, using write-downs, debt-for-equity exchanges, or delayed debt repayment.[120]

The CDS radically transforms this alignment of interests. As argued by Hu and Black, when a lender purchases credit protection on its debt, it loses motivation to exercise its debt governance rights in a responsible way. As a result, the lender becomes more interested in securing private rents through a repayment of the CDS rather than in monitoring and preserving the borrower's enterprise value.[121] In short, these lenders become "empty creditors"—creditors in name only—without holding economic risk vis-à-vis the borrower on their books.[122]

The social costs created by empty creditors can be enormous.[123] Lenders with no skin in the game may needlessly destroy enterprise

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119. *See* Bolton & Oehmke, *supra* note 1, at 2617 (presenting a finance-theory viewpoint modeling the operation of empty creditors from an ex ante and ex post perspectives)*;* Lubben, *supra* note 1, at 405 (discussing the incentives of lenders using credit derivatives in restructurings); Tung, *supra* note 1, at 167–69 ("Derivatives markets enable investors to construct portfolios that disaggregate cash flow rights from the control rights associated with their investments."). *See generally* Hu & Black, *Debt Decoupling*, *supra* note 1 (discussing the problems created by equity derivatives); Hu & Black, *Empty Voting II*, *supra* note 1 (same); Hu & Black, *Hedge Fund Insiders*, *supra* note 1 (same).

120. Danis, *supra* note 1, at 2.

121. Hu & Black, *Debt Decoupling*, *supra* note 1, at 18–19 ("Even a creditor with zero, rather than negative, economic ownership may want to push a company into bankruptcy, because the bankruptcy filing will trigger a contractual payout on its credit default swap position.").

122. It should be noted that lenders still assume risk on the protection seller. In other words, they still depend on the protection seller being solvent enough to make good on the promised CDS protection. This counterparty risk exists between the parties to the CDS.

123. *See* Lubben, *supra* note 1, at 405 (discussing the incentives of lenders using credit derivatives in restructurings); Subrahmanyam et al., *supra* note 4, at 9–11 (an empirical study of

value because they will be less likely to take steps that will benefit the borrower's economic health. For example, they will be less likely to exercise good debt governance, to prevent excessive risk taking, or to support needed restructurings. Where empty creditors extend credit to risky or losing businesses, these failings do more than just destroy the borrower's enterprise value. They also create externalities for the financial system as a whole.[124]

The costs of separating economic risk from control rights are widely noted. First, finance theory increasingly recognizes the costs CDSs impose. Professors Bolton and Oehmke, for example, argue that while CDSs can have benefits in debt governance, they can also impose significant costs. They posit that lenders are likely to overinsure their debt by purchasing more credit protection than the value of their underlying debt. In this way, lenders become more likely to push for inefficient outcomes by seeking to be repaid quickly under the CDS, or by extracting maximum rents from the borrower, owing to their strong bargaining position.

Second, empirical studies have demonstrated that CDSs can have pernicious effects on debt governance.[125] A study of 901 companies, for instance, noted that their likelihood of suffering a credit downgrade and overall deterioration in creditworthiness increased with the start of CDS trading on their debt.[126] The study suggests that the blame for this decline lies with empty creditors, who become uninterested in debt restructuring. Similarly, another study notes that CDS trading on a firm's debt leads to a marked decline in the firm's ability to restructure through a distressed debt exchange that reduces the amount this firm must repay. This, the study argues, can lead to such firms suffering a higher incidence of default.[127]

Third, a series of high profile examples dating from the earliest days of CDS trading also showcases the harmful effects of empty

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901 firms with CDS trading on their debt to show these are more susceptible to default or a decline in credit quality, attributable, authors suggest, to poor lender monitoring).

124. Jordan M. Barry et al., *On Derivatives Markets and Social Welfare: A Theory of Empty Voting and Hidden Ownership* 2 (Rock Ctr. for Corporate Governance, Working Paper No. 122, 2012) (arguing that empty voting can make markets unstable, unpredictable, and inefficient).

125. Some studies note that the empty creditor hypothesis is difficult to prove empirically. For alternative viewpoints on the empty creditor perspective and a review of the literature detailing the complexities of investigating the operation of the empty creditor hypothesis and possible lack of application, see Mascia Bedendo et al., Distressed Debt Exchanges in the Presence of Credit Default Swaps 3 (Nov. 15, 2012) (unpublished manuscript), *available at* http://perma.cc/7NZM-7JRL (noting that their study did not find evidence that CDS led to greater incidence of bankruptcy over out-of-court workouts).

126. Subrahmanyam et al., *supra* note 4, at 22.

127. Danis, *supra* note 1, at 34.

creditors. Indeed, some commentators have gone so far as to suggest that, when restructuring proposals fail or attract low creditor participation, credit derivatives are usually to blame.[128] In 2003, Mirant Corporation, a Georgia-based energy company, filed for Chapter 11 bankruptcy protection when discussions with its creditors, a number of whom had purchased CDS protection against Mirant's debts, broke down. The proceedings highlighted that the company would still hold value even after Mirant repaid all of its creditors. In other words, Mirant still remained viable and retained net economic value for its shareholders. As creditors had succeeded in pushing a viable enterprise into bankruptcy, it seemed that empty creditors had prevailed.[129]

Similarly, in 2010, the technology firm Unisys was forced to improve the deal for its CDS-protected creditors to coax them into restructuring Unisys's debt. In its proposal to bondholders, Unisys offered to exchange outstanding notes for senior secured debt at a rate of ninety-five cents on the dollar and twenty percent in cash, making the bonds more valuable than at par value—that is, the face value of the original bonds. This remarkable result points to creditors that enjoyed an especially strong bargaining position versus the borrower. Lenders could extract high rents by virtue of being hedged under CDSs, knowing that if they failed they would be protected anyway.[130] Empty creditors have also been implicated in the restructurings of Harrah's Entertainment, General Motors and Chrysler, Six Flags, General Growth Properties, and others. Indeed, the impact of empty creditors has been viewed as so potent and costly that any decision to start restructuring must often begin by determining the value of CDSs outstanding on existing debt.[131] Unfortunately, despite the costs, policymakers have not given serious attention to the problem, leaving these externalities to reverberate unchecked across Main Street.

In summary, the empty creditor hypothesis develops three core propositions: (i) lenders lose interest in debt governance once they trade the economic risk of this loan to a credit protection seller; (ii) with a CDS in play, lenders are chiefly interested in recouping the payment on the CDS and enjoying a quick exit; and (iii) this behavior

128. Henny Sender, *CDS Investors Hold the Cards as CDS as Groups Try to Exchange Debt*, http://perma.cc/8WZ5-RDDN (ft.com, archived Feb. 5, 2014).

129. For discussion, see Bolton & Oehmke, *supra* note 1, at 2620–22.

130. Sender, *supra* note 128; *see also*, Bolton & Oehmke, *supra* note 1, at 2621–23 (discussing remedies to overcome the inefficiencies caused by excess insurance).

131. Sender, *supra* note 128; Michael S. Rosenwald, *Plagued by Debt, Six Flags Faces Its Own Wild Ride*, http://perma.cc/E59B-ALWX (washingtonpost.com, archived Feb. 5, 2014).

leads to perverse outcomes in debt governance and bankruptcy, where lenders can push even viable debtors to fail. The hypothesis is anchored in the CDS instrument's basic design and in the CDS's ability to separate the economic risk in debt from the legal rights that frame that risk. Where lenders no longer constitute the locus where economic risk and legal control align, theory argues, the consequences are overwhelmingly negative.

B. The Promise of Cooperation

Despite the grim prognosis offered by the empty creditor hypothesis, the picture is not as bleak as it might initially appear. The empty creditor hypothesis presents only a partial perspective on CDS trading and debt governance. Indeed, a further dynamic animates the CDS markets, one arising from the tension between CDS protection buyers and protection sellers. Although lenders lose interest in the exercise of their control rights in debt, these rights (and the influence they carry) assume tremendous significance for the CDS protection seller. The CDS protection seller—the economic lender for all intents and purposes—holds risk but no corresponding legal rights to safeguard its interest.[132] To cure this deficit, a protection seller should, in theory, possess strong incentives to acquire control rights and influence, in order to reduce the risk the underlying company poses. These incentives are likely to grow more powerful the closer a debtor edges towards default. In such cases, protection sellers cannot easily sell or share their own exposure to the debtor. And lenders are most likely to behave recklessly in order to trigger repayment on the CDS.

If properly harnessed, these incentives provide a basis on which to better allocate debt governance responsibilities to those who have an interest in their exercise and who are less likely to pursue inefficient outcomes for the borrower. As detailed in Part V, this Article proposes that lenders and protection sellers be able to trade control rights in debt with each other in a manner that promotes good governance and minimizes the potential for abuse on both sides. However, a first-order problem remains: Why should a lender trade the debt governance rights and levers at its disposal, given its interest in seeing a debtor fail and then recouping payment from the CDS protection seller? After all, this lender has paid for credit protection: it should want to get its money's worth.

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132. It is possible, of course, for protection sellers to protect themselves in other ways, for example, by buying credit protection on the risks that they hold. However, such methods may be impractical or expensive, particularly when a debtor poses a risk and any insurance on risks becomes overly expensive to obtain.

Despite incentives towards becoming disruptive empty creditors, however, lenders are subject to several powerful incentives that can encourage cooperation with the protection seller. As described below, these include (i) the importance of a lender's reputation, (ii) the ongoing costs of monitoring viable companies, and (iii) the influence of unhedged creditors in a company's capital structure. These pressures are significant in making lenders open to the possibility of trading debt governance levers with CDS protection sellers in the interests of promoting better credit discipline.

1. Reputation and Regulation

Reputational capital is key in the CDS market, maybe more so than anywhere else in the financial markets. Participants in the CDS market undertake risky transactions on a repeat basis. For most of the market's history, parties have relied on one another to establish adequate levels of collateral, risk-management practices, and disclosure conventions.[133] In the historical absence of regulation, reputational capital has facilitated this interdependence and functioned as a proxy for hard rules of the road in governing the conduct of market participants. Reputational capital is significant in two respects. First, CDS protection buyers can face market and public reprimand where they fail to exercise sound governance over an underlying debtor, suggesting that they are not playing fairly in CDS markets. Anecdotally, at least, some lenders have faced considerable public rebuke after being revealed as empty creditors. For example, in the run-up to its Chapter 11 bankruptcy filing in 2009, amusement park operator Six Flags offered its unsecured creditors an eighty-five percent equity stake in an effort to restructure its debt outside of bankruptcy.[134] However, Six Flags failed to gets its creditors on board, owing, some publically speculated in the news media, to the efforts of a CDS-protected Fidelity fund that refused to come to the bargaining table.[135]

The restructuring of YRC Worldwide, one of the largest trucking and transportation companies in the United States, provides another case in point. When YRC met resistance in its efforts to get the required number of creditors to agree to its debt-for-equity

133. Stout, *supra* note 8, at 22–24.

134. *CDSs and Bankruptcy: No Empty Threat*, http://perma.cc/6KGH-GY22 (economist.com, archived Mar. 3, 2014); Daniel Gross, *the Scary Rise of the "Empty Creditor,"* http://perma.cc/N8AC-ETGY (slate.com, archived Mar. 3, 2014).

135. *See* sources cited *supra* note 134.

exchange offer, YRC union members blamed empty creditors for the resistance.[136] The Teamsters, headed by James P. Hoffa (son of the famous Jimmy), wrote letters to the SEC and New York Attorney General Andrew Cuomo suggesting that Goldman Sachs and others were making a market in bonds and CDSs that would encourage creditors to vote against the exchange offer.[137] As the Teamsters began preparations to picket before the offices of Brigade Capital Management, a suspected creditor involved in the strategy, some firms bought up the bonds from resisting creditors and voted for the exchange offer.[138] Reports suggest that the firms buying the bonds from Brigade included those named in Hoffa's letter to the SEC.[139]

As evident in the case of YRC, reputation and the threat of peer and public sanction can have a real impact on outcomes for underlying borrowers. While the CDS market has suffered from opacity in the past, making it harder to glean the interests and incentives of empty creditors, the promise of transparency following the Dodd–Frank Act should make the reputational threat much more potent. Where lenders worry about being exposed as empty creditors and as bad bets in the CDS market, they should be more open to cooperating on, rather than contesting, good debt governance outcomes. Otherwise, problem creditors face the risk of losing their reputations both publically and privately within CDS markets. This might lead to them being charged more for credit protection, or of seeing only their safest debt covered by protection sellers.[140]

Second, bad reputations generate network externalities across the financial markets as a whole. Where a lender ends up with a bad loan book, counterparties across all markets—not just the CDS market—may be wary of doing business with that firm. A toxic balance sheet, as well as a reputation for recklessness, may well imperil a lender's ability to raise funds in the capital markets.[141]

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136. *Teamsters Seek Probe of YRC Debt Trading*, http://perma.cc/953K-RMBN (joc.com, archived Mar. 3, 2014).

137. *Id.*

138. Thomas L. Gallagher, *Teamsters Postpone Protest in Support of YRC*, http://perma.cc/4WNG-HVTZ (joc.com, archived Mar. 3, 2014).

139. William B. Cassidy, *Hoffa Says Teamsters Build YRC Success*, http://perma.cc/Z7UX-VH8Y (joc.com, archived Mar. 3, 2014).

140. For example, MBIA, the monoline insurer, provided cover for mortgages in the CDS market. It provided cover on mortgages extended by Countrywide. When these loan books fell into default, MBIA and Countrywide became involved in tussles for MBIA to recoup payment for Countrywide's alleged lack of diligence. *See* Felix Salmon, *MBIA's Volatile Credit Protection*, http://perma.cc/52DT-Y8WR (reuters.com, archived Feb. 5, 2014) (reporting on MBIA CEO Jay Brown's testimony that he is pursuing banks that lied to him in order to get his money back).

141. *See* Nada Mora & Andrew Logan, *Shocks to Bank Capital: Evidence from UK Banks at Home and Away* 8 (Bank of Eng., Working Paper No. 387, 2011) (noting that banks that suffer

Lenders that accumulate bad loans on their books create risks for any other firm that supplies credit to them or that shares risk with them in supplying credit to borrowers. Returning to Six Flags, for example, a number of creditors emerged with far greater losses after the Chapter 11 restructuring than they would have suffered had the out-of-court plan gone ahead. The class of unsecured creditors set to get an eighty-five percent stake in Six Flags under the out-of-court plan emerged with just one percent after Chapter 11 proceedings. Given these potential costs to a multiplicity of creditor classes, not just protection sellers, sources of private discipline can extend beyond the CDS market. Importantly, where a lender externalizes risks to the entire market through its recklessness, the attention and ire of market regulators are likely to soon follow.

Simply put, there are costs involved in behaving recklessly vis-à-vis underlying debtors. These can be significant and potentially much higher than the payout likely to be received from triggering repayment under the CDS.[142] It makes sense, then, for lenders to consider the trade-off between the gains they may receive from triggering the CDS against the reputational costs of a high default rate on loans and those attached to being a problem player in credit markets.

These costs should motivate lenders to look for ways to share debt governance responsibilities with others who have incentives to be diligent. A protection seller provides the most effective option. By letting the protection sellers provide monitoring and disciplining services, a lender saves itself cost and effort, and frees up attention to focus elsewhere. Giving protection sellers a role in debtor oversight allows an interested and expert actor to suggest how best to maintain

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capital shocks often migrate to lending to less risky borrowers); *see also* Jessica Silver-Greenberg, *Citigroup to Cut 11,000 Jobs and Take $1 Billion Charge*, http://perma.cc/57ZZ-H95N (dealbook.nytimes.com, archived Feb. 5, 2014) (discussing the costs to Citigroup owing, amongst other factors, to a glut of bad loans on its books).

142. The Federal Depository Insurance Corporation ("FDIC"), for example, supervises banks alongside the Federal Reserve and other regulators such as the Office of the Comptroller of the Currency. The FDIC provides deposit insurance in cases a bank fails and has expertise in bank resolution and risk management. As part of its supervisory duties, the FDIC assesses lending practices, the depth of losses on a bank's loan book. Post-Crisis, the FDIC can charge higher fees to those banks whose governance practice encourage risk taking. *See, e.g.,* FDIC, RISK MANAGEMENT MANUAL OF EXAMINATION POLICIES: LOANS § 3.2, *available at* http://perma.cc/54N6-N9XQ (FDIC Risk Management Manual of Examination Policies); Michael R. Crittenden, *FDIC Moves to Tie Fees to Bank Pay*, http://perma.cc/C7B-884Z (wsj.com, archived Feb. 5, 2014) ("The Federal Deposit Insurance Corp.'s board narrowly agreed to start the process to impose higher fees on U.S. banks whose compensation plans encourage risky behavior that could threaten the bank's solvency.").

the creditworthiness of underlying borrowers. Protection sellers might, for example, suggest business strategy changes that better protect the value of a debtor's assets and existing collateral, like liens over the debtor's accounts receivable or the debtor's inventories. They may warn lenders when a debtor appears to be borrowing more than it should or where the debtor is investing in overly risky projects. These proposals can help dramatically improve the risk profile of debtors, lenders, and protection sellers. Where a protection seller monitors an underlying debtor, its scrutiny also disciplines the lender and nudges this lender to be more diligent. Moreover, where protection sellers have greater control over the underlying debt and greater confidence in the lender's good behavior, they may be motivated to lower the cost of protection.[143]

2. Corporate Viability

Empty creditors are present throughout a debtor's life. But the incentives driving empty creditors differ at each stage. When a company remains far from default, rather than pushing it towards default, empty creditors should have strong incentives to maintain enterprise value. To do so at lower cost, empty creditors should rationally seek to share the burdens of governance with CDS protection sellers invested in the sound exercise of creditor control rights.[144] CDS trading takes place on a variety of companies, from banks and financial firms to well-known and well-established Main Street companies, many of which are far from default.[145] It is not easy to push viable companies towards bankruptcy. And strong borrowers create a variety of long-term costs for lenders. Monitoring costs, due diligence responsibilities, requests for waivers, covenant defaults, and dissipation of collateral—to name just a few—all continue. Moreover,

143. Outside of the CDS market, lenders routinely share governance responsibilities in the context of loan syndication. Where loans are syndicated between lenders, each individual lender may have limited incentives to undertake due diligence on the borrower. Often, to avoid the loan going into default, lenders delegate monitoring to one of the syndicate, normally the lead underwriter. All syndicate members can share the costs of monitoring and ensure that, notwithstanding incentives towards laxity, debt discipline is exercised over the loan. *See* Baird & Rasmussen, *supra* note 3, at 1226 (examining the role of creditors in corporate governance decisions).

144. CDSs pay out if a "credit event" takes place. The definition of "credit event" has been notoriously problematic. For example, this issue has emerged in the case of CDS payments on sovereign default. *See* Christopher Whitehall, *US CDS Trigger Still Uncertain*, http://perma.cc/3SFN-YGXP (ifre.com, archived Mar. 3. 2014).

145. For a list of some household corporate names with CDS traded on their debt, see *Credit Default Swap Spreads and S&P 500 Constituents Signals from CDS Widening*, http://perma.cc/P6A7-F9CS (seekingalpha.com, archived Feb. 5, 2014).

hedged lenders do not wish to lose powerful clients who represent a source of profit and hold out the promise of future business. Prestige clients, in the form of large, well-known companies, are a prize for a lender's business and profile.

Still, lenders who have purchased credit protection may be less motivated to expend the full costs of monitoring and debt governance. These costs are additional to the sums that lenders spend to buy credit protection. Hedged lenders may be less diligent or more willing to accept a borrower's risky activity, like large capital expenditures or more frequent dividend payments to shareholders. Lenders may fail to correct structural problems with a borrower, like poor accounting and reporting practices. While borrowers might not lurch towards bankruptcy on account of such lender disinterest, they may end up using capital inefficiently. For example, scholars have noted that lender interventions can help make companies operate more efficiently well outside of the bankruptcy context. In one study of 3,500 covenant violations by U.S. public firms, the authors found that lender interventions postviolation usually resulted in borrowers improving operating performance and equity valuation.[146] As noted earlier, such violations are fairly routine occurrences in corporate life. Importantly, the authors observed that violating firms earned statistically significant abnormal returns of around five percent postviolation and showcased better operating efficiency.[147]

Clearly, there are gains to be made if lenders exercise good discipline. Where lenders cannot, owing to poor incentives after purchasing CDS protection, they can, in theory, help borrowers and themselves by shifting their debt governance rights to protection sellers. Lenders save themselves the costs of exercising debt governance. By allowing an interested party to invest in governance rights and share the costs of due diligence, lenders can shift their limited resources elsewhere—for example, to those borrowers whose risks cannot be hedged. Borrowers, too, benefit when their capital is more efficiently used. And protection sellers enjoy an opportunity to ensure reduced risks in the CDS market.

One question bears asking: Why would a protection seller wish to assume these rights when the borrower is far from bankruptcy and the CDS protection seller is unlikely to pay out? If a lender cannot push a viable borrower towards bankruptcy, why should the protection seller care enough to expend its own money to monitor and discipline a

146. Nini et al., *supra* note 37, at 2–4.

147. *Id.*

borrower? A possible response to this query can be found in the structure of CDS trade itself.

Recall that the CDS trade between the lender and the protection seller is supported by the constant provision of collateral. Importantly, the protection seller must provide collateral as an underlying debtor becomes riskier. This assures the lender that the CDS protection seller can pay out in the event that the CDS is triggered. When borrowers become risky, even if they remain viable, CDS protection sellers may end up facing capital costs of their own. They may have to supply collateral under the CDS contract, and potentially in large amounts. Where the value of the swaps written on a borrower's debt is extensive—for example, where there is a large volume of "naked" swaps outstanding—protection sellers may face expensive collateral calls to reflect incrementally higher risks. With this in mind, protection sellers can help themselves by working to maintain borrower creditworthiness and efficiency. If a borrower operates efficiently and shows sound credit risk management, it is likely to enjoy more stable CDS spreads.

One additional factor is worth noting. Protection sellers may become liable to pay out on CDSs across a number of borrowers and industries owing to increased risks attaching to a single important borrower. Large borrowers can interconnect with other enterprises. Firms in similar industries or linked through supply chains may come to be seen as being more risky simply because they are linked to a prominent borrower. A large borrower's deteriorating credit quality can also give rise to a general market shock that creates higher CDS spreads across the corporate sector. If CDS protection sellers can control risks attaching to a central borrower, they may also help to reduce the perceived riskiness of other linked companies.

Of course, this argument is speculative. But the CDS market has shown evidence of such correlations in the past. The 2005 credit downgrades of General Motors and Ford provide one important illustration. When the credit rating of GM and Ford was downgraded to junk status, the market saw CDS spreads rise not only across the auto industry but also across a range of industries, including oil and gas, consumer services, and technology.[148] This rise in CDS spreads reversed eventually. However, these co-movements in CDS spreads between an important borrower and others illustrate the significance

148. Viral Acharya, Stephen Schaefer & Yili Zhang, Liquidity Risk and Correlation Risk: A Clinical Study of the General Motors and Ford Downgrade of May 2005, at 3–5 (Aug. 2008) (unpublished manuscript), *available at* http://perma.cc/6L2R-MAAC.

of preserving the creditworthiness of key viable borrowers in order to prevent ripple effects across the corporate debt market.

3. Creditor Competition

The positive influence of other creditors can make it harder for hedged lenders to pursue reckless and disruptive outcomes vis-à-vis underlying borrowers. Faced with the costs involved in negotiating with other creditors, CDS-protected lenders can be motivated to cooperate with protection sellers in the exercise of debt governance.

Companies often have multiple creditors. Their interplay means that empty creditors cannot always achieve what they want because they face pressure from other interested creditors. A company's various creditors can include banks as well as bondholders, each with varying intensities of control over the enterprise. Some of these creditors might buy CDS protection; others may not. Not all lenders buy CDS protection on the loans that they extend. Some may choose to avoid using CDSs altogether.[149] Certain lenders that use CDSs may do so in an effort to reduce the regulatory burdens they face—buying themselves space on their balance sheets in order to lend more—rather than to recoup payment on the loan made. A company's capital structure—particularly when it includes multiple creditors—can represent an arena of competitive creditor control.

This multiplicity of creditors makes it hard for any single creditor to force its will on the others. And it makes it particularly difficult for empty creditors to push the company into extinction when other creditors would prefer that the company succeed. Thus, empty creditors can face high transaction costs (for example, the direct costs associated with negotiating or litigating with other creditors, or the associated reputational damage from the resulting delays) when they seek to force the company into default.[150]

Findings emerging from recent bankruptcy proceedings are illustrative. In an extensive study, for example, Professors Ayotte and Morrison have observed that intercreditor conflict is rife, especially between senior secured and unsecured creditors.[151] The interests of these creditor groups routinely diverge, with unsecured creditors

149. Minton et al., *supra* note 110, at 4.

150. *See Overview of Goldman Sachs' Financing Transaction with CIT Group*, http://perma.cc/AY5E-L9YR (goldmansachs.com archived Feb. 5, 2014) (issuing a statement denying that CDSs on CIT Group debt were purchased to profit from CIT Group's bankruptcy); Rosenwald, *supra* note 130.

151. *See generally* Ayotte & Morrison, *supra* note 37.

usually more interested in pursuing longer restructurings versus secured creditors who may be more willing to push for a quicker resolution and repayment on their debt.[152] Importantly, outcomes turn on negotiation between these creditor groups and on the strength of their bargaining positions in any one case.[153] For example, where a secured creditor takes out security whose value exceeds that of its debt, it may be more likely to succeed in achieving its preferred outcomes.[154] Other secured creditors whose security is less than the value of their debt may be more willing to negotiate with others.[155] Additionally, secured lenders tend to exercise a high and precise degree of creditor control in insolvency proceedings and retain considerable sway in tilting the direction of outcomes for the debtor.[156]

Enter the empty creditors. Their success in pushing their own preferences in bankruptcy is likely to turn heavily on the power and sway held by other creditors in a company's capital structure and on the cost-benefit trade-offs of action. Empty creditors may only be willing to expend resources to negotiate with other creditors when they have purchased far greater amounts of protection than their underlying debt. Even in such cases, they must account for possible pushback from other creditors, such as unsecured lenders further down the priority ladder that wish to get repaid. These negotiations and the uncertainty of resolution create costs that should disincentivize action by empty creditors.

Empty creditors, recognizing these constraints, should wish to shift the costs of debt governance and negotiation to CDS traders that are invested in its exercise. By shifting monitoring and disciplining burdens, empty creditors can reduce some of the costs they face in holding the debt on their books, even if they cannot cheaply exit their investment by triggering repayment on the CDS.

The presence of multiple creditors is significant in other ways as well. Specifically, competing creditor classes suggest that, where one creditor stops monitoring a debtor, other creditors are able to pick up the slack. If an empty creditor is disengaged or reckless in its exercise of creditor discipline, creditors wishing to ensure that the debtor remains viable can continue to monitor a borrower. This can be seen in the recent rise of bondholder vigilance, whereby engaged

152. *Id.* at 512–14.
153. *Id.* at 514.
154. *Id.*
155. *Id.*
156. *Id.* at 513–14.

bondholders have sought out activist strategies to assert creditor discipline, arguably bringing benefit to the company as a whole.[157]

Certainly, the traditional lack of transparency in CDS markets has created serious challenges for interested lenders to control poor monitoring by others. Without good information, creditors are likely to make incorrect assumptions about the incentives to other lenders within the capital structure to monitor the borrower. For example, a secured lender may simply assume that a large unsecured lender is monitoring the debtor. The unsecured lender, however, may have purchased CDS protection and may thus have limited incentives to monitor. Without fuller information about CDS exposures, the ability of creditors to engage in collective monitoring can become impaired.

However, as CDS markets move towards greater transparency post-Crisis, it is likely that these informational deficits may reduce over time. In other words, creditors will have greater insights into the actual economic interests of others and may thus apply more accurate assumptions regarding their motivations towards debt governance. Hedged lenders might see others stepping in to monitor a debtor where they themselves may be unwilling to do so.

This underscores the point that empty creditors face a variety of considerations in determining whether or not to act with perverse incentives vis-à-vis a debtor. Where empty creditors are met by competing creditors, it makes sense to consider allowing another party to assume some of the costs of debt governance.

C. Reducing Participation Costs

The CDS market creates significant interdependence between protection buyer and protection sellers, laying the groundwork for cooperation rather than conflict.

The CDS market is unique. A few features stand out. First, the market has historically traded complex risks bilaterally between private players.[158] Second, CDSs facilitate the processes of credit

157. For more detail, see Kahan & Rock , *supra* note 68, at 183.

158. NASSIM TALEB, BLACK SWAN: THE IMPACT OF THE HIGHLY IMPROBABLE 225 (2d ed. 2010) (discussing the formation of "tail risks," extreme but rare risk events arising out of complex financial trading); Viral Acharya et al., *Manufacturing Tail Risk: A Perspective on the Financial Crisis 2007-9*, 4 FOUND. & TRENDS FIN. 247, 251 (2010) (discussing the extreme and correlated risks resulting from large firms taking on too much leverage). For an insightful discussion of the challenges of modeling credit risk, see Daniel Goldstein & Nassim Taleb, *We Don't Quite Know What We Are Talking About When We Talk About Volatility*, 33 J. PORTFOLIO MGMT. 4, 84–86 (2007); Benjamin Yibin Zhang et al., *Explaining Credit Default Swap Spreads*

formation in the economy. By allowing banks and others to hedge risks, they enable these firms to lend more cheaply than they otherwise might do.[159] At the same time, they also clearly constitute a powerful source of profit for financial firms. The upside for protection sellers comes when they make money by covering the risks of others (and not having to pay out). Protection buyers make money by hedging their risks through a CDS and lending more. Speculators gain by taking synthetic exposures on underlying debt using a CDS, without incurring the full capital costs of this investment but winning all the same if they happen to be on the right side of the bet.[160] Third, the market comprises a small number of repeat players that trade regularly with one another. The types of firms might diverge. Banks, mutual funds, insurers, and hedge funds represent a diverse mix with varying levels of regulatory constraint, investment habits, and objectives. But at a high level of generalization, this market functions through mutual reliance: one set of institutions buys credit protection, and another set of specialists at the end of the chain supply it. Within this dynamic, speculators of all stripes dip in and out of the arena, relying on, and contributing to, its liquidity.[161]

This basic interdependence yields an important friction. Superficially, the market is clearly adversarial. The protection buyer purchases a CDS and hopes for a quick repayment. On the other side, the CDS protection seller—like any rational insurer—does not wish to pay out. Parties jockey for collateral to support the risks of the

with Equity Volatility and Jump Risks of Individual Firms 1–3 (Bank of Int'l Settlements, Working Paper No. 181, 2005).

159. Alessio Saretto & Heather Tookes, Corporate Leverage, Debt Maturity and Credit Default Swaps: The Role of Credit Supply 12 (Mar. 7, 2011) (unpublished manuscript), *available at* http://perma.cc/XB9S-3RXX; *see also* Adam Ashcraft & Joao Santos, *Has the Credit Default Swap Market Lowered the Cost of Corporate Debt?,* 56 J. MONETARY ECON. 514 (2009) (arguing that CDSs do not reduce the interest rates at which an average firm can borrow in the bond and bank debt market); HIRTLE, *supra* note 110, at 125 (showing that banks that used CDSs extended more credit); Mitchell Petersen & Raghuram Rajan, *The Benefits of Lending Relationships: Evidence from Small Business Data*, 49 J. FIN. 3, 7 (1994) (showing that hedging strategies can increase the supply of credit to small businesses).

160. Daniel Gross, *The Greatest Trade Ever*, http://perma.cc/QF42-MYRN (thedailybeast.com, archived Feb. 5, 2014); Jesse Eisinger & Jared Bernstein, *The Magnetar Trade: How One Hedge Fund Helped Keep the Bubble Going*, http://perma.cc/DVT9-J9UR (propublica.org, archived Feb. 5, 2014).

161. For example, certain actors enter the market to take on or otherwise engage in pure speculative trading on CDS markets without holding any underlying interest. These positions express a positive or negative assessment of the underlying asset's likelihood of default. As an illustration, some hedge funds bought "naked" CDS protection against mortgages in anticipating that these were likely to default, which they did during the housing downturn, generating large gains for the speculators. Gross, *supra* note 160.

contract, ensuring that each side's position is covered at all times.[162] At face value, parties' interests appear to be perpetually in conflict. However, there is more to this relation than meets the eye.

As a starting point, both sides can maximize the gains from their participation where they can enter and use this market with minimal transaction costs. Everyone stands to lose where it becomes prohibitively expensive for one or other side to enter the CDS market: lenders might not find a protection seller, and sellers might not find a lender. Conversely, both sides can maximize the gains from their participation where they can enter and use this market with minimal transaction costs. In other words, protection buyers can best help themselves by having the ability to cost-effectively protect a broader spectrum of risky debt using CDSs. Similarly, protection sellers can save costs where they provision as cheaply as possible for the credit risks that they assume. Cheaper participation enables protection buyers to lend more and protection sellers to provide expanded credit protection.

Take the case of a lender that must regularly purchase CDS protection on the loans that it extends to corporate borrowers. To procure credit protection, it relies on a group of protection sellers. Assume the lender wishes to behave disruptively toward its borrower, pushing the borrower ever closer towards default. This behavior imposes costs on the protection sellers by increasing both the likelihood of pay out and the levels of required collateral. Moreover, protection sellers have no means to control the underlying borrowers or to counteract the lender's negative actions, increasing yet further the protection sellers' costs of transacting in the CDS market. Certainly, the lender might win in a few cases, able to recoup payment on its CDS. But if the lender behaves disruptively on a repeated basis, in the bigger picture, it loses. Where the lender repeatedly represents a source of risk for other CDS traders, obtaining credit protection from protection sellers will be more costly in the long run. These protection sellers, too, will face higher costs of participation owing to the lender's behavior. The protection sellers may even eventually leave the market. When this happens, the lender has even fewer options in its search for affordable credit protection.

Keeping transaction costs low is especially important for the CDS market. Market participants routinely handle a volatile asset—namely, credit risk—which can be hard to model and expensive to

162. Cohan, *supra* note 82.

provision for through protective capital cushions.[163] As a result, the "participation costs" of entering this market are already fairly steep and reflected in the market reality that only the largest financial firms tend to participate.

An additional factor reinforces this shared interest to keep participation costs low. While participants broadly fall into the buyer or seller camp, most routinely undertake both types of functions. It follows that, while parties adopt an adversarial posture in some transactions, viewed as a whole, the CDS market represents an arena for a repeat game. Where parties are continually transacting with each other, they can help themselves by helping each other to keep transaction costs low. This enables firms to participate in the CDS market more cheaply and to improve their cost-benefit trade-offs. Despite its superficially adversarial posture, the market facilitates cooperation through its small cast of actors and history of bilateral dealings. In game-theoretic terms, at its broadest, the CDS market represents a form of assurance game, where parties have a common interest to cooperate in order to maintain their participation—a far greater prize that is over and above gains in any single CDS transaction.[164]

As parties participate in this market on a repeat basis, facing an uncertain outcome with respect to whether or not the CDS pays off, additional incentives to cooperate and keep costs low exist. Parties on both sides take a position on the future creditworthiness of an underlying debt obligation. In theory, ultimate payoffs depend on who has the better estimate of the likelihood of an underlying company defaulting. In the absence of "smoking gun" information, the trade represents an educated position regarding the future of an underlying company. In many cases, default might never happen for the life of the contract. After all, CDSs trade on all types of household company

163. The Dodd-Frank Act is likely to alter the cost calculus somewhat but not fundamentally. The Dodd-Frank Act requires that parties move CDS trading to swap execution facilities (akin to exchanges for CDS contracts) and to clear these contracts through clearinghouses. Moving contracts to regulated exchanges and clearinghouses is likely to reduce the costs of participation through increased transparency, reduced counterparty risks, and more standardized contracts. At the same time, the OTC market continues to exist and parties must still provide for the complex risks that they assume. For further detail on reforms and the risks underlying their implementation, see Sean J. Griffith, *Governing Systemic Risk: Towards a Governance Structure for Derivatives Clearinghouses*, 61 EMORY L.J. 1153, 1177–80 (2012), which discusses the problematic risks that clearinghouses face in clearing OTC derivatives. Yadav, *supra* note 8, at 441.

164. DOUGLAS G. BAIRD ET AL., GAME THEORY AND THE LAW 35–37 (1994). *See generally,* BRIAN SKYRMS, THE STAG HUNT AND THE EVOLUTION OF SOCIAL STRUCTURE (2004) (discussing how parties behave and interact in Rousseau's classic game "The Stag Hunt").

names, many of which are successful and far from default.[165] But because the costs to maintain the contract continue for the length of the bargain, incentives to cooperate are compelling. The protection buyer pays for protection but does not receive repayment on the CDS. Meanwhile, the protection seller, while not paying out, must still provision for the contingency on its books.[166] Given the length of the CDS contract and the range of companies it can cover, cooperation to control risk reduces costs and fosters goodwill in a concentrated market of repeat players.

D. So Why Are CDS Traders Not Cooperating?

This Article suggests that, contrary to conventional wisdom, credit derivatives can improve debt governance rather than consign it to failure. Instead of purely adversarial motives, CDS traders should have powerful incentives to cooperate, thereby improving outcomes in debt governance. The market constitutes an arena for a classical assurance game: parties can maximize gains where they cooperate together to win a grand prize. However, as with any assurance game, cooperation is not always straightforward.[167] In particular, effective cooperation requires parties to (i) possess high levels of information such that they may understand each other's strategies;[168] and (ii) ensure that they are not distracted by smaller payoffs that prevent them from cooperating to achieve the bigger prize.[169]

Still, why are CDS traders not already cooperating? If incentives to do so are as compelling as this Article suggests, then we should be seeing greater cooperation between lenders and protection sellers in matters of debt governance.

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165. Alanna Byrne, *Credit Default Swaps Top Movers: Argentina and Duke Realty*, http://perma.cc/4UEX-7TKK (futuresmag.com, archived Feb. 5, 2014); John Glover, *Europe's $180 Billion of Maturities Lifts Swaps: Credit Markets*, http://perma.cc/LLS4-N32Z (bloomberg.com, archived Feb. 5, 2014); *2009: What a Year for Distressed Debt!*, http://perma.cc/WRD2-FHTA (distressed-debt-investing.com, archived Feb. 5, 2014).

166. Of course, this provisioning must be regarded as a positive externality from the perspective of market stability: financial firms pose fewer risks when they are over- rather than underprotected.

167. I am very grateful to Professor Chris Brummer for insights in this area.

168. *See* Posner et al., *supra* note 22, at 4–5 (providing a demonstration involving The Stag Hunt Game, and suggesting that the game is facilitated in practice when the players can communicate with each other).

169. Smaller payoffs are referred to as "hares" in the terminology of the assurance game. When individual players pursue their own private gains, they are unable to cooperate to catch the proverbial stag. For further discussion of the collective action problems that arise between players, see BAIRD ET AL., *supra* note 164, at 35–36.

One response may be that that cooperation could well exist already in CDS markets, albeit on an ad hoc and opaque basis. With the high levels of secrecy shrouding this market, its activities have been notoriously difficult to grasp. Particularly, if CDS traders transact with one another without relying on intermediary dealers, then there may certainly be a chance that debt governance negotiation also takes place behind closed doors.

But there are significant legal and regulatory barriers to cooperation that likely make CDS traders reluctant to cooperate and to admit to such cooperation if they have in fact done so from time to time. Most obviously, there are clear legal constraints and uncertainties. Cooperation on issues of debt governance may imply that lenders are breaching their duties of confidentiality to their borrowers, or that they are involved in a form of insider trading. Antitrust concerns may also arise if lenders and CDS traders are considered to be engaging in collusive behavior in determining how a borrower should behave.

Deeper problems exist as well. Ad hoc debt governance arrangements for CDSs are unknown and raise serious legal questions. These arrangements may fail to withstand judicial scrutiny when protection sellers seek recognition of their informal bargain with a lender, for example, in insolvency proceedings. Unlike CDS contracts, which transfer economic risk between CDS traders, no such contractual conventions exist for the simple transfer of debt governance rights and responsibilities. Parties must fully internalize the costs of negotiation and of maintaining and privately enforcing their bargain.

This Article raises several questions for future enquiry, the critical one being, "Which debt governance rights may be legally transferable between CDS lenders and protection sellers?" Also of great importance is how these transfers might take place. But at present, the answers remain elusive. With this legal uncertainty, CDS traders may be unwilling to stake millions of dollars on informal bargains even if they wished to cooperate in the interests of debt governance.

From the logistical perspective, the historic lack of transparency in the market creates its own barriers to cooperation. Without adequate information, parties may be unable to identify those who possess debt governance levers, those who might wish to share them, and the cost at which any trading might occur. Indeed, it is well-established that CDS markets are notoriously opaque. While some scholars presume that bad debt governance is a function of CDS trading, this phenomenon may in fact be a matter of poor institutional

design. In other words, poor information sharing, not necessarily the nature of CDS trading itself, might constitute the real barrier to good governance.

In summary, the empty creditor hypothesis only partially explains the impact of CDS trading on corporate governance. This Article shows that there exist other forces that shape the borrower-lender relationship. Lenders can lose their reputation when they behave recklessly, or face public sanction and higher costs of capital in exercising poor debt governance. Moreover, viable companies and other competing creditors diminish the likelihood that empty creditors will succeed in triggering a default and recouping payment under the CDS. Lenders and protection sellers can benefit where they can share the costs of debt governance. In a concentrated market of repeat players, cooperation, not conflict, can generate long-term rewards for lenders and protection sellers alike.

V. THE NEW MARKET IN DEBT GOVERNANCE

This Part proposes the creation of a market in debt governance as a cure to the empty creditor problem and the challenges the CDS market imposes on the borrower-lender relationship. Credit derivatives can generate enormous costs for ordinary companies by weakening the effectiveness of debt governance. A market to trade control rights in debt would harness the cooperative incentives of lenders and protection sellers to allocate the responsibilities of debt governance to those most driven to use them. It also would motivate CDS traders who hold economic risk on a debtor to also invest in control rights that help to mitigate risk through better monitoring and discipline. The goal of the market lies in restoring the broken nexus between economic risk in debt and the control rights critical to managing this risk, thereby helping to promote more efficient credit management in the economy.

This Article outlines the key features of a debt governance market. It represents the first step in the analysis, offering several pathways for further enquiries to flesh out the institutional details to govern such a market. This market will impact numerous regulatory regimes and the regulators that oversee them. CDS contracts implicate securities regulation, financial stability, corporate law, and bankruptcy. With this extensive reach, this Article presumes cooperation between regulators and courts to enable the creation of this market and to maintain its operation. It leaves open the question

of which of these regulators may be best placed to exercise primary oversight of a market in debt governance.

A. Market Mechanics

From the Coasian perspective, in the absence of transaction costs, lenders and protection sellers should arrive at an optimal risk and control-sharing arrangement to reflect their needs and monitoring abilities in exercising debt governance vis-à-vis a borrower.[170] A market in debt governance allows lenders and credit protection sellers to bargain in the levers of creditor control. In outlining the rationales and central features of such a market, this Article proposes a corrective influence to reduce the costs of empty creditors in credit markets.

1. Rationales for Commoditizing Control

A market for creditor control seeks to create a formal mechanism for lenders and CDS protection sellers to trade and share control rights in debt. As detailed in Part II, debt contracts routinely allow lenders access to an array of control rights, as well as soft influence over a borrower. Reporting and monitoring covenants, veto power over capital expenditures, influence on management, alongside legal standing in bankruptcy all comprise the debt governance framework that lenders rely on to control their risk. With a market in debt governance, protection sellers that hold credit risk on an underlying borrower will gain a means of acquiring these tried-and-tested control levers to help control their risk. This market is likely to be of greatest significance to those who are net protection sellers in credit markets. Institutions like pension funds, insurers, and mutual funds that are emerging as specialist protection sellers will benefit most from a mechanism to acquire debt governance levers to better safeguard their vast exposure.

A formal space to trade control rights in debt lowers transaction costs by reducing search costs for participants. It ensures that trades take place in the open and with information sharing between participants. This transparency should help CDS traders overcome a central barrier to cooperation: a lack of information on underlying CDS exposures. This market should help place debt governance cooperation on a firm legal footing, ensuring that these

170. *See generally* Ronald H. Coase, *The Problem of Social Cost*, 3 J.L. & ECON. 1 (1960) (providing a theory on risk and resource allocation).

interactions enjoy legal recognition and are not likely to fall foul of insider trading, privacy, antitrust, or other laws. Finally, with such trading regulators, the market and underlying debtors can understand the motivations and risk preferences of the actors involved. This understanding will allow regulators and underlying debtors to hold lenders of all stripes more fully to account.[171]

There exist powerful policy rationales for creating a market in debt governance. First, the market would provide a corrective to the empty creditor problem. It would allow credit protection sellers—who are economically motivated to use levers of control—to invest and agitate for good governance, diminishing the voice of empty creditors. Loan covenants and lender influence would acquire greater bite and would encourage more efficient flows of credit.[172]

Second, a market in debt governance would bring transparency to reveal risk taking in corporate lending. The scrutiny of the CDS market can serve as a watchful check on debtor companies that misuse their capital. In other words, protection sellers—possessing tools to better monitor debtors—would be able to expose risky borrower behavior. In this manner, engaged oversight from protection sellers would reign in borrower recklessness by shaming and pressuring management to act responsibly.[173]

In addition, transparency offers CDS participants a channel to share information and, with deeper information, to discipline one another in case of defection from group norms. Importantly, information from the CDS market can provide evidence of lender mismanagement. Where the CDS market shows that a borrower is becoming risky and overleveraged, it shines a light on the conduct of lenders that supply credit to a company. Where lenders supply credit without sufficient attention to the risks presented, they should suffer reprimand from peers. After all, peer firms stand to lose if the debtor defaults and the protection seller is forced to pay out. This peer pressure can prevent CDS traders from shirking their responsibilities towards debt governance. It can help make credit markets more efficient where, by this soft oversight function, (i) borrowers receive only as much credit as they are able to handle; (ii) lenders are motivated to exercise greater caution in lending and in the exercise of

171. These legal regimes are discussed *infra* in Part V.B.1.

172. *See, e.g.*, Harner, *Trends in Distressed Debt Investing*, *supra* note 15, at 123–25 (discussing the Kmart turnaround).

173. *See* David A. Skeel, Jr., *Shaming in Corporate Law*, 149 U. PA. L. REV. 1811, 1829–30 (2001) (discussing the important role of shaming in shaping behavior in the corporate marketplace).

debt governance; and (iii) market players are quicker to internalize the implications of risk taking and to provision for this risk taking on an ex ante basis.

2. Commoditizing Control Rights

A market in debt governance requires the lender and protection seller to be able to trade control rights in the underlying debt contract with one another.

Ordinarily, creditors can acquire control rights by purchasing debt instruments outright. In other words, creditors invest in the actual bonds or loans and thereby become lenders of record vis-à-vis debtors. At other times, creditors might assign rights under loans to third parties. Assignment of rights under a loan contract usually entails an assignee enjoying the benefits of repayment from the debtor and, for all intents and purposes, becoming the lender to the borrower, acquiring the full benefits of the legal rights provided in the loan agreement.

But, the CDS market is different. For one, a protection seller contracts with another CDS trader. It does not enter into any arrangement with an underlying debtor.[174] And a key rationale driving protection sellers to the CDS trade is to acquire synthetic exposure to an underlying debt instrument. This synthetic investment is, generally speaking, much cheaper than buying the underlying loan or bond. If protection sellers must pay for a wholesale assignment of rights from a lender, it makes sense to consider buying the underlying debt instrument.[175]

A market in debt governance envisions lenders and protection sellers agreeing to "borrow" control rights for a period of time. Certainly, a first-order question exists as to which rights can legally be borrowed or temporarily transferred—and deeper analysis of the issue is necessary. However, a borrowing arrangement appears most feasible in this context, although purchasing these rights might also be possible. A temporary borrowing arrangement better reflects that CDS contracts do not always extend for the term of the loan and may

174. This situation changes when repayment on the CDS is triggered. In such cases, the protection seller pays out and acquires the underlying debt instrument (e.g., a bond), gaining rights under that instrument. For discussion in relation to the Eastman Kodak restructuring, see Melissa Mott, *Kodak CDS Auction Sheds Light on Settlement Process*, http://perma.cc/768S-2349 (reuters.com, archived Feb. 5, 2014).

175. *See, e.g.*, Manson, Iver & York v. Black, 176 Cal. App. 4th 36, 49 (Cal. Ct. App. 2009) ("An assignment transfers the interest of the assignor to the assignee. Thereafter, '[t]he assignee stands in the shoes of the assignor, taking his rights and remedies, subject to any defenses which the obligor has against the assignor prior to notice of the assignment.' ").

be entered into for a period of time. For example, the CDS contract may cover only a five-year period of a ten-year loan. When the CDS contract ends, these rights revert back to the lender, as the economic risk is back on the lender's books.

Instead of seeking to acquire all the rights in a loan agreement, a protection seller can select a few rights that may be especially helpful. A protection seller, for instance, might desire to use only rights to monitor a debtor's secured assets, notification rights on key corporate events, or rights to control additional borrowing by the debtor. By allowing protection sellers to choose certain key rights to exercise, the market reduces the costs of intervention—it is likely cheaper to acquire specific rights under a loan contract than it is to acquire all the rights available. Lenders may also be unwilling to part with all control rights and may prefer ceding control only over a selected few.[176] There is always the risk that lenders might engage in some form of holdout behavior, refusing to let protection sellers acquire the rights sought or perhaps charging high amounts. However, this Article demonstrates that lenders gain by allowing protection sellers to assume monitoring responsibilities and to assist in managing underlying risks. Moreover, protection sellers, too, might engage in tit-for-tat behavior by raising the cost of credit protection to reflect the increased risks they face.

But how would such an arrangement work legally? Does the lender assign selected rights to a protection seller with an agreement that they be reassigned back to the lender at a later date (for example, at the end of the CDS contract between the lender and the protection seller)? This seems clumsy. It also creates the risk that borrowers become confused regarding lender accountability. A lender may be liable for certain actions but not for others, where a protection seller is also involved in the exercise of creditor control.

One way forward lies in deeming a lender to be the agent for a protection seller with respect to the exercise of particular rights and responsibilities in the underlying contract. A lender follows the direction of the protection seller and interacts with the borrower on

176. Assignment of select rights is commonplace, especially in the context of debt collection. See, for example, discussion surrounding the Fair Debt Collection Practices Act, 15 U.S.C. § 1692a(4) (2012). The Act defines a "creditor" to be:

> [A]ny person who offers or extends credit creating a debt or to whom a debt is owed, but such term does not include any person to the extent that he receives an assignment or transfer of a debt in default solely for the purpose of facilitating collection of such debt for another.

Id.

behalf of the protection seller. An agency agreement poses fewer challenges for underlying debtors, who can still continue to engage with their usual lenders of record. Underlying debtors do not have to transact with a multitude of sophisticated actors; instead, they work with the lender with which they are most familiar. Lenders can still be held liable by their debtors. But a lender can in turn pursue a protection seller for misfeasance, for example, where protection sellers are overintrusive or proffer advice that is harmful to underlying debtors. A greater benefit also accrues. Lenders cannot completely disengage from debt governance when subject to such agency arrangements. Continuing accountability to a debtor and scrutiny from a protection seller can control instances of lender slack. At the same time, the potentially disruptive voice of the empty creditor is substituted by that of the protection seller with risk on its books. Such arrangements encourage lender cooperation but also intercreditor monitoring to control the risk that each lender faces from one another.[177]

3. Search Costs and Informational Gains

A key challenge for CDS traders seeking to cooperate in relation to debt governance lies in searching out counterparties with which to trade control rights. Protection sellers and lenders must find each other.

Transparency has traditionally been a big problem in CDS markets. CDS transactions have historically operated over the counter, and trade reporting has been ad hoc and largely unregulated.[178] The OTC nature of the market has meant that although some trades are executed directly between parties and are not therefore anonymous, other trades are intermediated by dealers.[179] Dealers provide intermediary services that bring clients together to execute CDSs. The ultimate clients in such cases may never know the identity of the other counterparty. Sometimes, dealers themselves may be providing protection to lenders, at least until such time as they can find another counterparty to take on the contract. The period over which a dealer holds a contract can sometimes be long, especially

177. For discussion on competitive and coordinated monitoring, see Triantis, *supra* note 51, at 100–02.

178. *See* THE G-20 PITTSBURGH SUMMIT, *supra* note 102 (suggesting that financial supervision be strengthened).

179. Andras Fulop & Laurence Lescourret, How Liquid is the CDS Market? 4–5 (Dec. 2007) (unpublished manuscript), *available at* http://perma.cc/4RPL-GP86 (discussing transparency and trading structure in the CDS market).

where it is difficult for the dealer to find a client willing to assume the risk.[180] Where clients do not know who the other is, finding out relevant details about an underlying debtor and loan contract imposes impossibly high search costs.

The dealer-dominated nature of the market provides a way forward in debt governance.[181] In other words, dealers themselves can facilitate the creation of this market by intermediating searches between lenders and protection sellers with respect to debt governance. Dealers routinely interact with their clients to collect information on their trading requirements and preferences, price the trade in order to connect counterparties, and allow these counterparties to complete the trade. This centrality to the trade-execution process makes dealers ideally placed to collect information on underlying debtors as well as on the terms of the underlying contract. This information is likely to be of benefit to dealers themselves. The better the information on underlying debtors and the terms of the loan, the better the risk assessment the dealer can perform and the more accurate the pricing is for the CDS contract. The ability of dealers to connect trading parties is particularly important in the context of helping CDS traders transact in control rights. Protection sellers seeking out control rights may not have transacted directly with a lender. Rather, a protection seller seeking out control rights may have contracted with another firm that now seeks protection on the credit insurance it once sold to a lender. The daisy chains that characterize CDS trading can make it harder for lenders and protection sellers to find one another in the market. This is likely to increase reliance on intermediaries that can reduce search costs between lender and protection seller.

Greater intermediation by dealers also yields informational gains for regulators. As noted, trade reporting is a critical pillar of post-Crisis regulation in the CDS market.[182] This trade reporting is designed to create greater transparency in credit derivatives trading, ultimately helping to mitigate risks for the financial system.[183] However, better trade reporting also improves outcomes vis-à-vis

180. *Id.*

181. *See* Avellaneda & Cont, *supra* note 85, at 9–10 (suggesting that the CDS market is concentrated on a small number of dealers, and that the ten largest dealers account for a significant portion of gross national trading volume).

182. The Dodd-Frank Act stipulates mandatory trade reporting requirements under Dodd-Frank Act §§ 731, 766(b). For a critical discussion, see Yadav, *supra* note 8, at 387, which argues that moving CDS trading to clearinghouses does not mitigate the risks of their trading.

183. THE G-20 PITTSBURGH SUMMIT, *supra* note 102.

underlying debtors. Regulators too might benefit where they can receive information from dealer-intermediaries regarding the exercise of debt governance. Where lenders and protection buyers enter into agreements with respect to control sharing in debt, regulators gain insights into who has access to control rights vis-à-vis a company and how these rights are being exercised. This information aids in understanding risk and, critically, fills in a missing link in current reform proposals under the Dodd–Frank Act.

Better information also helps regulators to punish lender indiscipline. Common-law lender-liability regimes are only rarely used to check misconduct.[184] And the insolvency process may seem remote from the everyday dealings between borrower and lender. Indeed, lenders that act with misaligned incentives owing to the play of the CDS can and have escaped scrutiny. Greater transparency through a market in debt governance brings regulators more proactively into the fold to oversee the exercise of creditor control in corporate governance. By gaining information on CDSs and debt governance, the market shines a light on who is using control rights and, importantly, on how they are using them. Lenders that fail to behave cooperatively with protection sellers—for example, by pushing a borrower into liquidation to trigger repayment under the CDS—face the prospect of regulatory scrutiny. These can include those who push borrowers into liquidation to trigger repayment on the CDS, even where the borrower remains viable economically. Equally, in a formalized market, protection sellers that exercise control akin to any lender of record must face accountability for their actions from regulators and their peers. This seems straightforward. It ensures that regulation tracks the evolving notion that the true "lenders" are those who hold the economic risk of the loan, not simply those who are the legal lenders of record.

B. Checks and Balances

A new market in debt governance offers a cure to the problem of separating economic risk in corporate debt from the legal control rights that frame that risk. This market's basic aim is simple: to help place legal control rights in debt in the hands of those with sufficient skin in the game to use them effectively. With the importance of lender rights only likely to grow in the wake of the Financial Crisis, ensuring the optimality of their exercise constitutes an essential goal for scholars and lawmakers.

184. Triantis & Daniels, *supra* note 3, at 1102.

However, checks and balances are essential. The potential for abuse is ever present, as it is in any market. Regulators will have to contend with protection sellers that misuse control levers in debt, to exercise them speculatively without any real interest in the underlying borrower. The market also raises some important questions for future regulation to monitor a market growing in complexity and innovation.

1. Speculative Trading

Scholars have highlighted the risks that purely speculative trading in CDSs can present. A high volume of naked swaps can create problems. For example, as noted earlier, the value of CDS contracts outstanding can far exceed the face value of the outstanding debt.[185] In such cases, CDS protection sellers can end up facing potentially open-ended liability on swaps, far in excess of the value of the underlying debt.

Similarly, trading in debt governance can attract opportunistic traders with no underlying risk in the debtor. This new market can theoretically allow CDS traders to acquire a set of specific rights in a loan agreement at much lower cost than acquiring the underlying loan or an assignment of loan rights. With cheap entry, a market in debt governance can attract investor activists that use the CDS market for intervention instead of transacting through the market for managing underlying credit risk. Additionally, this market can open its doors to investors with little to lose. These investors enjoy the upside when they succeed in their intervention. But the cost of this intervention is likely to be small, insofar as it relates to acquiring select control rights in the underlying loan agreement. Thus, this market might leave debtor companies open to opportunistic advances from CDS traders who are far removed from a company's everyday affairs.

With sophisticated, informed, and repeat traders dominant in this market, debt governance may be less effective at mitigating risk. Rather, it may become just a mere tool in the activist's quiver, to be deployed for extracting private rents—rather than for effectively managing the governance of underlying debt and reducing risk.

The potential for abuse requires intermediaries to exercise a gatekeeper function in order to prevent instances of "empty activism."

185. Satyajit Das, *The Credit Default Swap ("CDS") Market—Will It Unravel?*, http://perma.cc/RRY7-62N2 (wilmott.com, archived Mar. 17, 2014) (discussing Delphi Corp, where Delphi ended up subject to $28 billion worth of CDS outstanding against $5.2 billion worth of its bonds and loans when it entered bankruptcy).

Such gatekeeping may require dealers to check whether CDS traders seeking out control rights actually hold some underlying economic risk in relation to a debtor. This inquiry is critical. Without a showing that traders have real skin in the game vis-à-vis a debtor, the market loses its value as a means of promoting better alignment between economic risk and corresponding legal rights in debt. Put differently, instead of these rights being available to net protection sellers, they are deployed instead by opportunistic activists seeking quick, cheap returns. Without vigilance as to who can enter the market for governance, the nexus between rights and risk breaks further. This disconnect makes it harder for those who wish to exercise substantive creditor control to succeed in their intervention.

The problem of empty activism might also be addressed by requiring those purchasing control rights to hold some threshold amount of risk relative to the outstanding value of the underlying debt.[186] Specifically, the market could helpfully set a threshold amount of risk relative to the outstanding value of the underlying debt in order to enter it. The rationale for a clear threshold relates to the larger policy goal of assuring engaged lenders rather than opportunistic ones. With a threshold amount in place, the market can attract those with a tangible stake in the underlying company. The threshold should work to prevent intervention by traders who acquire minimal credit risk on an underlying company in order to cheaply intervene in that company's affairs. As an added benefit, a threshold amount should prevent control rights vesting in a large number of protection sellers. Where protection sellers can acquire small stakes to intervene, the number of those seeking out control rights can easily proliferate. With a large number of voices seeking involvement, all with small stakes in the overall pie, creditor control can become unsustainable and drained of potency.

2. Adaptive Regulation

The crisis in debt governance has drawn attention to the significance of debt as a modality of control in corporate life. It has also shone a light on the lingering inability of regulation to match innovation in the marketplace. Debt has not generated the same intensity of regulatory reaction as the market for equities, where reporting and disclosure requirements are commonplace.[187] Given the

186. The question of what this threshold should be is largely an empirical question and is outside the scope of this Article.

187. *See, e.g.*, Filing of Schedules 13D and 13G, 17 C.F.R. § 240.13d-1 (presenting a statutory example). For a discussion on the subject, see Michelle M. Harner, *Distressed Debt*

shareholder-centric focus of corporate law scholarship, this near-exclusive focus on equity rather than debt as the key regulatory unit of analysis is unsurprising. But it is increasingly unsustainable. The emergence of CDS trading and its impact on corporate governance requires a thoroughgoing reworking of existing regulation to control the economic and social welfare costs that CDSs can extract. A market for debt governance provides one important solution. But it is only part of a bigger focus on bringing debt more fully into the light. An outline of some accompanying suggestions for reform is set out below.

Disclosure. Disclosure constitutes a key pillar of post-Crisis reform for derivatives markets.[188] But reform efforts largely focus on Wall Street's derivatives traders with scant attention given to the reference company. This Article brings this underlying corporation into the analysis as a central subject of scrutiny.

An important first step involves improving the quality of disclosure on underlying CDS exposures. Bankruptcy laws have made some progress towards including analysis of CDS positions in deliberations. Notably, Federal Rule of Bankruptcy 2019 requires ad hoc, unofficial creditor committees to provide a fuller statement of their economic interests.[189] This disclosure helps to uncover empty creditors. But this Rule is limited to unofficial processes and does not extend to formal, official creditor committees. A better rule would require far-reaching disclosure at each stage of insolvency to also include formal processes within its ambit. Better disclosures of derivatives positions would help courts analyze in real terms the stakes lenders' hold and the incentives those alignments generate. More importantly, a robust disclosure regime would help to identify which companies are especially susceptible to the costs of empty creditors from an early stage of distress.

However, disclosure can also be helpful outside of the distressed debt and bankruptcy context. With the growing significance of debt governance in corporate life, regularly disclosing CDS exposures on underlying companies can work to better protect their economic value.[190] CDS traders could provide regulators with fuller

Investing: The New Barbarians at the Gate, 89 WASH. U. L. REV. 155, 178–81 (2011) (discussing the underreporting of debt-based acquisitions and proposing the application of the Williams Act to debt-based takeovers).

188. THE G-20 PITTSBURGH SUMMIT, *supra* note 102.

189. For summary analysis, see SHEARMAN & STERLING LLP, AMENDED BANKRUPTCY RULE 2019 IS EFFECTIVE (2011), *available at* http://perma.cc/83R-AJLX.

190. Arguably, these disclosures can be incorporated into existing disclosure regimes that CDS traders must undertake under the Dodd-Frank Act.

information on their CDS exposures to underlying companies on a rolling basis, or at least when they acquire large exposures to an underlying company. This helps regulators track how CDS trading on corporate debt connects to activity in other markets, such as those for equities. With regular flows of information, regulators garner insight into how CDS trading on a company's debt impacts its overall corporate health. Better data helps regulators connect the dots between CDS trading and other events in a company's life, such as mergers, takeovers, asset sell-offs, changes in management, and so on. With more information on CDS and corporate governance, regulatory responses can be better tailored to purpose, for example, to prevent opportunistic protection sellers from using debt governance levers to promote an agenda of empty activism.[191]

It should come as no surprise that the equities market is already ahead in advocating a broader, more continual disclosure regime for equity derivatives. Importantly, section 766(b) of the Dodd–Frank Act of 2010 stipulates that any investor acquiring beneficial ownership of equity securities through an equity-based swap must disclose their interest if it exceeds five percent ownership of a certain class of shares.[192] In this tenor, improving disclosure in credit derivatives markets follows seamlessly from the recognition of debt as a, if not the, critical modality of control in corporate governance.[193]

With clarity on the forces shaping corporate life, regulators and the market internalize the fuller implications of CDS trading in determinations of corporate value. Interventions may be desirable where this value is improperly destroyed through opportunistic or manipulative trading strategies. With a deeper understanding of how

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191. For example, a company's over-reliance on leverage and deteriorating creditworthiness might point regulators to the CDS market for explication. In such cases, regulators could limit high speculation in its CDS securities.

192. A key issue for equity derivatives has been whether equity swap counterparties—those who protect shareholders against downside risk of their investment—should disclose their interest as part of section 13(d) of the Securities and Exchange Act 1934 and schedule 13(d) disclosures. This issue has been litigated already. See generally *CSX Corp. v. Children's Investment Fund Management (UK) LLP*, 654 F.3d 276 (2d Cir. 2011), which left unclear the issue of whether or not equity swap counterparties protecting shareholders should disclose their interest. Section 766(b) of the Dodd-Frank Act 2010 seeks to provide greater clarity in this regard. It stipulates that any investor that acquires beneficial ownership of equity securities through an equity-based swap must disclose their interest if it exceeds five percent ownership of a certain class of shares. The new sections 766(e) of the Dodd-Frank Act and 13(o) of the Exchange Act direct the SEC to define beneficial ownership.

193. *See also* Harner, *supra* note 187, at 155 (suggesting that there is a growing use of debt, rather than equity to cause a change of control at target companies); Hu & Black, *Empty Voting II*, *supra* note 1, at 632 (providing an overview of decoupling).

CDS trading impacts an underlying company, regulation can be tailored to optimize the positive externalities of CDS trading. Without means to track transactional connections between Wall Street and Main Street, the fuller impact of derivatives trading will only half explored.

Lender liability. Even with disclosure, further corrective tools are necessary to check conflicts of interest and value-destroying interventions through the CDS market. A first step is to (i) include protection sellers explicitly within existing lender liability regimes, and (ii) discipline them for deleterious conduct through bankruptcy processes.

Protection sellers should generally be motivated to act in the best interests of the underlying debtor because protection sellers have an economic interest in the debtor's continuing economic vitality. However, as outlined above, the market for debt governance may introduce the problem of "empty activism," which arises because CDS traders might also have incentives to trade in debt governance even where they have no economic interest at stake. In cases of empty activism, CDS traders cannot always be counted on to act in the underlying debtor's best interests: they may aim, instead, to derive rents from arbitrage between markets, or to be disruptive with respect to the underlying debtor. One adaptive regulatory response to this empty activist problem would be to extend lender liability to those acquiring debt's levers of control.[194] Where CDS traders are main movers in proposing action or advice regarding an underlying debtor's governance, an expansive and functional definition of "lender" constrains conduct and introduces liability costs that limit the payoff. Even where CDS traders have real economic risk on underlying debt, a wider lens in terms of liability motivates better behavior. With liability risks, CDS traders seeking out control levers in debt must internalize the costs of their harmful behavior. This is not to suggest that lender liability be made stricter, or that the threshold for imposing liability be lowered to account for protection sellers. It simply proposes that those standards that apply to legal lenders of record be extended to also apply to economic lenders intervening improperly in debtor affairs.

The suggestion that the problem of disruptive CDS traders can be mitigated by a broader construction of lender liability is consistent

194. *See In re* Fabricators, Inc., 926 F.2d 1458, 1470 (5th Cir. 1991) (subjecting a lender to liability that advised management to favor this lender's private interests and undermine those of competing creditors).

with scholars who advocate that rent-seeking behavior is best controlled by taking a functional view of corporate influence. These scholars argue for flexibility when determining who, beyond managers, holds power within an organization. Professors Anabtawi and Stout, for example, propose the creation of fiduciary duties for institutional investors to ensure they exercise their authority in a responsible manner.[195] Within this normative trend, a broader construction of lender liability to also include protection sellers matches market innovation and design. Imposing liability risk poses its own challenges through costs that dissuade legitimate protection sellers from acting to repair the broken nexus between risk and its management mechanisms. However, the principle is clear. If an actor behaves like a lender, constraints ordinarily applicable to lenders should be applied widely, through a functional lens, rather than one reflecting formalist, and increasingly outmoded, conceptions of what a "lender" looks like.

Debt discipline in bankruptcy. Bankruptcy law has developed its own procedures for recouping value lost through opportunistic and reckless conduct by debtors and lenders alike. Voidable preference rules and limits on transactions at undervalue constitute just one such mechanism that allows the debtor's estate to retrieve value.[196]

As noted earlier, greater disclosure of CDS positions is emerging in the bankruptcy process, beginning with Rule 2019. However, this incremental move towards revealing derivatives positions in bankruptcy, and with this the motivations that undergirds lender conduct, is just part of the picture. The deeper workings of bankruptcy—regarding the optimal allocation of capital to match the risks and losses created by the various actors involved—can helpfully extend to cover the conduct of CDS traders. In other words, bankruptcy laws could make protection sellers subject to traditional rules on voidable preferences and transactions at an undervalue. This would answer a separate question from liability for lender behavior. Even where the activities of lenders do not reach the level necessary to generate lender liability, interventions by protection sellers can still reduce the value of the debtor's estate.[197] Normatively, this move broadens the frame of regulatory vision to encompass those who

195. Iman Anabtawi & Lynn Stout, *Fiduciary Duties for Activist Shareholders,* 60 STAN. L. REV. 1255, 1256 (2008).

196. *See* 11 U.S.C. § 547 (2012) (providing statutory definitions).

197. *Id.* § 547(b)(4)(A) (outlining the ninety-day look-back period for voiding preference transactions).

exercise influence on a functional basis alongside those who remain formally vested with the legal rights in debt governance.

In summary, the empty creditor problem has emerged as a significant impediment to the effective exercise of creditor discipline. This Article takes steps towards offering a solution to this problem: a market in debt governance that helps those holding economic risk to also be able to acquire control rights in debt. In light of the value that is being lost through the operation of empty creditors, this solution is necessary—and possible. This Article outlines the incentives that can bring lenders and protection sellers together to exercise sounder governance through debt. Certainly, like all markets, there exists the potential for abuse on the part of CDS traders. However, the solution proposed in this Article moves the debate forward to overcome the negative influence of empty creditors in debt governance and to reduce the risks they create for financial stability. Recognizing that the CDS market is here to stay, a market in debt governance ensures that a central influence in corporate life—lender oversight and discipline—can work effectively to its fullest potential.

VI. CONCLUSION

This Article has drawn attention to the considerable complexity inhering in the CDS—and our incomplete understanding of their power vis-à-vis the borrower-lender relationship. It has argued that credit derivatives have given rise to a revolution in debt governance. Established theory has assumed that this revolution is one sided. Conventionally construed, CDSs must extract a heavy price from the corporate sector. But this Article argues otherwise. It demonstrates that the incentives underpinning the conduct of CDS traders are complex and multifaceted, which, when properly harnessed, can encourage rather than erase debt governance. This Article has proposed the creation of a market in creditor control to provide CDS traders a formal market in which to trade the control rights in underlying debt. With this market in place, economic risk and legal control in debt can better align. Certainly, the Article is just the first step, and it raises several enquiries for further study. But in its discussion, this Article has drawn attention to the law's failure to fully appreciate the interconnected reality of the CDS market. What has become clear, however, is that only a broader regulatory field of vision can best encompass both the reality of today's interconnected markets and the depth of their interactions with the corporate sector. How

broad is broad enough, of course, remains an open question in the age of innovation.