

Bankruptcy Process for Sale

Kenneth Ayotte[†] & Jared A. Ellias^{††}

The lenders that fund Chapter 11 reorganizations exert significant influence over the bankruptcy process through the contract associated with the debtor-in-possession (DIP) loan. In this Article, we study a large sample of DIP loan contracts and document a trend: over the past three decades, DIP lenders have steadily increased their contractual control of Chapter 11. In fact, today’s DIP loan agreements routinely go so far as to dictate the very outcome of the restructuring process. When managers sell control over the bankruptcy case to a subset of the creditors in exchange for compensation, we call this transaction a “bankruptcy process sale.” We model two situations where process sales raise bankruptcy policy concerns: (1) when a senior creditor leverages the debtor’s need for financing to lock in a preferred outcome at the outset of the case (“plan protection”); and (2) when a senior creditor steers the case to protect its claim against litigation (“entitlement protection”). We show that both scenarios can lead to bankruptcy outcomes that fail to maximize the value of the firm for creditors as a whole. We study a new dataset that uses the text of 1.5 million court documents to identify creditor conflict over process sales, and our analysis offers evidence consistent with the predictions of the model.

Introduction.....	3
I. The Evolution of Creditor Control in Chapter 11: Evidence from DIP Loans	9
A. Sample and Categories of DIP Loans.....	9
B. Changes in DIP Loan Type over Time.....	14
II. Motivating Examples	15
A. Walter Energy	16

[†] UC Berkeley School of Law.

^{††} UC Hastings College of the Law. We would like to thank Christopher Hench and the UC Berkeley Data Lab for extraordinary help in gathering our court document text data and Jonathan Gottlieb, Spencer Kau, Aartika Maniktala, Nir Maoz, Daniel Rua, and Lauren Watanabe for excellent research assistance. The authors also thank Vince Buccola, Adam Feibelman, Brooke Gotberg, Rainer Haselmann, Melissa Jacoby, Ed Morrison, Adriana Robertson, Steven M. Sheffrin, Fred Tung, Tobias Trager, and seminar audiences at the Annual Meeting of the Canadian Law & Economics Association, the Goethe University House of Finance, the BYU Winter Deals conference, the UC Hastings Law, Business & Economics Workshop, the UC Berkeley Law, Business & Economics Workshop, the USC Law and Social Science Workshop, the Tulane Center on Law & the Economy Workshop Series, the Corporate Law Academic Webinar Series, and the Wharton-Hastings Corporate Restructuring & Insolvency Seminar for their helpful feedback.

B. Pliant.....	17
III. Theory	19
A. Example 1: Plan Protection	21
1. The Efficient Decision	23
2. The Debt-Overhang Problem	24
3. DIP Loan Proposals at Date 0	24
4. Second-Lien Lenders Will Not Compete at Date 0	25
5. First Lien Prefers Faster Resolution.....	26
6. The Benefit of Process Sales.....	26
7. Secured-Creditor Conflict Increases Demand for Process Control	26
8. Extensions to Example 1	27
B. Example 2: Entitlement Protection.....	28
1. The Efficient Action	29
2. The Contest for Control	30
3. Benchmark: With No Entitlement Shifts, the Efficient Outcome Occurs	30
4. Bidding with Entitlement Shifts: Outcome is Inefficient.....	30
IV. Empirical Analysis.....	31
A. Data Collection and Research Design.....	31
B. Summary Statistics	34
C. Regression Analysis and Hypothesis Testing.....	39
1. Are the Creditor-Control Allegations Cheap Talk?	39
2. Are Process-Sale Allegations Associated with Plan Protection and Entitlement Protection?	42
3. Do Creditors Buy Control to “Cut Short” Bankruptcy Cases?	45
V. Proposal: Temporary Priming DIPs for “Stalking Horse” DIP Loans.....	47
Conclusion	50
Appendix.....	51
A. Additional Tables	51
C. Data Appendix.....	57
1. DIP Loan Sample.....	57
2. Court Document Sample.....	58

Introduction

Neiman Marcus and J. Crew each filed for strikingly similar Chapter 11 bankruptcies in May of 2020.¹ Both firms planned to borrow hundreds of millions of dollars in debtor-in-possession (DIP) financing from their existing senior creditors to fund the reorganization process.² These loans, however, came with strings attached. Both DIP loan contracts required the borrower to reorganize within four months through a transaction that management had already negotiated with the company's senior creditors in a side contract called a restructuring support agreement (RSA).³ Each deal had also won the support of their respective private equity owners, perhaps because the DIP loan contracts had provisions that could help insulate shareholders and senior creditors from lawsuits.⁴ In Neiman Marcus's case, the DIP loan also contained a commitment from the DIP lenders to negotiate postbankruptcy pay with managers in the first month of the bankruptcy case.⁵

Quite clearly, these documents were far more than contracts to borrow money: they also constituted a significant transfer of control over the bankruptcy

1. See Vanessa Friedman & Sapna Maheshwari, *Neiman Marcus, a Symbol of Luxury, Files for Bankruptcy*, N.Y. TIMES (Oct. 28, 2020), <https://www.nytimes.com/2020/05/07/business/neiman-marcus-bankruptcy.html> [<https://perma.cc/QPU9-P3GF>]; Vanessa Friedman, Sapna Maheshwari & Michael J. de la Merced, *J. Crew Files for Bankruptcy in Virus's First Big Retail Casualty*, N.Y. TIMES (May 14, 2020), <https://www.nytimes.com/2020/05/03/business/j-crew-bankruptcy-coronavirus.html> [<https://perma.cc/V5QN-DLUX>].

2. See Motion of Debtors for Entry of Orders (I) Authorizing the Debtors to Obtain Postpetition Financing, (II) Authorizing the Debtors to Use Cash Collateral, (III) Granting Liens and Providing Superpriority Administrative Expense Claims, (IV) Granting Adequate Protection to Prepetition Secured Parties, (V) Modifying the Automatic Stay, (VI) Scheduling a Final Hearing, and (VII) Granting Related Relief at 2, *In re Chinos Holdings, Inc.*, No. 20-32181 (Bankr. E.D. Va. May 4, 2020) [hereinafter *J. Crew DIP Motion*]; Debtors' Emergency Motion for Entry of Interim and Final Orders (I) Authorizing the Debtors to (A) Obtain Postpetition Financing and (B) Utilize Cash Collateral, (II) Granting Adequate Protection to Prepetition Secured Parties, (III) Modifying the Automatic Stay, (IV) Scheduling a Final Hearing, and (V) Granting Related Relief at 3, *In re Neiman Marcus Grp. Ltd.*, No. 20-32519 (Bankr. S.D. Tex. May 7, 2020) [hereinafter *Neiman Marcus DIP Motion*].

3. See *J. Crew DIP Motion*, *supra* note 2, at 25; *Neiman Marcus DIP Motion*, *supra* note 2, at 15. The *J. Crew RSA* was styled as a "Transaction Support Agreement," which is substantively identical to an RSA. For more on RSAs, see Douglas G. Baird, *Bankruptcy's Quiet Revolution*, 91 AM. BANKR. L.J. 593, 593 (2017); and Edward J. Janger & Adam J. Levitin, *Badges of Opportunism: Principles for Policing Restructuring Support Agreements*, 13 BROOK. J. CORP. FIN. & COM. L. 169, 169 (2018).

4. See *J. Crew DIP Motion*, *supra* note 2, at 21; *Neiman Marcus DIP Motion*, *supra* note 2, at 15; see also Marble Ridge Capital LP and Marble Ridge Master Fund LP's Statement in Response to the Declaration of Mark Weinsten and Limited Objection to Debtors' Emergency Motion for Postpetition Financing, *In re Neiman Marcus Grp. Ltd.*, No. 20-32519 (Bankr. S.D. Tex. May 8, 2020) (discussing the ways that the DIP loan and RSA would make it harder to prosecute avoidance actions). The support of the private equity owners is noteworthy, as each proposed transaction contemplated canceling the firms' existing equity with no recovery for the shareholders.

5. Declaration of Mark Weinsten, Chief Restructuring Officer, of Neiman Marcus Grp. Ltd. LLC, in Support of the Debtors' Chapter 11 Petitions and First Day Motions at 121, *In re Neiman Marcus Grp. Ltd.*, No. 20-32519 (Bankr. S.D. Tex. May 7, 2020) [hereinafter *Neiman Marcus First Day Declaration*].

process to creditors through the DIP loan.⁶ Their similarity speaks to how common this structure has become in bankruptcy practice. We describe this transaction—when management agrees to transfer control over the bankruptcy process to a subset of the company’s creditors at the very beginning of Chapter 11 in exchange for compensation—as a “bankruptcy process sale.”⁷

What should we make of process sales? On the one hand, bankruptcy law has long urged managers to negotiate workouts with creditors to limit bankruptcy costs, and this new practice is consistent with that long-standing policy goal.⁸ Indeed, the Chief Restructuring Officer of Neiman Marcus emphasized the degree of consensus among several creditor groups that supported the RSA.⁹ On the other hand, deals like this can exclude significant creditors and can be calibrated to forestall consideration of alternatives. This may undermine the balancing of creditor interests inherent in the oversight structure of Chapter 11 and lead to bankruptcy outcomes that fail to maximize the value of the firm for

6. The fact that distressed companies transfer control rights to creditors is well known, and there are benefits to such control shifts from shareholders to creditors when they occur outside of bankruptcy. *See, e.g.*, Philippe Aghion & Patrick Bolton, *An Incomplete Contracts Approach to Financial Contracting*, 59 REV. ECON. STUD. 473, 473 (1992); Mathias Dewatripont & Jean Tirole, *A Theory of Debt and Equity: Diversity of Securities and Manager-Shareholder Congruence*, 109 Q.J. ECON. 1027, 1027 (1994); Greg Nini, David C. Smith & Amir Sufi, *Creditor Control Rights, Corporate Governance and Firm Value*, 25 REV. FIN. STUD. 1713, 1713 (2012). There is mixed empirical evidence suggesting that creditor control leads to outcomes consistent with efficiency inside bankruptcy; for results more consistent with the efficiency side, see Stuart C. Gilson, Edith S. Hotchkiss & Matthew G. Osborn, *Cashing Out: The Rise of M&A in Bankruptcy* (Mar. 6, 2016), <https://ssrn.com/abstract=2547168> [<https://perma.cc/6CL2-HB6W>]. Courts have long policed the transfer of control through financing transactions. *See, e.g.*, *In re Def. Drug Stores, Inc.*, 145 B.R. 312, 317 (B.A.P. 9th Cir. 1992) (“While certain favorable terms may be permitted as a reasonable exercise of the debtor’s business judgment, bankruptcy courts do not allow terms in financing arrangements that convert the bankruptcy process from one designed to benefit all creditors to one designed for the unwarranted benefit of the postpetition lender.”).

7. In bankruptcy courts, creditors appear to refer to these loans derisively as “sub rosa plans,” a bankruptcy term of art implying that the bankruptcy financing effectively determines the outcome of the bankruptcy case and the distribution of the estate’s value from the start. For example, an objection to the DIP loan in the *Propex* case: “Second, the proposed financing facility is a sub rosa plan, which cannot be approved by this Court. Having all of the hallmarks of a sub rosa plan, the proposed financing facility (i) dictates the terms of the Debtors’ reorganization in that it forces the immediate liquidation of the Debtors’ assets, (ii) significantly alters all creditors’ rights with respect to the Debtors’ assets in that, once the proposed financing facility is approved, creditors and parties in interest have no meaningful opportunity to oppose the sale of the Debtors’ assets without jeopardizing the Debtors’ postpetition financing and (iii) requires that the Debtors liquidate all of their assets immediately, leaving nothing left to reorganize. Since the proposed financing facility constitutes an improper sub rosa plan, the relief requested in the Motion must be denied.” *Objection of the Official Committee of Unsecured Creditors of Propex Inc., et al. to the Debtors’ Emergency Motion for Interim and Final Orders (i) Authorizing the Debtors to Obtain Post-petition Financing, (ii) Authorizing the Debtors to Use Cash Collateral, (iii) Granting Adequate Protection to the Prepetition Lenders, (iv) Modifying the Automatic Stay, and (v) Scheduling a Final Hearing Pursuant to Bankruptcy Rule 4001 at 2, In re Propex Inc., Case No. 08-10249 (Bankr. E.D. Tenn. 2008). See also In re Latam Airlines Grp. S.A.*, 620 B.R. 722, 731 (Bankr. S.D.N.Y. 2020) (denying approval of a DIP loan as a “sub rosa plan”).

8. *See, e.g.*, *In re 500 Fifth Ave. Assocs.*, 148 B.R. 1010, 1017 (Bankr. S.D.N.Y. 1993) (noting that “consensual means of plan negotiation and confirmation is among the paramount goals of chapter 11”); H.R. REP. NO. 95-595, at 221 (1977).

9. *See* Neiman Marcus First Day Declaration, *supra* note 5, at 5.

creditors as a whole.¹⁰ For example, a major secured creditor of Neiman Marcus, who was not involved with the deal, alleged that management had only signed on to the RSA because pursuing the value-maximizing alternative transaction—a merger—could cost them their jobs.¹¹

In this Article, we present significant new empirical evidence and theory on this shift in control over the bankruptcy process, and we offer a framework for identifying when this practice might result in inefficient bankruptcy outcomes. As further explained below, process sales are not value creating or value destroying per se. Instead, they are problematic because they occur at the very beginning of a bankruptcy case, when both information and competition—the best antidotes for value-destroying transactions—are in short supply. DIP financing usually comes from a firm’s pre-bankruptcy senior creditors.¹² Rival investors are rarely willing to extend loans that rank below the senior creditors in priority, and the Bankruptcy Code makes it difficult for new money to rank ahead of them. By bundling their preferred transaction into the DIP loan contract, pre-bankruptcy senior creditors can steer the bankruptcy case towards their preferred restructuring transaction with little competition from rival lenders and without having to satisfy the much more exacting information-generating process that Congress created for evaluating bankruptcy plans of reorganization.¹³

10. Scholars have long worried that senior creditors were attaching conditions to DIP loans that could distort bankruptcy outcomes. *See, e.g.*, Anthony J. Casey, *The Creditors’ Bargain and Option-Preservation Priority in Chapter 11*, 78 U. CHI. L. REV. 759; Oscar Couwenberg & Stephen J. Lubben, *Private Benefits Without Control? Modern Chapter 11 and the Market for Corporate Control*, 13 BROOK. J. CORP. FIN. & COM. L. 145 (2018); Melissa B. Jacoby & Edward J. Janger, *Ice Cube Bonds: Allocating the Price of Process in Chapter 11 Bankruptcy*, 123 YALE L.J. 862 (2014); Melissa B. Jacoby, *Corporate Bankruptcy Hybridity*, 166 U. PA. L. REV. 1715 (2018); Jonathan C. Lipson, *Controlling Creditor Control: Jevic and the End (?) of LifeCare*, 27 NORTON J. BANKR. L. & PRAC. 563, 571-72 (2018); Charles J. Tabb, *What’s Wrong With Chapter 11?* (U. of Ill. Coll. of L. Legal Stud. Res. Paper No. 19-15), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3352137 [<https://perma.cc/7PET-HCLS>]; Jared A. Ellias, *The Shadowy Contours of Bankruptcy Resistant Investments*, 114 COLUM. L. REV. SIDEBAR 123 (2014); Mark Jenkins & David C. Smith, *Creditor Conflict and the Efficiency of Corporate Reorganization* (July 8, 2014) (unpublished manuscript), <https://ssrn.com/abstract=2463700> [<https://perma.cc/P5SZ-54FJ>].

11. *See* Mike Spector & Jessica DiNapoli, *Exclusive: Neiman Marcus Creditor Calls for Deal with Saks Fifth Avenue—Letter*, REUTERS (May 12, 2020, 8:50 PM), <https://www.reuters.com/article/us-neimanmarcus-m-a-saksfifthavenue-exc/exclusive-neiman-marcus-creditor-calls-for-deal-with-saks-fifth-avenue-letter-idUSKBN22P035> [<https://perma.cc/7QBY-YEWA>]; Lisa Fickenscher, *Lenders Want Neiman Marcus CEO Canned After Bankruptcy Plan*, N.Y. POST (May 13, 2020, 10:04 PM), <https://nypost.com/2020/05/13/lenders-want-neiman-marcus-ceo-canned-after-bankruptcy-plan> [<https://perma.cc/XC6S-R83R>]. The validity of claims like this are hard to evaluate, but the allegation demonstrates how the RSA had locked Neiman Marcus into a transaction that made it harder to explore other alternatives—in this case, a merger with Saks Fifth Avenue.

12. *See* Jared A. Ellias, *The Law and Economics of Investing in Bankruptcy in the United States* (Mar. 2, 2021), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3578170 [<https://perma.cc/PW6C-Z4P8>] (describing the advantages that existing senior creditors have in competing to provide DIP loans).

13. *See* 11 U.S.C. § 1129 (2018). While the bankruptcy judge can still deny confirmation of a plan of reorganization, in practice, judges rarely do so.

We first document the rise of bankruptcy process sales by reviewing a new sample of DIP loan agreements spanning three decades.¹⁴ About twenty years ago, scholars noticed that the senior creditors of Chapter 11 firms, who are usually the providers of DIP financing, were using the DIP loan contract to limit management's discretion in exercising control by, for example, requiring the debtor to exit bankruptcy quickly.¹⁵ We show that this account is out of date and that the new generation of creditor control goes much further than indirect controls like short time limits for Chapter 11.¹⁶ We document a transition, beginning in the early 2000s, from an old paradigm of managerial control to a new model with capital tied to preidentified restructuring transactions under close supervision, just as in Neiman Marcus and J. Crew.¹⁷ Between 1995 and 2000, only 10% of DIP loans in our sample required management to implement a specific transaction.¹⁸ For the five-year period ending in 2015, 57% of DIP loans were funding to implement a specific deal.¹⁹

We then propose and test a theory that identifies some potentially problematic situations where the sale of control early in the bankruptcy process produces inefficient outcomes.²⁰ As further explained below, our theory starts with a manager of a Chapter 11 debtor, who needs DIP financing to fund a Chapter 11 reorganization.²¹ The firm's existing creditors, who occupy different positions in the capital structure (first lien, second lien, and unsecured), can compete by offering a package that includes new financing that may have control

14. See *infra* Part I.

15. Barry E. Adler, Vedran Capkun & Lawrence A. Weiss, *Value Destruction in the New Era of Chapter 11*, 29 J.L. ECON. & ORG. 461 (2013); Douglas G. Baird & Robert K. Rasmussen, *The End of Bankruptcy*, 55 STAN. L. REV. 751, 784 (2002); David A. Skeel, Jr., *Creditors' Ball: The "New" New Corporate Governance in Chapter 11*, 152 U. PA. L. REV. 917, 919 (2003); Elizabeth Warren & Jay L. Westbrook, *Secured Party in Possession*, AM. BANKR. INST. J. (Sept. 2003), <https://www.abi.org/abi-journal/secured-party-in-possession> [<https://perma.cc/W8YW-ACFZ>]; Kenneth M. Ayotte & Edward R. Morrison, *Creditor Control and Conflict in Chapter 11*, 1 J. LEGAL ANALYSIS 511, 514 (2009) (finding that bankruptcy sales are more likely and traditional reorganization less likely with debtors that have over-secured creditors).

16. These DIP loans effectively decide creditor payoffs, create creditor veto rights over restructuring actions, protect creditors or shareholders against litigation, and limit management's ability to consider alternative proposals. See *infra* Sections II.A and II.B. Unlike a prepackaged bankruptcy where all creditors support the plan, the Neiman Marcus transaction was not supported by a significant number of creditors.

17. For an example of a court overruling a "sub rosa" DIP Loan, see *In re Belk Props., LLC*, 421 B.R. 221, 226 (Bankr. N.D. Miss. 2009), which states, "[T]he purpose of the Meadowbrook post-petition financing proposal still violates the holding of *Braniff* because it achieves the same effect as a *sub rosa* Chapter 11 plan of reorganization."

18. See *infra* Table 1.

19. See *infra* Table 1.

20. See *infra* Part III.

21. The vast majority of Chapter 11 debtors need debtor-in-possession financing to reorganize. In the dataset we study in this Article, which is roughly equivalent to all major bankruptcies between 2004 and 2012, roughly 94% of firms either obtained debtor-in-possession financing or came to an agreement with lenders on the use of cash collateral. See *infra* Part IV. In practice, agreements on the use of cash collateral also restrict management's discretion and often impose restrictions on management's ability to use the bankruptcy process.

rights attached. They also offer a payoff to entice management, such as a bonus or future stock in the reorganized company. We assume that management is self-interested and will choose the package that gives them the highest payoff. Importantly, while management may be able to change course and pursue an alternative transaction, process sales are structured in ways that restrict management's ability to do so.²²

The theory generates two main insights. First, it explains why a senior (that is, first-lien) secured creditor making a DIP loan will value buying complete control of the bankruptcy process instead of merely acquiring the indirect control that comes from making a short-term DIP loan. We suggest two different motivations for process sales that we call *plan protection* and *entitlement protection*. We explain each in turn.

Plan protection is the desire to ensure that the lender's desired outcome is not undermined by the other creditors. A process sale to the first lien through the DIP loan ensures that management will not "switch teams" during the case to advance a different plan that other creditors might favor and are willing to finance themselves. In our models, the first-lien lender's claim is partially underwater, meaning they will not be paid in full if the firm were to liquidate on the date of the bankruptcy petition. The DIP loan can boost the value of the company and thus boost the recovery on the first-lien claim. But if the case continues beyond the point of full recovery for the first liens, any further increase in firm value benefits only the lower-priority creditors, and the continuation subjects the first-lien claim to downside risk. The first-lien lender seeks process control to ensure that the lower-priority lenders will not step in to provide new lending and finance an alternative plan, to their detriment. We show that process sales can lead to inefficiency,²³ as the process sale might stifle a competing lender's plan that provides a greater payoff to the creditors overall. We show that competition will not solve this problem and that it is more severe when the conflict occurs between classes of secured creditors (for example, first lien versus second lien), rather than secured versus unsecured.

22. To alleviate concerns regarding fiduciary duties, these process sale provisions typically include "fiduciary out" provisions that purport to give the debtor flexibility to deviate from the agreed-upon plan as necessary to satisfy their fiduciary duties. But these provisions are often illusory. In the Walter Energy cash collateral motion described *infra*, for example, the fiduciary out could be exercised by management, but it would be an event of default under the financing motion if they did. See Official Committee of Unsecured Creditors' Objection to the Debtors' Motion for an Order (A) Authorizing the Debtors to Assume a Restructuring Support Agreement and (B) Granting Related Relief at 2-3, *In re Walter Energy, Inc.*, No. 15-02741 (Bankr. N.D. Ala., 2015).

23. We adopt a view here that the goal of the bankruptcy is to maximize the payoff collectively to all the creditors; this comes from a foundational theory of bankruptcy called the Creditors' Bargain. An efficient outcome in bankruptcy would result if management makes decisions that maximize the value of the company, such as deciding whether to reorganize, liquidate, or sell the company, at a time that yields the most value overall. Thus, when we refer to an outcome as inefficient, we mean that another choice is available to the company that would make the company's assets worth more, and thus the creditors collectively better off. See THOMAS H. JACKSON, *THE LOGIC AND LIMITS OF BANKRUPTCY LAW* 10-18 (1986).

Entitlement protection is the desire to protect a pre-bankruptcy claim from an attack on its validity by the debtor.²⁴ A common example is a fraudulent transfer action that the bankruptcy code allows debtors to bring against their creditors to recover value for the bankruptcy estate.²⁵ A successful fraudulent transfer action can void a secured lender's lien, returning the value of that lien to the other creditors. We show that the need to defend against entitlement challenges makes the affected lender a more aggressive bidder for control of the case. We also show that a desire to protect entitlements can result in inefficient outcomes. A lender seeking to protect itself from litigation might seek to end the case earlier, for example, to stymie the litigation against it,²⁶ even if a longer case would increase the value available for creditors as a whole.

With our theoretical framework in place, we then examine the data and test the main predictions of our models on a new dataset of more than 1.5 million court documents from all major bankruptcies that occurred between 2004 and 2012. As we cannot identify inefficient bankruptcy outcomes directly, we look to see whether creditor conflict is more likely in the situations that our theory suggests will cause greater conflict. Using a combination of automated and manual data collection, we search for allegations that the senior creditor has bought control of the bankruptcy process, typically through the DIP loan contract.²⁷ We find support for the main predictions of our models. In our preferred specification, the presence of second-lien debt raises the probability of observing a process-sale allegation by 8.9%, and the mention of avoidance actions in objections to a proposed DIP financing is associated with a 10.2% increase in the likelihood of observing a process-sale allegation.²⁸

We close by offering a policy solution that might ameliorate the perverse incentives that senior creditors have for inefficient control purchases. Courts could allow any creditor to provide debtor-in-possession financing to cover a

24. Baird refers to these issues as uncertain priority rights and discusses the ways that the presence of uncertain priorities complicates bankruptcy bargains. One difference between our perspective and Baird's is that our model describes how the resolution of these priority disputes can affect case outcomes and thus efficiency, while Baird suggests that these disputes have primarily distributional effects in the first instance. Another difference is that we assume that management can be induced to follow a creditor through promises of future value, while Baird assumes that the debtor's representatives are more interested in a path toward a confirmed plan and less interested in distributional outcomes. *See* Baird, *supra* note 3, at 608-09, 616.

25. In practice, these claims are often brought by unsecured creditors after the debtor agrees not to bring them in the DIP loan contract.

26. A prominent example of this is the Lyondell bankruptcy. *See* Jared A. Ellias & Robert J. Stark, *Bankruptcy Hardball*, 108 CALIF. L. REV. 745 (2020).

27. Allegations are not merely cheap talk: we find that allegations of control are associated with significantly lower unsecured-creditor recoveries, controlling for other factors. We find that process-sale allegations are a frequent target for objecting creditors. In 49% of the cases that involve an allegation of secured-creditor control of some kind, an objector alleges that the debtor in possession is tied to a specific plan or plan process.

28. Though unsecured creditors are the most common objectors to creditor control, we find that secured-creditor conflict is common: in 30% of the cases alleging creditor control, at least one secured creditor objects to the transfer of control.

short period—perhaps two or three months—of expenses, with priority over all creditors, including secured creditors. This would allow for greater competition among lenders to finance the debtor and a more fulsome exploration of plan alternatives before management is allowed to commit to a path out of bankruptcy.²⁹

This Article proceeds as follows. Part I examines trends in DIP financing over time and shows that DIP lenders have required management to give up an ever-increasing amount of control over Chapter 11 over the past thirty years. Part II provides some illustrative examples involving bankruptcy cases where management engaged in transfers of control that can be characterized as process sales. Part III presents a set of simple theoretical models that explicate the two agency problems that are the focus of the paper. Part IV summarizes our data and tests some of the predictions of our theory. Part V offers our proposed policy solution, and we then conclude.

I. The Evolution of Creditor Control in Chapter 11: Evidence from DIP Loans

In this Part, we study a large sample of DIP loans to investigate how lender governance has changed over time.³⁰ We begin by describing our sample, then we summarize patterns in the data. As we show below, the overall pattern is one in which DIP lenders acquire increasing amounts of control through the DIP loan contracts over the sample period, with the trend accelerating significantly after the financial crisis.

A. Sample and Categories of DIP Loans

We identified our sample of DIP loan contracts with a combination of automated searches, hand checking of results, and hand coding. The sample is pulled from the Securities and Exchange Commission (SEC) files of the 3,033

29. As we explain further, this is similar to how bankruptcy judges already treat requests to sell substantially all of the firm's assets, where the debtor is permitted to select a preferred bidder but must hold a fair auction to allow third-party competition and ensure that the final sale process is the highest and best price. *Infra* Part V; see, e.g., *In re Tex. Rangers Baseball Partners*, 431 B.R. 706, 712 (Bankr. N.D. Tex. 2010) (considering the amount of time that is needed between the approval of bidding procedures and when an auction should occur).

30. DIP loans have been extensively studied, but no prior study has focused on lender governance of the Chapter 11 process. The closest is Kai Li & Wei Wang, *Debtor-in-Possession Financing, Loan-to-Loan, and Loan-to-Own*, 39 J. CORP. FIN. 121 (2016), which analyzes the differences between Chapter 11 lenders that “lend to lend” versus “lend to own” for a sample of 658 debtors, of whom 63% borrowed money through a DIP financing. That study focuses on lender-identity and governance outcomes, not understanding how the DIP lender uses the DIP loan contract to dictate the outcome of Chapter 11 as this one does. See Sreedhar Bharath, Sandeep Dahiya, Anthony Saunders & Anand Srinivasan, *So What Do I Get? The Bank's View of Lending Relationships*, 85 J. FIN. ECON. 368 (2003); Maria Carapeto, *Does Debtor-in-Possession Financing Add Value?* (IFA Working Paper No. 294-1999); Sris Chatterjee, Upinder S. Dhillon & Gabriel G. Ramirez, *Debtor-in-Possession Financing*, 28 J. BANKING & FIN. 3097 (2004).

publicly traded debtors that filed for bankruptcy between 1993 and April 2018.³¹ We use the SEC files because this enables us to identify contracts going back as far as the mid-1990s, while court docket access through PACER only goes back to 2004.³² As further detailed in the Data Appendix, our search was roughly equivalent to searching all documents filed by those firms around the time that they filed for bankruptcy where the word “agreement” or “contract” appeared near “credit,” “loan,” “facility,” or “revolving.”³³ After manual inspection of all of our matches, we emerge with a sample of 175 DIP loan agreements dating from 1995 to 2018.³⁴ Appendix Figure 1 shows the distribution of the DIP Credit Agreements across the sample period. To the best of our knowledge, this sample represents the population of all DIP loan contracts filed with the SEC, and this is the longest-dated longitudinal sample of DIP loan contracts studied in the literature.³⁵

We are interested in understanding the level of control that managers acquire over Chapter 11 debtors through the DIP loan contracting process. Congress decided in 1978 that the new Chapter 11 procedure would have a mandatory rule leaving existing managers in control of the business, subject to the oversight of the bankruptcy judge.³⁶ However, managers can give up some

31. The list of Chapter 11 debtors came from Bankruptcy Datasource. Firms began filing documents with the SEC’s Edgar dataset in 1993, but we do not match a Chapter 11 debtor to the SEC file until 1995.

32. This data gathering method yields fewer DIP loans than a gathering DIP loan contracts from the court dockets themselves, as a contemporaneous working paper did. See B. Espen Eckbo, Kai Li & Wei Wang, *Rent Extraction by Super-Priority Lenders* (Dec. 18, 2020) (Tuck Sch. of Bus. Working Paper No. 3384389 (2019)), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3384389 [<https://perma.cc/2PWT-52LP>] (studying a sample of 267 cases with DIP loans). However, SEC data goes back to 1993, whereas PACER, the source for bankruptcy court documents, only goes back to 2002. The Eckbo et al. study was partially collected in the mid-2000s when PACER went back to 2002, which it no longer does, which is why our sample of court documents, *infra* Part IV, begins in 2004.

33. We also ran searches for “debtor” near “credit agreement” on the entire SEC corpus but found that focusing on the broader search of “credit agreement” on the corpus of firms that we knew filed for Chapter 11 identified more DIP credit agreements.

34. The vast majority of these DIP loan contracts were the version actually approved by the bankruptcy court.

35. The results here complement Frederick Tung, *Financing Failure: Bankruptcy Lending, Credit Market Conditions, and the Financial Crisis*, 37 YALE J. ON REGUL. 651 (2020). Tung studied a sample of 172 DIP loans of the 278 large firms that filed for bankruptcy between 2004 and 2012—a sample that is likely similar to the sample of court documents we study in Part IV. Tung focused his inquiry on the ability of senior creditors to use DIP loans to extract extraordinary relief, such as recharacterizing pre-petition loans as postpetition debt and the relationship between DIP loan provisions and credit market conditions. See *id.* at 675, 695. Tung also examines the incidence of milestones. *Id.* at 702. In unreported results, we find a similar pattern for milestone provisions to Tung’s research. Our inquiry differs in that we are focused on different metrics that match up with our theory—understanding control shifts from management to the DIP lenders in indirect ways (short maturity and milestones) and direct ways (process sales), and we study these patterns over a longer horizon. See also Li & Wang, *supra* note 30 (studying a sample of Chapter 11 filers between 1996 and 2013).

36. In the early years of the modern bankruptcy code, managers were thought to use their control to favor shareholders over creditors. See Lynn M. LoPucki, *The Debtor in Full Control-Systems Failure Under Chapter 11 of the Bankruptcy Code*, 57 AM. BANKR. L.J. 99 (1983); Lawrence A. Weiss & Karen H. Wruck, *Information Problems, Conflicts of Interest, and Asset Stripping: Chapter 11’s Failure in the Case of Eastern Airlines*, 48 J. FIN. ECON. 55 (1998).

of that control when they enter into financing contracts—just as is the case outside of bankruptcy.³⁷ For example, managers can agree that the firm will be subject to financial covenants that indirectly limit management’s ability to make business decisions, since those decisions might “trip” a covenant.³⁸

In summary, our review of the DIP loan contracts revealed that they tended to create one of three distinct relationships between the DIP lender and managers. We explain each in turn.³⁹ Note that these governance arrangements only go so far: management always has the option of liberating itself from the DIP lender’s control by refinancing the loan. However, informational asymmetry and other frictions that we discuss in Part III make it relatively challenging for a new lender to refinance an existing DIP loan, and such transactions are rare in practice.⁴⁰

The first type of DIP loan is a “management control” DIP loan. In these loans, management typically borrowed money with few strings attached and could use that money to meet capital requirements to reorganize.⁴¹ These DIP loans often required management to meet financial covenants and to promise to repay the loan, but management was not subject to any of the restrictive

37. See generally Nini et al., *supra* note 6 (showing that creditors play an active role in the governance of corporations well outside of payment default states).

38. See *id.* at 1737.

39. DIP loan contracts contain numerous bespoke governance provisions tailored for the specific situation. For example, Peabody Energy’s 2016 DIP loan contract imposed a 120-day deadline for management to provide lenders with a five-year business plan that the lenders found “reasonably acceptable.” Peabody Energy Corp., Current Report (Form 8-K) (Apr. 18, 2016), Ex. 10.2, at 93. The provisions we focus on capture the “flavor” of the three types of DIP loans we reviewed: some provided management with ample discretion and time to reorganize, some imposed restrictions through milestones, while others left management with little discretion and dictated the outcome of the Chapter 11 case. Figure 1 in Section I.B, *infra*, shows the distribution of these three types over time. These extra provisions were control enhancements on top of restrictive loans.

40. DIP loans are usually structured as freely tradable syndicated loans, and lenders who seek to exit lending relationships can usually do so by selling their claims on the robust secondary market. See Jared A. Elias, *Bankruptcy Claims Trading*, 15 J. EMPIRICAL LEGAL STUD. 772, 777-78 (2018).

41. The Pacific Gas & Electric Company was able to borrow a DIP loan on these conditions, showing that this contract still exists, especially, perhaps, for the biggest and hardest to reorganize firms. See Motion of Debtors Pursuant to 11 U.S.C. §§ 105, 362, 363, 364, 503 and 507, and Fed. R. Bankr. P. 2002, 4001, 6003, 6004 and 9014 for Interim and Final Orders (I) Authorizing the Debtors to Obtain Senior Secured, Superpriority, Postpetition Financing, (II) Granting Liens and Superpriority Claims, (III) Modifying the Automatic Stay, (IV) Scheduling Final Hearing and (V) Granting Related Relief at 30-31, *In re PG&E Corporation*, 2019 WL 3933733 (Bankr. N.D. Cal. Jan. 29, 2019) (No. 19-30088) (noting that “the Debtors have obtained DIP Financing on favorable terms. . . . The DIP Facilities do not subject PG&E to any milestones related to a sale or plan process, leaving the Debtors with adequate time and flexibility to develop and implement a restructuring that is in the best interests of their estates.”). The investment banker advising PG&E called the loan “unique . . . in that it provides PG&E with substantial flexibility to pursue their reorganization efforts. The DIP Facility does not subject PG&E to any milestones related to a sale or plan process, thereby enhancing the likelihood that PG&E will have adequate time and flexibility to develop and implement a restructuring that is in the best interests of its estates. Further, the DIP Facility contains no financial covenants.” See Declaration of David Kurtz in Support of Debtors’ Motion Pursuant to 11 U.S.C. §§ 105, 362, 363, 364, 503 and 507, and Fed. R. Bankr. P. 2002, 4001, 6003, 6004 and 9014 for Interim and Final Orders (I) Authorizing the Debtors to Obtain Senior Secured, Superpriority, Postpetition Financing, (II) Granting Liens and Superpriority Claims, (III) Modifying the Automatic Stay, (IV) Scheduling Final Hearing and (V) Granting Related Relief at 10, *In re PG&E Corp.*, No. 19-30088 (Bankr. N.D. Cal. Jan. 29, 2019). As the data show, the investment banker is correct in 2019—but in 1999, such loans were far less unique. See *infra* Part IV.

covenants we discuss below that effectively transferred control of the bankruptcy process to the lender.

The second type of DIP loan is one that limits management's discretion. The most common form of limitation consists of "milestones," which are requirements that management accomplish identified goals by specific days.⁴² For example, one DIP Loan from 2013 required the debtor to run a sale process and explore a standalone reorganization at the same time on a very tight timeframe.⁴³ DIP loan contracts with milestones force managers to move through the bankruptcy process on an accelerated timeframe. Milestones alone, however, may not dictate the outcome of the bankruptcy process. For example, the DIP loan contract to Vencor, Inc. required the firm to file a plan of reorganization and disclosure statement or sale motion within 90 days of the petition date but did not require the filing of any specific plan of reorganization.⁴⁴ This type of loan can be thought of as a transfer of some of the control that Congress gave to Chapter 11 managers, but management retains the power to seek out other alternatives along the way without defaulting on the loan.

The final type of DIP loan, and perhaps most troubling from a bankruptcy policy perspective, are loans tied to a specific preidentified transaction, a transaction we describe as a process sale because it involves a full transfer of control of the Chapter 11 process to creditors. For a representative example, when Swift Energy Company filed for bankruptcy on December 31, 2015, it also requested judicial approval for a DIP loan with the following milestones that required the approval of a plan that senior creditors had already identified as their preferred plan:

- (a) On the Petition Date, the Debtors shall each have filed with the Bankruptcy Court (i) a plan of reorganization reasonably acceptable in form and substance to the [senior creditors] (the "Approved Plan") and (ii) a related disclosure statement reasonably acceptable in form and substance to the [senior creditors] (the "Disclosure Statement");
- (b) On or before January 6, 2016, the Bankruptcy Court shall have entered the Interim Order;
- (c) On or before February 1, 2016, the Bankruptcy Court shall have entered the Final Order;
- (d) On or before February 15, 2016, the Bankruptcy Court shall have entered an order approving the adequacy of the Disclosure Statement reasonably acceptable in form and

42. "Milestones" are usually found in the Events of Default section of a DIP loan contract, a separate Milestone section, or in a Schedule.

43. *See, e.g.*, School Specialty, Inc., Quarterly Report (Form 10-Q) (Mar. 7, 2013), Ex. 10.1, Schedule 5.18.

44. *See, e.g.*, Vencor, Inc., Quarterly Report (Form 10-Q) (Sept. 30, 1999), Ex. 10.3, § 5.10.

Bankruptcy Process for Sale

substance to the Administrative Agent and the Backstop Lenders;

(e) On or before March 30, 2016, the Bankruptcy Court shall have entered an order confirming the Approved Plan reasonably acceptable in form and substance to [senior creditors]; and

(f) On or before April 19, 2016, the Approved Plan shall become effective.⁴⁵

After management agrees to these provisions, it is effectively an instrumentality charged with implementing the senior creditors' proposed plan of reorganization.

45. See Swift Energy Company (Form 8-K) (Jan. 11, 2016), Ex. 10.1 at 122. Another common "transaction dictating" provision is a milestone requiring the firm to sell itself to the highest bidder on a tight schedule. See, e.g., Champion Enterprises Inc. 8-K (November 19, 2009), Ex. 10.2 at 99 (requiring that "The Debtors shall have: (i) filed a motion, in form and substance acceptable to the Administrative Agent, to sell substantially all of their assets (on terms and other documentation in form and substance acceptable to the Administrative Agent and the Required Lenders), by no later than thirty-seven (37) days from the Petition Date, (the "Sale Motion Milestone"), (ii) by no later than sixty (60) days from the Petition Date, obtained an entry of an order of the Bankruptcy Court, in form and substance acceptable to the Administrative Agent (the "Bidding Procedures Order"), approving bidding procedures with respect to such sale, (iii) by no later than ninety (90) days from the Petition Date, conducted an auction pursuant to the Bidding Procedures Order, (iv) by no later than one hundred (100) days from the Petition Date, obtained entry of an order approving a sale of substantially all of the Debtors' assets, in form and substance acceptable to the Administrative Agent (the "Sale Order"), and (v) by no later than one hundred and ten (110) days from the Petition Date, consummated the sale approved by the Sale Order").

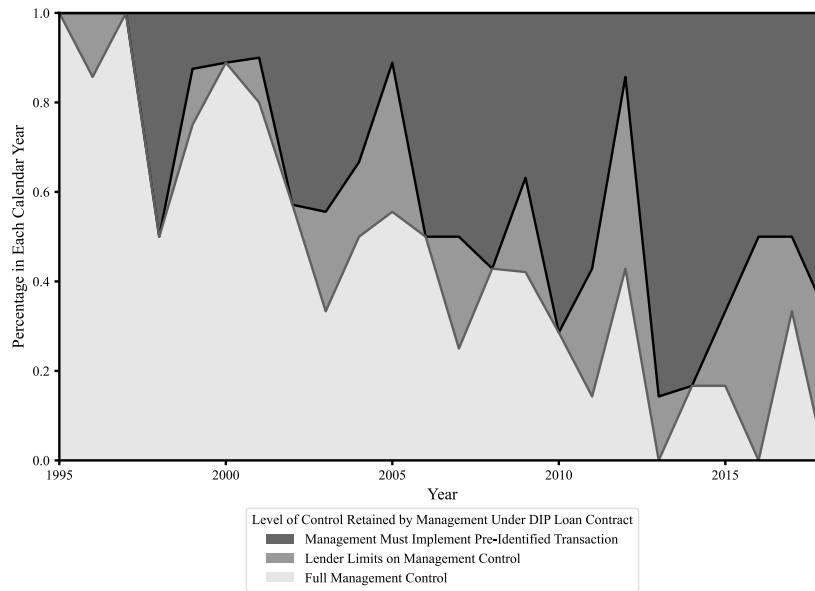
*B. Changes in DIP Loan Type over Time*Table 1: Governance Provisions of DIP Loans, 1995-2018

Years	n	Prepackaged	Milestones	Loan Tied to Specific Plan	Mean Maturity Period in Months
1995-2000	31	0.03	0.13	0.10	17.37
2001-2005	47	0.04	0.38	0.24	11.79
2006-2010	41	0.05	0.54	0.46	7.23
2011-2015	33	0.09	0.73	0.57	9.05
2015-2018	23	0.04	0.86	0.50	7.85
Total	175	0.05	0.50	0.36	10.79

Table 1 summarizes important aspects of the creditor governance rights created by 175 DIP loan contracts gathered from the SEC Edgar system that were filed between the years 1995 and 2018. The data gathered for the Table is further described in the Data Appendix. “Prepackaged” takes on a value of 1 if the solicitation for votes for a Chapter 11 plan was completed prior to the petition date. “Milestones” takes on a value of 1 if the DIP loan provides specific deadlines for Chapter 11 actions, such as filing a plan of reorganization or a motion to sell the firm. “Loan Tied to Specific Plan” takes on a value of 1 if the DIP loan contract references a specific plan of reorganization or sale transaction that the debtor must follow. “Mean Maturity Period” is the mean number of months before the loan matures according to its terms.

As the Table shows, there has been a steady decline in the amount of discretion managers have under DIP loan contracts. In 1995-2000, only 13% of DIP loans were subject to so-called “milestones,” contractual requirements that management complete certain actions (like filing a plan of reorganization with the court) by a certain time. That number steadily increased, reaching a new high of 86% for the 2015-18 sample. Management’s diminished discretion is also evident in the shortened loan period, which fell from 17 months on average in the 1995-2000 sample to a mere 7.85 months in 2015-18. The trend in Table 1 above is illustrated in Figure 1 below.

Figure 1: Level of Control Retained by Management Under DIP Loan Contract, 1995 to 2018



The category of “management must implement pre-identified transaction” is defined as when the DIP loan is meant to fund a specific transaction supported by the lender, a “process sale” as defined below. The category of “lender limits on management control” is defined as when the DIP loan contract requires meeting milestone dates that then control the timeline of the Chapter 11 and reduce management’s ability to consider alternatives. The category of “full managerial discretion” includes all DIP loans that do not have milestones or are not tied to a specific transaction.

As Figure 1 shows, DIP lenders now routinely ask for management to agree to strict limitations on its discretion in exchange for capital, and judges routinely approve those requests. In Part III, we offer a theoretical framework that offers insight into the frictions that might drive process-sale transactions.

II. Motivating Examples

In this Part, we use case studies of two Chapter 11 cases to illustrate how management might engage in the transaction at the heart of our models: a sale of control of the bankruptcy process to senior creditors in exchange for some compensation. While the cases we discuss are not representative of all Chapter 11 cases, Part IV presents comprehensive evidence from a larger sample that suggests that the basic dynamic of control sales are pervasive in modern Chapter 11 practice. The cases below combine three features of Chapter 11 bargaining that we model in Part III:

1. Management tries to sell control of the case to a senior creditor in exchange for a side payment;
2. The sale of control is tied to the contract for the debtors' bankruptcy financing; and
3. Management attempts to protect the control sale from reorganization alternatives and to defend the entitlements of senior creditors.

A. *Walter Energy*

By the time coal producer Walter Energy arrived in Chapter 11 in July of 2015, it had already created a framework for restructuring its debt. On the first day of the case, Walter Energy presented the bankruptcy court with an RSA that contemplated a debt-to-equity conversion of over \$1.8 billion of the Company's prepetition secured debt for substantially all of the reorganized debtors' common stock. These contracts must be approved by the bankruptcy judge to bind management.

At a high level, the RSA represented a trade in which management agreed to implement the first-lien lenders' preferred restructuring transaction and protect them from litigation in exchange for liquidity and side payments. The lenders were given control over the case and the power to force the company into an immediate liquidating sale if management failed to act exactly as the lenders wanted. Triggering events were defined to give the first-lien group veto rights over significant restructuring actions during the case, including proposals to restructure Walter's collective bargaining agreements, retiree obligations, and assumptions of executory contracts.⁴⁶ This control was protected with a "window shop" clause that prevented the debtor from seeking out better offers than the first-lien group's proposal.⁴⁷ The lenders were also given releases from litigation arising from an earlier acquisition, which potentially transferred a lucrative claim from the company—and its other creditors—to the lenders. For their part, managers were promised a management incentive plan containing up to ten percent of the equity in the reorganized company.⁴⁸ The firm's unsecured creditors would receive no distribution at all.

The second-lien creditors, the unsecured creditors' committee (UCC), and the United Mine Workers objected to the assumption of the RSA. The UCC argued that the RSA constituted a de facto sale of the bankruptcy process to the

46. This was primarily implemented by giving the first-lien lenders the right to call a default and force an immediate sale if any "triggering event" occurred under the RSA. *See* Official Committee of Unsecured Creditors' Objection to the Debtors' Motion for an Order (A) Authorizing the Debtors to Assume a Restructuring Support Agreement and (B) Granting Related Relief at 2-3, *In re* Walter Energy, Inc., No. 15-02741 (Bankr. N.D. Ala., Aug. 26, 2015) [hereinafter "Unsecured Creditors' Objection"].

47. *See id.* at 19.

48. *See id.* at 6.

first-lien creditors.⁴⁹ They claimed that the expedited process provided insufficient time to conduct a proper marketing and sale of the company's assets, or to investigate the claims of first-lien lenders that were subject to dispute.⁵⁰

The court was sympathetic to these objections, and the first-lien lenders responded by bringing the Chapter 11 case to a quick ending. Instead of approving the RSA and cash-collateral order as the debtor and first-lien lenders proposed, the court made its own modifications to these orders before approving them. In particular, the court preserved some of management's discretion over the bankruptcy process and limited the protections that lenders had created for their entitlements in the RSA.⁵¹ The first-lien lenders were unwilling to accept these modifications. They asked the court to recognize that a termination event had occurred, which terminated the RSA and the consensual use of cash collateral in accordance with the lenders' terms. The court acceded to this demand and confirmed the termination of the RSA. The first-lien lenders ultimately financed the Chapter 11 until they were able to acquire the major assets of Walter Energy in a sale several months later.

B. Pliant

Pliant was an Illinois-based manufacturer of film and flexible packaging that filed for Chapter 11 in 2009 with, similar to the Walter Energy example, an agreement in hand with its first-lien lenders to follow a dictated restructuring transaction.⁵² Just as with Walter Energy, the first-lien lenders were to obtain control with a combination of a financing tied to another contract, here styled as a "lockup agreement." The lockup agreement was similar in many respects to the Walter Energy RSA: it was tied to the DIP loan through cross-default clauses, and it provided for a plan process that would give all of the equity in the reorganized company to the first-lien lenders with some equity to be held back for existing management.⁵³ Plan protections included provisions that prevented

49. *See id.* at 16 ("Taken together, this package of rights all but hands control of the Debtors cases over to the First Lien Creditors, even before any plan or sale process. This transfer of control to a creditor group that does not have fiduciary obligations to any other party in these cases is simply inappropriate.").

52. *See id.* at 20 ("The unreasonably tight milestones and limited budget contemplated under the RSA mean that cash will go out the door and claims will be released before the Committee is able to complete a thorough investigation of potential claims against the First Lien Creditors.").

51. *See* Steering Committee's Emergency Motion for an Order: (I) Confirming that the RSA has Terminated; (II) Terminating the Debtors' Use of Cash Collateral on the Nonconsensual Terms Set Forth in the Final Cash Collateral Order; and (III) Authorizing the Debtors' Use of Cash Collateral at 3-4, *In re* Walter Energy, Inc., No. 15-02741 (Bankr. N.D. Ala., Sept. 18, 2015).

52. The Chapter 11 filing in 2009 was its second filing, after emerging from an earlier bankruptcy in 2006.

53. The lockup agreement allowed for warrants to be distributed to the lower-priority creditors subject to their consent to the plan. Emergency Motion of Apollo Management VII, L.P. Under Federal Rule of Bankruptcy Procedure 2004 to Authorize Examination of Debtors at 4, *In re* Pliant Corp., No. 09-10443-MFW (Bankr. D. Del., Feb. 25, 2009).

management from supporting any plan other than the first-lien plan.⁵⁴ In addition to post-bankruptcy equity, the first-lien lenders negotiated performance bonuses with management that were tied to the speed of Pliant's emergence from Chapter 11.⁵⁵

The second-lien lenders, led by the private equity firm Apollo, objected to the DIP. Like in the Walter case, the junior creditors argued that the DIP and lockup agreement effectively turned over control of the case to the first-lien lenders.⁵⁶ Unlike Walter Energy, where no competing lenders emerged, second-lien creditors expressed a willingness to provide alternative DIP financing with a longer runway and on better terms. The second-lien lenders argued that they were being denied access to the information necessary to evaluate the loan opportunity. The debtor, by contrast, claimed that the second liens were out of the money, and their requests were hold-up tactics intended to delay the case. It also expressed reluctance to share sensitive information with Apollo, who owned Berry Plastics, a competitor of the debtor.⁵⁷ Apollo was able to procure an order compelling the debtor to provide additional information.⁵⁸

Meanwhile, management continued to press forward with the first-lien plan. The unsecured creditors committee joined with Apollo to oppose it. They convinced the court to postpone a hearing on the first-lien disclosure statement and then to terminate management's exclusivity period, allowing Apollo to propose its own plan. The court terminated exclusivity and allowed Apollo to present its competing plan. Ultimately, Apollo's plan was confirmed, and Pliant was merged with Berry Plastics.

54. *Id.*

55. Transcript of Proceedings Before the Hon Brandon L. Shannon U.S. Bankr. Ct. Judge at 111-13, *In re Pliant Corp.*, No. 09-10443-MFW (Bankr. D. Del., Feb. 25, 2009).

56. Ad Hoc Committee of Certain Holders of 11 1/8% Senior Secured Notes Due 2009: (A) Preliminary Objection to Motion for Interim & Final Orders (I) Authorizing Debtors to Obtain Post-Petition Financing & Use Cash Collateral of Pre-Petition Secured Parties, (II) Granting Adequate Protection to Pre-Petition Secured Parties, (III) Scheduling a Final Hearing & (IV) Granting Related Relief; & (B) Motion Requesting Adequate Protection at 4, *In re Pliant Corp.*, No. 09-10443-MFW (Bankr. D. Del., Feb. 11, 2009) [hereinafter Ad Hoc Committee] ("The DIP Facility . . . is simply a mechanism to ensure that the First Lien Noteholders/DIP Lenders, not the Debtors or this Court, are in control of this restructuring, and will be the primary beneficiaries of these chapter 11 Cases, not the Debtors' 'broader creditor constituency.'").

57. Response of the Debtors to Emergency Motion of Apollo Management VII, L.P. Under Federal Rule of Bankruptcy Procedure 2004 to Authorize Examination of Debtors at 2, *In re Pliant Corp.*, No. 09-10443-MFW (Bankr. D. Del., Mar. 1, 2009) ("At worst, the Alternative Plan is an effort by Apollo—the owner of Berry Plastics, a competitor of Pliant—to derail months of intense analysis and negotiation that culminated in the plan of reorganization in these Chapter 11 Cases. Whether intended or not, Apollo's tactic of waiting until now to launch its Alternative Plan, despite being aware months ago of the pre-bankruptcy negotiations between the Company and the First Lien Committee, threatens to prolong these proceedings and cause further competitive harm to the Company.").

58. Objection of Apollo Management VII, L.P. to Motion for Approval of Debtor's Disclosure Statement at 5, *In re Pliant Corp.*, No. 09-10443-MFW (Bankr. D. Del., May 6, 2009).

Pliant is a case in which the junior creditors successfully resisted the first-lien lender's process controls.⁵⁹ But this took the efforts of a sophisticated, activist private equity firm with substantial resources and access to capital to press its case repeatedly in court. Management's actions were tied explicitly (through the lockup agreement) and implicitly (through the bankruptcy bonus plan and the promise of post-reorganization equity) to the interests of only the first-lien lenders, and this control proved difficult for the second-lien lenders to break.

These examples are only illustrative, but they show that some of the forces underlying our models are present in several high-profile large Chapter 11 cases.⁶⁰ We now turn to the theory section to understand the mechanisms by which process sales can affect bankruptcy outcomes. The theory will also generate two empirical predictions we will test in Part IV.

III. Theory

In this Part, we propose a theoretical framework that allows us to identify when we might expect process sales to result in inefficient bankruptcy outcomes. We begin by summarizing our models, the assumptions on which they depend, and the insights they yield before moving on to identify the frictions that might result in inefficient outcomes, which we test empirically in Part IV.

As a threshold matter, our models measure outcomes by how much total value they create for the investors in the company. Outcomes that maximize the total “pie” available to investors—the value of the bankruptcy estate—will be called *efficient*. This normative goal is well known in the corporate bankruptcy literature and follows from the classic Creditors' Bargain Theory of Douglas Baird and Thomas Jackson.⁶¹ In practice, bankruptcy judges commonly assume this is one of the most important policy goals of the bankruptcy system.⁶² Clearly,

59. One of us has studied the question of junior activism in the bankruptcy process and found evidence that it is a common feature of Chapter 11. See Jared A. Elias, *Do Activist Investors Constrain Managerial Moral Hazard in Chapter 11?: Evidence from Junior Activist Investing*, 8 J. LEGAL ANALYSIS 493 (2016).

60. The examples also show that creditors may successfully resist a process sale by appealing to the bankruptcy court. This is outside our simple model: direct control is, to be sure, less airtight than our model assumes. At the same time, the Walter Energy case suggests that judicial resistance to the process sale comes with significant risk of losing access to financing and ending the case prematurely. Our priming DIP proposal, *infra* Part V, addresses this concern.

61. See, e.g., Jackson, *supra* note 23, at 10-17 (providing a framework for understanding the fundamental tenets of bankruptcy law); Douglas G. Baird & Thomas H. Jackson, *Corporate Reorganizations and the Treatment of Diverse Ownership Interests: A Comment on Adequate Protection of Secured Creditors in Bankruptcy*, 51 U. CHI. L. REV. 97, 116-25 (1984) (exploring the rights of secured creditors in bankruptcy); Thomas H. Jackson, *Bankruptcy, Non-Bankruptcy Entitlements, and the Creditors' Bargain*, 91 YALE L.J. 857, 861-68 (1982) (developing the Creditors' Bargain theory). For a forceful critique of the Creditors' Bargain Theory, see Anthony J. Casey, *The New Bargaining Theory of Corporate Bankruptcy and Chapter 11's Renegotiation Framework*, 120 COLUM. L. REV. 1709 (2020).

62. See, e.g., *In re Pursuit Capital Mgmt.*, 595 B.R. 631, 659 (Bankr. D. Del. 2018) (“Two primary goals of the Bankruptcy Code are to maximize the value of the estate for the benefit of creditors and to provide for the equality of treatment of creditors.”).

it is important to maximize the value of what is distributed to pre-bankruptcy investors because doing so increases incentives for lending to healthy companies *ex ante*.⁶³

In our models, the key decision affecting the efficiency of the bankruptcy case relates to when to continue operating in bankruptcy versus ending the case. Thus, when we refer to an outcome as *inefficient*, we mean that the firm makes some choice (to end the case or to continue it further) when a different choice is available that would make the creditors collectively better off.⁶⁴ Empirical research in the finance literature shows that these inefficiencies caused by creditor conflicts have large negative effects on creditor recoveries.⁶⁵

We study a capital structure involving a firm that has two levels of secured debt—first-lien debt and second-lien debt—and unsecured debt. For ease of exposition, we will refer to those creditors as “First,” “Second,” and “Unsecured” for short.⁶⁶

The numerical examples below will generate several insights:

1. A senior lender (here, the first-lien lender)⁶⁷ whose claim is partially underwater can value direct control of the case through a process sale. Buying control of the bankruptcy process is valuable to the first-lien lenders because it prevents management from “switching teams” and continuing the case by borrowing from another lender. This process sale comes at the expense of the second-lien lenders and unsecured creditors, who prefer a longer case. Overall, a process sale can be efficient or inefficient, depending on the company’s circumstances.
2. The presence of debt overhang conveys market power to the first-lien lenders at the outset of the case. Hence, the other creditors (the second-

63. See Francesca Cornelli & Leonardo Felli, *Ex-ante Efficiency of Bankruptcy Procedures*, 41 EUR. ECON. REV. 475-485 (1997); Julian R. Frank, Kjell G. Nyborg & Walter N. Torous, *A Comparison of US, UK, and German Insolvency Codes*, 25 J. FIN. MGMT. 86 (1996); David C. Smith & Per Strömberg, *Maximizing the Value of Distressed Assets: Bankruptcy Law and the Efficient Reorganization of Firms*, WORLD BANK CONF. ON SYSTEMATIC FIN. DISTRESS (Mar. 2004), <https://www.hhs.se/contentassets/662e98040ed14d6c93b1119e5a9796a4/worldbank0304.pdf> [https://perma.cc/5NFH-59JU].

64. Another important goal of bankruptcy is to respect the priority structure of claims to the extent possible because firms design their capital structures to minimize agency costs and other frictions. See Adler, *supra* note 15. We do not consider these issues explicitly in our theory, but we assume that the seniority structure as between the first-lien, second-lien, and unsecured creditors will be respected.

65. See Samuel Antill, *Do the Right Firms Survive Bankruptcy?* (Apr. 9, 2021), J. FIN. ECON. (forthcoming 2022); Winston Wei Dou, Lucian A. Taylor, Wei Wang & Wenyu Wang, *Dissecting Bankruptcy Frictions*, 142 J. FIN. ECON. 975 (2021).

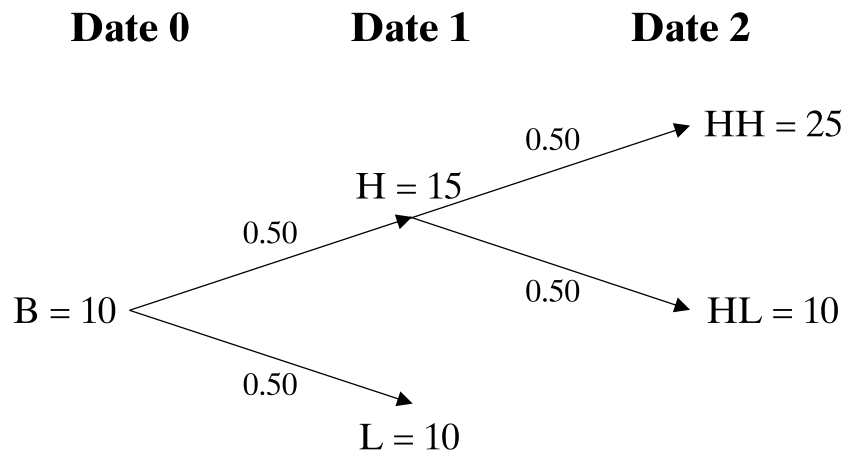
66. Although we refer to them in the singular, the first-lien and second-lien lenders are a collection of institutional investors holding portions of syndicated debt that must be treated the same under a common loan document (a “Credit Agreement”) that created the obligation. While our theory ignores shareholders for simplicity’s sake—shareholders are rarely important in bankruptcy cases as they are usually out of the money—there would be no difference in our results if we were to have, say, shareholders as the residual claimant on the firm’s assets instead of the unsecured creditors.

67. The intuition underlying the incentives for process sales would apply equally well to a second-lien lender who is underwater when a first-lien lender above it is fully secured.

lien lenders and unsecured creditors) may refuse to offer a competing loan proposal, even if the first-lien lenders' exercise of control comes at their expense.

3. The first-lien lenders are more likely to seek to force an early end to the case in the presence of second-lien debt. This is because debt overhang can work in two directions. In addition to discouraging the second-lien lenders from offering a competing loan at the outset of a case, it can also discourage the first-lien lenders from financing a longer case because the first-lien lenders cannot capture the benefits by priming the second-lien lenders.
4. When a secured creditor's entitlement is subject to challenge in litigation, it becomes a more aggressive bidder for control. This can affect the efficiency of the case outcome if controlling the case outcome (a shorter case, for example) can also help the creditor defend its entitlement.

Figure 2: Timeline and Company Values



A. Example 1: Plan Protection

Figure 2 shows the timeline of our game and the value of the company depending on the states of the world that may arise in the future. There are three potential dates in bankruptcy: 0, 1, and 2. At date 0 (the filing date), the debtor has commenced a bankruptcy case. Continuation requires new financing, and it involves risk: if the firm continues from date 0, the value of the company may rise to 15 (state H) or fall to 10 (state L). If the firm reaches state H, another

continuation decision must be made.⁶⁸ Continuation can increase the value of the company further to 25 (state HH) or cause it to fall to 10 (state HL). If state L is reached, the parties all agree that continuation is unfavorable and thus will end the case. The probability of any rise or fall in firm value is assumed to be 50%.

If the bankruptcy ends on a particular node, the firm value in Figure 2 is realized at that node. This can be thought of as a sale of the company or confirmation of a reorganization plan that takes place on that date.

Table 2: Model Variable Definitions and Values

Variable	Definition	Value
F	First-lien debt	15
S	Second-lien debt	7
U	Unsecured debt	10
I	Per-period financing need	2

Table 2 provides definitions of the variables and values we will use in our illustrative example. The company has $F = 15$ dollars in first-lien (senior) debt outstanding, $S = 7$ dollars of second-lien debt, and $U = 10$ dollars in unsecured debt. Company value is never high enough to provide value for shareholders, so all the value will be divided between the three creditor groups.

The company requires $I = 2$ dollars in new financing per period in order to continue the reorganization. We do not impose any a priori restrictions on the ability of any creditor to fund the loan; as we will see, though, only the first lien creditors will want to fund it. If a DIP loan proposal is made, the priority of the new loan will be junior in priority to the first- and second-lien debt. This captures the common practice that DIP loans are typically ahead of unsecured creditors in priority, but are rarely allowed to prime existing secured creditors without their consent.⁶⁹

As bankruptcy law allows, a DIP loan can be provided by any of the firm's creditors. The proposal can transfer control over the reorganization to the DIP lender, along with the terms of the financing. It also provides a transfer of value

68. The company might also face a continuation decision in state L; to keep the example as simple as possible, we suppose that all parties agree that the case should end immediately if state L is reached.

69. Intercreditor agreements between first- and second-lien lenders do commonly permit the first lien to prime the second lien with a DIP loan, but the priming is typically subject to a general cap that limits the total amount of first-lien debt. The second-lien lenders can also exploit ambiguities in the agreement to voice an objection to priming or request adequate protection. In the Pliant case mentioned above, the first and second liens had such a dispute over the ability of the second liens to be primed according to the intercreditor agreement. *See Ad Hoc Committee, supra* note 56, at 14-15.

(call this “ τ ”) to the firm’s management. This transfer can be in the form of a promise of future employment or equity in the reorganized company.⁷⁰

If multiple loan proposals are received, the firm’s management will propose to the bankruptcy judge the proposal that provides the largest τ . In the basic example we present here, the judge plays no role because no other creditor will make a proposal; in Appendix B, we describe a different example in which multiple lenders want to participate, and the judge can favor the proposal she believes is in the best interest of the estate.

There are several important assumptions operating in the background of this model that deserve attention. First, we assume that creditors defend their interests only by making a loan offer to the debtor; they do not negotiate with each other. This is a strong assumption, but it is a simple way of representing bargaining frictions that necessitate bankruptcy.⁷¹ If perfect Coasean bargaining were available, we would not need bankruptcy law at all. In addition, we assume that creditors can come up with enough money to fund the DIP loan but not enough money to buy the company outright. A world of full liquidity would mean no need for bankruptcy as well since an auction of the company’s assets on the first day of the case would produce efficiency.

1. The Efficient Decision

As a benchmark, consider the actions that would constitute efficient actions in this model. The efficient plan is the plan that maximizes the total expected value of the firm, net of financing costs,⁷² by deciding whether to continue the bankruptcy or end it at each point in time. In this example, the efficient action plan is always to continue at date 0 and continue at state H if it is reached at date 1.

To see why, consider the decision at date 1 in state H. The total firm value if the case ends at state H is 15. If the bankruptcy process continues, the firm value is 25 in state HH and 10 in state HL. Thus, the expected firm value, net of the required investment cost of 2, is $.5(25) + .5(10) - 2 = 15.5$.

Now, having derived that firm value is 15.5 in state H, we can see that continuation is also efficient as of date 0. Continuation at date 0 produces 10 if the case ends immediately. If it continues, it produces 15.5 in state H and 10 in state L. This has an expected value of $.5(15.5) + .5(10) - 2 = 10.75$.

70. Importantly, regardless of any agency problems, managers may benefit after the bankruptcy from a plan confirmed at a low valuation by receiving valuable stock options at an artificially low strike price. See Ellias, *supra* note 59, at 2-3, 10-12.

71. One source of bargaining inefficiency is different beliefs about asset values. See Kenneth Ayotte, *Disagreement and Capital Structure Complexity*, 49 J. LEGAL STUD. 1 (2020).

72. We assume here that all participants are risk neutral, so they evaluate payoffs by comparing expected values. Expected values are the payoffs of each possible outcome multiplied by the probability of that outcome.

The potential efficiency problem we consider in this model, then, is an early termination problem. That is, we assume that company value is enhanced by spending at least some time restructuring inside bankruptcy, but senior-creditor control creates pressure to end the case too quickly. Scholarly evidence suggests that this problem is more empirically relevant in modern bankruptcy than the opposite problem of junior-creditor-driven excessive delay, and prominent reform proposals have been targeted at the senior-creditor-driven early termination problem.⁷³ Nevertheless, since the excessive delay is also a concern, our policy proposal should be robust to this possibility. We discuss a proposal that balances these competing concerns in Part V.

2. The Debt-Overhang Problem

The example is set up to examine the effect of debt overhang on the competition for financing and for control over the case. Notice in the example that the first-lien debt F is 15, and continuation from date 0 to date 1 can increase the value of the firm from 10 to 15. This means that all the value of continuation up to date 1 goes to improving the recovery on the first-lien debt. Only First, then, has the incentive to finance the continuation from date 0 to date 1.

But the situation changes if state H is reached at date 1. Then, continuation benefits Second and hurts First: the second lien is entitled to the next 7 dollars after the firm value reaches 15. So if continuation occurs, and the firm reaches state HH , the upside value accrues to Second. First can only lose from continuation, as firm value falls if state HL is reached. Thus, we should expect that Second will lean in favor of financing continuation from state H , while First will lean against it.

3. DIP Loan Proposals at Date 0

The first and second liens can make a proposal to the manager to provide a DIP loan at date 0.⁷⁴ A DIP loan is assumed to be junior to First and Second, but senior to the unsecured creditors, in accordance with Section 364(c) of the Bankruptcy Code.⁷⁵ In this model, there is value remaining to pay the DIP loan only in state HH . After the claims of First and Second are satisfied, there is $25 - 15 - 7 = 3$ remaining value to pay off the DIP loan.

73. For empirical evidence of secured-creditor-driven outcomes, see, for example, Ayotte & Morrison, *supra* note 15. For reform proposals targeted at these problems, see Casey, *supra* note 10; and Jacoby & Janger, *supra* note 10.

74. The unsecured creditors could also make a proposal, but they will not want to do so in this example, so we omit this discussion for brevity.

75. Under Section 364(c), a DIP lender can take a junior lien on any asset with an existing lien and take priority over the general unsecured creditors and administrative expenses. *See* 11 U.S.C. § 364(c) (2018). Both kinds of priority would put the DIP lender ahead of the general unsecured creditors but behind the first and second lienholders if the lienholders were secured by all the firm's assets.

Here, we will show that the debt-overhang problem would prevent Second from offering a DIP loan. This would leave First as the only bidder for the loan, and that loan will include process controls in favor of First.

4. Second-Lien Lenders Will Not Compete at Date 0

For Second, it will be optimal to provide continuation financing in state H if that state is reached, but due to debt overhang in favor of the first-lien debt, it is not optimal for Second to offer financing at date 0.

To see this, start at state H. If this state is reached, Second will not receive a payoff if the game ends at date 0, since the entire firm value will go to the first lien: $V - S = 15 - 15 = 0$. If continuation is funded from state H, then Second can capture the remaining value in state HH after First is paid, through its second-lien claim of 7.

Second's payoff is 7 if state HH is reached, and 0 if state HL is reached, since all of the 10 belongs to First. Net of the cost of the loan to fund continuing after state H is reached, Second would receive at least $.5(7) + .5(0) - 2 = 1.5 > 0$.⁷⁶

Now, consider date 0 before state H or L is reached. Second's payoff would be 1.5 if state H is reached, and 0 if state L is reached. It is not in Second's interest to invest 2 to receive a payoff of expected value $.5(1.5) + .5(0) = 0.75$.

The second-lien lenders will not provide a DIP loan at date 0 because of the debt-overhang problem: most of the benefits of Second's date 0 loan would go to First. In particular, if state H is reached, the value of First's loan rises from 10 to 15. Second cannot capture this increase in value because the DIP loan is junior to First in priority. In addition, Second bears a significant downside risk of receiving 0 if HH is not achieved. Hence, Second will not make an offer to provide the loan.

Given that lending cannot be profitable for Unsecured or Second, only First is willing to provide a DIP loan and so will make a proposal without competition. Consider the value to First of providing the DIP loan, supposing that the case will end at date 1 (this will be optimal for First, as we will see). If continuation occurs, First will receive, net of the cost of the loan, $.5(15) + .5(10) - 2 = 10.5$. This exceeds 10, the date 0 liquidation payoff, so First prefers to provide a DIP loan at date 0.

76. There is also a remaining value of 3 in state HH that Second could potentially collect through their DIP loan. But this would depend on the value of First's DIP loan at date 0. The two lenders would likely share equally in this remaining value. If so, then Second's willingness to lend in state H is even stronger. Second would still not lend at date 0 even if it could capture the entire 3, since $.5(.5(7 + 3) - 2) = 1.5 < 2$.

5. First Lien Prefers Faster Resolution

If state H is reached, First would lose from continuation beyond date 1. This is true even if Second were to provide the DIP financing. Ending the case in state H pays 15. In continuation, if state HH is reached, First would receive, at most, full payment on its first lien (15), plus the remaining firm value (3) as payment for their date-0 DIP loan, after Second is satisfied. This means that First's payoff from continuation is, at most, $.5(15 + 3) + .5(10) = 14 < 15$. As the firm's condition improves from date 0 to state H at date 1, the value of continuation for First gets smaller. This conflict of interest between senior and junior creditors is typically called the "fire-sale problem": when the value of the firm increases towards the amount owed to the first-lien debt, continuation adds risk that benefits the junior creditors at the expense of the senior creditors.

6. The Benefit of Process Sales

First knows that Second would be willing to provide a new DIP loan in state H. Thus, it is in the interest of First to include terms that give First control over the bankruptcy process. In particular, it must prevent management from joining with Second to finance continuation when state H is reached. It is not enough for First simply to provide short-term financing until date 1. Second is willing to fund the continuation itself, and since they profit from the continuation, Second would be willing to pay the manager a positive transfer to do so. First can combat this by buying control at date 0 and preventing this deal from taking place. So First must include a provision that prevents the manager from striking a deal with Second in state H at date 1.

Since First will be the only bidder for the loan as of date 0, the manager will agree to the loan terms. It is not in Second's interest to make a competing loan proposal. Even though there is another willing lender available to compete for the loan, the debt overhang creates market power that restricts competition.

7. Secured-Creditor Conflict Increases Demand for Process Control

One cause of the inefficient process sale to the first-lien lenders in this example is the existence of conflict between groups of secured creditors. In particular, one cause of creditor conflict is the presence of second-lien debt, which has priority over any DIP loan the first-lien lenders might make. This means the first-lien lenders cannot capture any of the continuation value after date H; it can only go to the second-lien lenders. To see this, suppose we replace the second-lien debt with unsecured debt ($F = 15$, $S = 0$, and $U = 10$). Now, First can make a loan that is senior to the interests of all of the other creditors. It is

easy to see that if First can demand an additional 9 to repay its DIP loans at date 0 and in state H, they would be willing to finance continuation in state H.⁷⁷

This suggests an empirical prediction that we will test against our data:

Hypothesis 1. There is a greater likelihood of a process sale when the firm has second-lien debt. The presence of second-lien debt makes it harder for the first-lien lender to capture continuation value through a DIP loan; hence, it is more likely to buy control to end the case earlier.

8. Extensions to Example 1

The numerical example we used is intended to demonstrate one possible scenario in which process sales can occur and lead to inefficiency. It is, of course, only one possibility of many. In this Section, we briefly discuss two alternative scenarios that are worthy of consideration.

First, the example above demonstrates a scenario where the process sale enables an inefficient early end to the case, but process sales are not inefficient per se. They can also enable an *efficient* early end to the case when the junior creditors would continue the case too long at the expense of the first liens and overall creditor recovery.⁷⁸ Moreover, identifying the efficient length of time a company should stay in bankruptcy at the outset of a case is unrealistic to expect of a bankruptcy judge. This means that a simple policy that prohibits process sales outright is not necessarily an optimal policy response and may do more harm than good. We discuss a different policy solution—temporary priming liens—that can manage this difficulty in Part V.

Second, even in the situation where there is more than enough value to pay both the first- and second-lien lenders in full, the first-lien lenders will still want to buy control of the bankruptcy process to extract a handsome return on a DIP Loan. Recall that DIP loans are senior to claims of general unsecured creditors, so a more generous interest rate on the DIP loan comes at the expense of unsecured creditor recovery. For this reason, courts are charged with approving the DIP loan and preventing the DIP lender from charging an excessive interest rate. However, informational asymmetry means that the judge may not be able to distinguish an interest rate that is “market” from one that is above market (i.e., greater than the DIP lender would require to make the loan). In that case, a process sale can help the DIP lender lock in an above-market interest rate and earn a supranormal return for a longer period. The process sale can prevent the

77. In state H, First would receive 15. If it continues, it will receive an expected payoff of $.5(15 + R) + .5(10) - 2$, where R is the gross repayment on First’s DIP lending. The R that makes First willing to continue is any $R \geq 9$. Note that R is uncollectible in state HL because there is only 10 to distribute.

78. To see this with numbers, suppose the payoff in state HL moves from 10 to 5. Then continuation is inefficient, because $15 > .5(25) + .5(5) - 2 = 13$. Yet, from the point of view of the second-lien lenders, the continuation and lending decisions are no different. The lower payoff in state HL only affects the recovery of the first-lien lenders, which the second-lien lenders will not take into account.

debtor from securing alternative financing from another lender at a lower interest rate.

Moreover, even when the first-lien lender's DIP loan interest rate is limited by the court, it can create incentives that give rise to process controls. One possibility is that the court holds the interest rate to be too low for the first-lien lenders to profit from the DIP loan, causing them to prefer an earlier end to the case. The first-lien lenders will therefore buy control of the bankruptcy process, as in Example 1, to prevent continuation by the other creditors.

We leave these examples to Appendix B.

B. Example 2: Entitlement Protection.

The second friction we will consider is the effect of entitlement shifts. We define an entitlement shift as any change in the value of a claim that can be affected by the bankruptcy process. A common example is the possibility of clawback actions against a lender such as a fraudulent transfer suit. If successful, this suit can reduce or subordinate the lender's priority. By agreement, lenders can include terms that prevent the debtor from bringing litigation against it, or reduce the time or the budget available for bringing suit.⁷⁹

In the next example, we show that including entitlement shifts in an auction for control can affect the ultimate outcome of the case. The defendant in the dispute—the party with an entitlement to protect—will make a more aggressive bid to control the case, in order to reduce the value of litigation against it. Entitlement disputes are zero-sum games in our example: what one party loses, other parties gain in equal amounts. But the defendant creditor's losses fall entirely on the defendant, while the gains are shared by multiple other creditors.

This can affect the efficiency of the bankruptcy when the value of the entitlement dispute is correlated with the case outcome. For example, a quicker resolution to the case may mean less time is available to challenge the lender's liens. This effect can lead a lender to prefer a quick outcome even though the slower outcome would result in a larger payoff to all creditors. While it is possible to unbundle this litigation from the plan process, in practice, the consent of senior creditors is often needed for the firm to reorganize, and management may need to lift the cloud over the firm that litigation creates in order to exit bankruptcy with a fresh start.

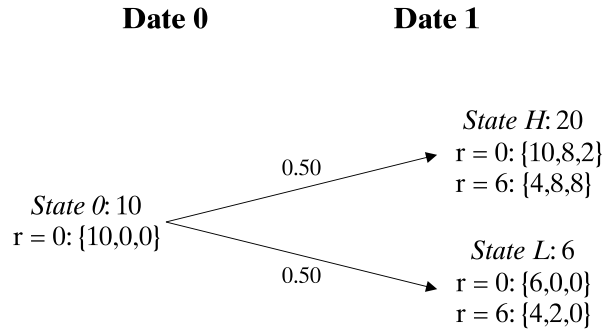
Example 2 shows how these effects can play out.

79. Other examples of entitlement shifts are litigation over the validity of make-whole premia, cross-collateralization or roll-ups, or other contractual rights in the loan agreement. These change the priority and interest rate of the DIP lender's prepetition claim, thus elevating its value relative to the other claims.

Figure 3: Entitlement Protection

Payoffs to {F,S,U} when F = 10, S = 8, U = 8

F = First-lien lenders; S = Second-lien lenders; U = Unsecured creditors



Expected Date 1 Payoffs : 13

r = 0: {8,4,1}
r = 6: {4,5,4}

Suppose there are only two dates, 0 and 1. A date 0 resolution corresponds to a fast sale, while proceeding to date 1 is a slower reorganization process. Because debt overhang is not an essential element of the story here, we can assume for simplicity that no new money is necessary to advance to date 1.⁸⁰

Figure 3 shows the payoffs to each party (First, Second, and Unsecured) depending on which state is realized and whether First is subject to an entitlement challenge. The expected payoffs on date 1 are the averages of the payoffs in states H and L, weighted by their probabilities (.5).

Suppose there is a potential challenge to First’s lien that would reduce its claim from 10 to 4, a reduction of r = 6. The challenge can be successful only if there is sufficient time to bring the action against First; hence, suppose that r = 6 is available only in a case that proceeds to date 1.

1. The Efficient Action

In this example, the expected value of the firm under continuation is larger. As Figure 3 shows, the expected payoff to continuation is $.5(20) + .5(6) = 13 > 10$. Hence, continuation is efficient. Holding the case outcome constant, an entitlement shift does not affect efficiency per se, since it is just a zero-sum transfer from First to the other creditors. As we will see, though, the presence of

80. The agreement that provides control to the creditor may be an agreement to use cash collateral or a restructuring support agreement that does not involve financing.

the entitlement shift can affect the case outcome decision and the identity of the winning bidder for control over the case.

2. The Contest for Control

In the control auction, the winning bidder can extract a promise by management to bring the entitlement action and recover from First ($r = 6$) or a commitment to forgo the action and leave First's claim undisturbed ($r = 0$). Since the potential action reduces First's claim, First obviously prefers $r = 0$, while Second and Unsecured both prefer $r = 6$.

Table 3 summarizes the parties' expected payoffs, depending on the entitlement shift and the date the case ends. It also calculates each party's willingness to pay for control. This is calculated as the difference in payoffs between its preferred case outcome and its least preferred outcome.

Table 3: Entitlement Shifts and Willingness to Bid for Control

Entitlement	Expected Payoff			Willingness to Pay For Control
	$r = 0$	$r = 0$	$r = 6$	
End Date	date 0	date 1	date 1	
First	10	8	4	$10 - 4 = 6$
Second	0	4	5	$5 - 0 = 5$
Unsecured	0	1	4	$4 - 0 = 4$
Total	10	13	13	

3. Benchmark: With No Entitlement Shifts, the Efficient Outcome Occurs

First, suppose that no entitlement shift is possible ($r = 0$). The parties will have different preferences over the length of the reorganization, due to the same fire-sale motives that are present in Example 1. First prefers that the case ends at date 0 to receive 10 with certainty. Second prefers a resolution at date 1, since that gives it a payoff of 8 in state H and 0 in state L; this has an expected value of $.5(8) + .5(0) = 4$ for Second. If the parties compete for control by offering a payoff to management, Second will be the most aggressive bidder, because Second's payoff increases by 4 in continuation, while First's payoff decreases by only 2. Continuation benefits Second more than it costs First. Competition for control will result in Second buying control of the process, which produces the efficient outcome for the firm.

4. Bidding with Entitlement Shifts: Outcome is Inefficient

Now consider the effect of the entitlement litigation. If First is the winning bidder, First will clearly prefer an end to the case at date 0, and full preservation

of its claim ($r = 0$). Second prefers to reduce First's claim ($r = 6$) and to extend the case to date 1. But in this case, First will be the most aggressive bidder, because they have more at stake in the entitlement litigation than either Second or Unsecured. If Second's bid wins, First will lose $10 - 4 = 6$, and so First is willing to bid up to that amount to win control. Second is willing to bid up to only $5 - 0 = 5$, because the gains from continuation and litigation against First are shared with Unsecured. In particular, Unsecured receives all 6 from the entitlement shift in state H, while Second receives a (smaller) benefit of 2 from the litigation in state L.

To summarize, Example 2 explains why the need to defend an entitlement can intensify the demand for control over the case. If the entitlement litigation can be weakened by steering the case outcome (say, by ending the case earlier), then the lender will favor this inefficient distortion of the case, even if it reduces the firm's value overall.

Example 2 leads us to our second empirical prediction:

Hypothesis 2. Creditor control is more likely when the controlling creditor seeks an entitlement shift.

With the predictions of our theory in hand, we now turn to our empirical analysis.

IV. Empirical Analysis

In this Part, we look for evidence supporting the model's main predictions using a large sample of court documents from major Chapter 11 cases. As we explain below, our approach is to see if creditor conflict correlates with situations where we might expect to observe inefficient process sales. In Section IV.A, we describe the sample and our research design. Section IV.B provides summary statistics. In Section IV.C, we present evidence from our regression analysis, which suggests that the chief predictions of our model in Part III have support in the data.

A. Data Collection and Research Design.

The sample is roughly equivalent to all major Chapter 11 cases that filed for bankruptcy between January 1, 2004 and December 31, 2019. This sample builds on a less detailed sample originally collected by one of us,⁸¹ supplemented by roughly 1.5 million court documents. In this Section, we explain how this sample was collected and provide illustrative examples of what our methodology identified as accusations of creditor control.

The sample was originally constructed by matching Next Generation Research's Bankruptcy Datasource's list of firms that filed for Chapter 11 to a

81. The core of the sample was collected for Jared A. Ellias, *What Drives Bankruptcy Forum Shopping? Evidence from Market Data*, 47 J. LEGAL STUD. 119 (2018); and Ellias, *supra* note 40.

list of firms with equity or debt that traded during the firm's bankruptcy period.⁸² For each firm that appeared to have equity or debt traded, one of us identified the court docket using PACER. We kept the firm in the sample if it met the following criteria: (a) the firm owed at least \$25 million to financial creditors such as banks or bondholders; (b) the firm brought some operating asset into Chapter 11 to reorganize or sell; and (c) the court documents were accessible, and it was possible to confirm that the first two conditions were satisfied. The original sample of large firms with assets to reorganize in Chapter 11 that filed for bankruptcy during the sample period consisted of 319 firms. For each of these cases, one of us hand gathered extensive information from the court docket, including details of the firm's capital structure and the outcome of the Chapter 11 case.

We then sought PACER waivers from the various bankruptcy courts to download all of the documents associated with the bankruptcy. 20 courts agreed to provide us with such waivers, which enabled us to download 1,503,225 court documents corresponding to 948,861 docket entries from 278 cases. We then used optical character recognition software to convert the court documents from PDF to text, which yielded a dataset of 1,453,264 documents from 913,537 docket entries.⁸³ The process of downloading the documents and converting them took more than a year of computing time. Table A1 in Appendix A provides summary statistics on the firms in the sample.

To identify allegations of creditor control, we used a combination of automated methods combined with human verification. We used a series of word searches to identify strings in which synonyms for "secured creditor" are located within 10 words of synonyms for "control". This produced an initial sample of documents. We supplemented this with a search intended to identify any documents that are objections to DIP financing motions. We then narrowed these samples by eliminating false positives using research assistants. We describe the complete process in Appendix C, the Data Appendix.

With the identified sample of documents that allege secured creditor control, we asked research assistants to code various aspects of the objection. Most relevant to our study, an objection was identified as an objection to a process sale when the objection alleged that control was tied to following a particular plan process or agreement, including a tie of DIP financing to any Plan Support or Restructuring Support Agreement.

As a representative example, consider this objection to Propex Inc.'s motion for debtor-in-possession financing filed by the official committee of unsecured creditors:

82. The list of firms with traded debt or equity was compiled by combining records maintained by Bloomberg, MarkIt, and TRACE as detailed in Ellias, *supra* note 81, at 124-26.

83. The missing files result from limitations of the OCR technology we used (Tesseract OCR), which was unable to convert some documents despite several attempts.

Bankruptcy Process for Sale

The proposed debtor in possession financing facility is inappropriate, overreaching and not in the best interest of the Debtors or their creditors (other than the DIP Lender and other secured lenders). First, the proposed financing facility inappropriately forces the Debtors to liquidate their assets in a short period of time without any showing that a sale will maximize value. The proposed financing facility is not just inextricably linked to a quick sale of the Debtors' assets, but designed to allow the secured lenders to purchase the Debtors' assets at the lowest price by publicly forcing an expedited sale where proper marketing will not occur and potential purchasers will not have time to conduct necessary diligence or compete against the secured lenders, which have already performed extensive diligence and have the right to control the sale process under the proposed financing facility.

Second, the proposed financing facility is a sub rosa plan, which cannot be approved by this Court. Having all of the hallmarks of a sub rosa plan, the proposed financing facility (i) dictates the terms of the Debtors' reorganization in that it forces the immediate liquidation of the Debtors' assets, (ii) significantly alters all creditors' rights with respect to the Debtors' assets in that, once the proposed financing facility is approved, creditors and parties in interest have no meaningful opportunity to oppose the sale of the Debtors' assets without jeopardizing the Debtors' postpetition financing and (iii) requires that the Debtors liquidate all of their assets immediately, leaving nothing left to reorganize. Since the proposed financing facility constitutes an improper sub rosa plan, the relief requested in the Motion must be denied.⁸⁴

For another illustrative example, consider the objection that the second-lien lenders filed in response to a plan of reorganization supported by the first-lien lenders in the bankruptcy of LandSource Communities in 2008:

The Plan is not only unconfirmable (the Second Lien Agent's specific objections to the substance of the Plan will be made at the appropriate time if the Plan process does move forward), but allowing the Plan to go forward will put these cases right back where they started. At the outset of these cases, in connection with the approval of the DIP Credit Agreement, both the Second Lien Agent and the Unsecured Creditors Committee voiced their concerns that the First Lien Lenders wanted to run these cases entirely for their own benefit; that the DIP Credit Agreement gave them such complete control over the Debtors that the cases were to be conducted for the sole purpose of allowing the First Lien Lenders to foreclose upon or sell assets without the burden of complying with California's onerous state foreclosure laws. Ultimately, a consensual arrangement was reached on the DIP Credit Agreement to eliminate but by no means control features contained therein. The Second Lien Agent hoped that this consensus would carry forward in these cases. This hope was apparently misplaced.

84. Objection of the Official Committee of Unsecured Creditors of Propex Inc., et al. to the Debtors' Emergency Motion for Interim and Final Orders (I) Authorizing the Debtors to Obtain Post-Petition Financing, (II) Authorizing the Debtors to Use Cash Collateral, (III) Granting Adequate Protection to the Prepetition Lenders, (IV) Modifying the Automatic Stay, and (V) Scheduling a Final Hearing Pursuant to Bankruptcy Rule 4001 at 2, *In re Propex Inc.*, No. 08-10249 (Bankr. E.D. Tenn. Jan. 21, 2009).

At the first available opportunity, the First Lien Lenders proposed a Plan providing for all of the Debtors' assets to be marketed and sold at their direction, with value apportioned between their collateral and unencumbered assets by an expert of their choosing, and with the First Lien Lenders likely credit bidding for the most valuable properties. Specific confirmation objections aside, the premise behind this Plan is fatally flawed. This Court has already stated it had concerns about the First Lien Lenders running these cases for their sole benefit.⁸⁵

B. Summary Statistics

In this Section, we compare the creditor-control sample to the sample without observed allegations of creditor control. For ease of exposition, we will refer to these two samples of firms as “creditor-control firms” and “non-creditor-control” firms. Note that “creditor control” is a broader category than just “process sales.” We will examine summary statistics to compare to the two cohorts of firms.

As Panel A of Table 4 below shows, there are few statistically significant differences between the pre-bankruptcy capital structures of the two cohorts of firms. Although the creditor-control firms are larger on average, the difference is not statistically significant. Creditor-control firms are also statistically indistinguishable from non-creditor-control firms in overall debt and secured debt. The lone significant difference between creditor-control and non-creditor-control firms is that creditor-control firms are nearly 50% more likely to have second-lien debt in the capital structure. This is consistent with Hypothesis 1 above; this difference remains significant when we control for other firm-level differences in Section IV.C below.

Examining bankruptcy-related events, Panel B shows that non-creditor-control firm bankruptcies are significantly more likely to be prepackaged or prenegotiated. This is sensible, given that these cases are more likely to be cases in which major objections are resolved before the filing. We do not observe shorter cases in the creditor-control sample; in fact, the creditor-control cases are longer on average, although the difference is not statistically significant. This effect is seemingly in contrast to some of our numerical examples, in which creditor control is used to shorten cases; but it is likely a mechanical effect. The longer the case goes on, the more documents will be filed with the court, proportionately increasing our likelihood of unearthing a creditor-control allegation with our methodology. We examine this in greater detail in Section IV.C below.⁸⁶

Panel C shows that the creditor-control firms were more likely to involve court-approved bonus plans for senior managers, which are styled as “Key

85. Statement in Response to Barclays Bank PLC's Motion for an Order Pursuant to Bankruptcy Rule 3016(b) Authorizing the Filing of a Disclosure Statement Within Thirty Days After the Filing of a Chapter 11 Plan at 2, *In re LandSource Cmty's., Inc.*, No. 08-11111 (Bankr. D. Del. Oct. 31, 2008).

86. One way we examine this mechanical effect is to limit the sample of creditor-control allegations to those that occur early in the case (for example, the first 2 months).

Employee Incentive Plans” (KEIPs). A higher rate of KEIPs is consistent with the view that at least some bankruptcy bonuses are effectively side payments to managers, which our model and other work suggest is more likely when management sells control.⁸⁷ As there are ways to direct side payments to managers without using a KEIP—such as paying the manager prior to or after the bankruptcy case—this relationship is only illustrative, and data constraints will keep us from following it further.⁸⁸

As Panel D shows, the two cohorts of firms are similar in terms of bankruptcy outcomes. The key statistically significant difference is that creditor-control firms have a mean level of unsecured creditor recoveries that is about half of the level of non-creditor-control firms. One interpretation of this correlation is that creditor control causes lower unsecured creditor recoveries, consistent with our theory; but another is that creditor control is more likely to be alleged when unsecured creditor recoveries are likely to be low for other reasons. Even under this interpretation, the correlation provides evidence that creditor-control allegations are not random noise; they occur in cases with less favorable outcomes for unsecured creditors.

87. See Jared A. Ellias, *Regulating Bankruptcy Bonuses*, 92 S. CAL. L. REV. 653, 653, 661-62 (2019).

88. For more on other ways of paying managers, see *id.* While we are sometimes able to observe a Chapter 11 debtor setting aside post-Chapter 11 equity for managers, very few of the sample firms emerge as publicly traded companies so tracking postbankruptcy compensation is not feasible to do for the sample in the aggregate.

Table 4: Summary Statistics for No Creditor-Control Allegation vs.
Creditor-Control Allegation

	No Creditor- Control Allegation	Creditor- Control Allegation	Difference	Std Err	p- value
Panel A. Pre-Bankruptcy Balance Sheet.					
Petition Assets (in millions)	27,400	46,200	-18,800	14,500	.195
Petition Liabilities (in millions)	27,900	60,200	-32,200	20,800	.123
Funded Debt (in millions)	14,800	22,100	-7,330	7,410	.324
Secured Debt (1/0)	.872	.91	-.038	.04	.335
Private Equity Sponsor (1/0)	.373	.412	-.039	.062	.531
Levels of Liquidation Priority (# of levels)	2.519	2.81	-.29	.179	.105
Asset Level Financing (1/0)	.129	.13	-.002	.042	.972
Second Lien Debt (1/0)	.196	.3	-.104	.052	.048
Panel B. Intentions on Petition Date.					
Sale Intended (1/0)	.19	.24	-.05	.051	.325
Liquidation Intended (1/0)	.044	.05	-.005	.026	.841
Prepackaged Filing (1/0)	.196	.03	.166	.042	0
Prenegotiated Filing (1/0)	.71	.59	.119	.059	.043
Panel C. Bankruptcy Events.					
DIP Financing (1/0)	.939	1	-.061	.024	.011
KEIP Approved (1/0)	.296	.48	-.184	.059	.002
Days of Bankruptcy Between Petition Date and Emergence (1/0)	248.046	313.31	-65.264	32.918	.049
Panel D. Bankruptcy Outcomes.					
Investment Banker Appraisal of Firm Assets (in millions)	11,000	12,200	-1,210	4,410	.783
Emerged as Independent Firm	.419	.47	-.051	.062	.412
Reorganize Through 363 Sale	.252	.31	-.059	.056	.293
First Lien Recovery Ratio from Disclosure Statement (n = 125)	.867	.816	.051	.048	.287
Second Lien Recovery Ratio From Disclosure Statement (n = 49)	.412	.409	.003	.127	.982
Unsecured Recovery Ratio from Disclosure Statement (n = 146) ⁸⁹	.447	.234	.212	.066	.002
Unsecured Recovery Ratio from Trading Data (n = 116)	.468	.286	.182	.072	.01

In order to gain deeper insight into the creditor-control cases, we examine details about the nature of creditor-control allegations in Table 4. Several trends are worth noting. Panel A provides information about the parties who allege harm from control. We find that unsecured creditors generally, and the Official

89. The “unsecured recovery ratio” is the recovery ratio of the most level of unsecured debt in the firm’s capital structure from the firm’s disclosure statement.

Committee of Unsecured Creditors (UCC) in particular, are the most likely to object to control: the UCC is an objector in 67% of the cases where creditor control is alleged. Nevertheless, a secured creditor or secured-creditor group is an objector in 29% of the cases alleging creditor control. This suggests that secured-creditor conflict is an important phenomenon in large Chapter 11 cases.⁹⁰

Panel B summarizes information on the party alleged to be exercising control. It is not surprising that most of the alleged controlling creditors are secured, given that our sample targets secured creditor control in particular. But it also shows that the vehicle for creditor control is typically the DIP loan agreement: 74% of the alleged controlling lenders are DIP lenders, although, as Panel D suggests, it is typically coupled with other, noncontractual methods of gaining bargaining power.

Table 5 summarizes the tools that creditors use to take control of bankruptcy cases from managers. While previous research has documented terms that transfer control in DIP loan agreements,⁹¹ it is hard to sort out which terms are most concerning to the other creditors in the case. Our text search helps to understand exactly which terms concern creditors enough to mention them in an objection. Panel C is restricted to control mechanisms that are tied to a loan agreement; Panel D describes allegations of control that are not specifically connected to a loan agreement. Of the 100 cases in which we find an allegation of creditor control of some kind, 49% of them involve an allegation of a process sale; that is, the loan is tied to a specific plan, plan or sale process, or restructuring support agreement. Other devices to which parties object with some frequency are case milestones (39%), which can serve to accelerate the timing of the case and steer it toward a particular outcome. Other frequently mentioned terms are those related to the loan's priority, such as the presence of a roll-up, administrative expense priority or the loan's collateral (29%), and objections to the loan's short maturity (17%).

90. It also suggests that intercreditor agreements—contracts between creditors that address cash flow and control rights between secured-creditor classes—do not eliminate conflict between secured-creditor groups in bankruptcy.

91. See Frederick Tung, *Do Economic Conditions Drive DIP Lending?: Evidence from the Financial Crisis* 1-2 (Bos. Univ. Sch. of L., Working Paper No. 16-38, 2017), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2828295 [<https://perma.cc/6BNE-33J2>].

Table 5: Summary of Creditor-Control Allegations.

Panel A. Allegations of Creditor or Shareholder Control, by Party Claiming to be Harmed by Control.

<i>Party Being Harmed by Control</i>	<i>Mean for Creditor-Control Cases (n = 100)</i>	<i>Std. Dev.</i>
Any Secured Creditor	.29	.456
Official Committee of Unsecured Creditors	.67	.473
Ad Hoc Unsecured Creditors Committee or Individual Unsecured Creditor	.19	.394
Shareholder	.1	.302
Other	.14	.349
Not Available	.14	.349

Panel B. Allegations of Creditor or Shareholder Control, by Party Exercising Control.

<i>Party Exercising Control</i>	<i>Mean for Creditor-Control Cases (n = 100)</i>	<i>Std. Dev.</i>
First-lien lender	.3	.461
Second-lien lender	.1	.302
DIP Lenders	.74	.441
Any Allegation about a Secured Creditor Exercising Control (includes First or Second-lien lender or DIP Lender)	.92	.273
Other Party, not Secured Creditor	.29	.456

Panel C. Mechanisms of Control through Loan Contract, by Mechanism.

<i>Mechanism of Control through Loan Contract, for Cases Alleging Creditor Control</i>	<i>Mean for Creditor-Control Cases (n = 100)</i>	<i>Std. Dev.</i>
Control Involves Contractual Leverage from Loan Contract	.75	.435
Milestones in Bankruptcy Loan Agreement	.39	.49
Short Maturity	.17	.378
Process Sale	.49	.502
Loan Prepayment Penalty	.11	.314
Priority or Seniority-Related	.26	.441
No Specifics of Loan Agreement Indicated	.12	.327
Other Control Mechanism through Loan Agreement	.22	.416

Panel D. Mechanisms of Control through Non-Contractual Means, by Mechanism.

<i>Noncontractual Mechanism of Control</i>	<i>Mean for Creditor-Control Cases (n = 100)</i>	<i>Std. Dev.</i>
Control through Restructuring Support Agreement	.21	.409
Control Through Bidding Procedures	.19	.394
Control through Credit Bidding	.15	.359
Other	.15	.359

C. Regression Analysis and Hypothesis Testing

In this Section, we use regression analysis to gain further insight into the main relationships observed in the summary statistics. We start with a sanity test of the research design by examining the robustness of the observed finding above that creditor-control allegations are associated with relatively lower creditor recoveries. The robustness of the relationship suggests that we are not simply picking up on random noise and that Chapter 11 cases with creditor-control allegations have statistically distinguishable lower creditor recoveries for unsecured creditors. We then examine Hypothesis 1 and Hypothesis 2 to look for evidence supporting our models' main predictions, and we show evidence suggesting creditor-control allegations are associated with situations in which senior creditors have incentives to buy entitlement protection and plan protection. Finally, we close by examining the relationship between creditor control and case length. In a regression framework, the sign associated with the process sale accusation is negative once we control for observable firm and bankruptcy characteristics, which could mean that process sales are associated with shorter cases, but the result is not statistically significant.

1. Are the Creditor-Control Allegations Cheap Talk?

As a threshold matter, we examine the robustness of the observed relationship between creditor-control allegations and relatively lower creditor recoveries.⁹² One potential challenge to our research design is that we could simply be identifying a subset of cases with a mechanical and automatic accusation of creditor control. For example, if inefficient process sales do occur in some cases, creditors may find it convenient to make accusations of improper creditor control in cases where they have not occurred if by doing so the creditors can acquire bargaining power or favorable judicial orders. In other words, if judges are conditioned to know that process sales do happen, they may be willing to give objecting creditors some relief to the extent they object to process sales, creating incentives for “cheap talk” control-sale accusations.

To learn more about the possibility of “automatic” and generic creditor-control allegations that could just be “unsecured-creditor boilerplate,” accusations, we examine the relationship between creditor-control allegations and unsecured-creditor recoveries. The dependent variable is the observed market value of the debtor’s outstanding unsecured bonds for those debtors in the dataset with bonds that are publicly trading at the end of the bankruptcy

92. The results are qualitatively similar for Models 1-3 if we instead use the process-sale-allegation variable studied in Table 4, but the relationship disappears in the data once the control variables from Models 4 and 5 are added, although the coefficient remains negative in all specifications.

process.⁹³ The intuition behind this exercise is that if creditor-control allegations are mechanically and indiscriminately prosecuted without regards to any underlying facts, we would not expect to see any statistically significant association between creditor-control allegations and how well the creditor fared in the bankruptcy case. The independent variable of interest is a dummy variable that takes on a value of 1 if an accusation of creditor control is observed on the docket of the bankruptcy case.

93. More specifically, the dependent variable is the average market value of traded bonds at the end of the bankruptcy case across all bonds with the same level of claim priority. In the case of an issuer that has, for example, a traded senior bond and a traded subordinated bond, we use the higher-priority bond (again, averaging multiple bond issues to arrive at a single number for each debtor in the sample to avoid overweighing firms with multiple issues of bonds). We rely on market data to sidestep bias that might be introduced if we rely instead on disclosure-statement recoveries.

Table 6: Creditor-Control Allegations and Creditor Recoveries

	(1) Market Value of Unsecured Bond	(2) Market Value of Unsecured Bond	(3) Market Value of Unsecured Bond	(4) Market Value of Unsecured Bond	(5) Market Value of Unsecured Bond
Creditor-Control Allegation	-0.182** (0.074)	-0.183** (0.073)	-0.179** (0.071)	-0.176** (0.070)	-0.145** (0.070)
Log Funded Debt		0.058** (0.024)	0.058** (0.024)	0.035 (0.024)	0.039 (0.026)
Prepackaged			0.207** (0.082)	0.210** (0.089)	0.300*** (0.088)
Prenegotiated			-0.173** (0.081)	-0.170** (0.078)	-0.196** (0.078)
Sale Intended				-0.143 (0.092)	-0.152 (0.098)
Liquidation Intended				-0.223* (0.127)	-0.149 (0.167)
Industry Distressed				0.042 (0.077)	0.159* (0.094)
Debt is Subordinated				-0.144** (0.069)	-0.084 (0.073)
Constant	0.469*** (0.043)	-0.735 (0.498)	-0.644 (0.494)	-0.105 (0.509)	-0.124 (0.530)
Obs.	115	115	115	115	115
R-squared	0.053	0.096	0.151	0.201	0.296
Year Fixed Effects	No	No	No	No	Yes

The Table shows OLS regression models. The dependent variable is the market value of the unsecured claim for each debtor in the sample that has a bond trading within thirty days of the date the firm leaves bankruptcy, either through a sale or a plan confirmation. The unit of analysis is a debtor. To the extent the debtor has multiple bond issues trading or multiple trades of the same bond in the thirty-day window, the dependent value is the weighted average price across all trades. Robust standard errors are in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Table 6 shows that cases with creditor-control allegations are associated with 12-18% lower unsecured-creditor recoveries, on average. Results are statistically significant in all specifications. In Model 1, we estimate an 18.2% lower recovery in a model without any control variables. This remains true in Model 2 after controlling for the log amount of debt (a proxy for the size of the firm), and in Model 3 after controlling for whether or not the bankruptcy was prepackaged or prenegotiated. In Model 4, we add additional bankruptcy-case characteristics, and in Model 5 we add fixed effects for petition year and the debtor's law firm. Overall, this result suggests that the observed relationship between creditor-control allegations and relatively lower unsecured-creditor recoveries is robust to control variables. Importantly, we cannot rule out that the creditor-control firms are different from non-creditor-control firms in ways that the control variables are not picking up. At the very least, though, the results in Table 6 are inconsistent with the hypothesis that creditor-control objections are

cheap talk: the variable is picking up a subset of the cases in which unsecured creditors are doing significantly worse.

2. Are Process-Sale Allegations Associated with Plan Protection and Entitlement Protection?

In this Section, we examine our models' predictions about situations regarding incentives to buy creditor control. We focus on the two hypotheses outlined in Part III. First, our models suggest generally that senior creditors look to buy control for "plan-protection" motives. In Example 1, the first-lien creditor wants to end the case early, while the junior creditors want to extend it. We saw that this conflict of interest is more severe when some junior creditors hold (second) liens, rather than unsecured debt. This is because it is harder for the first lien's DIP loan to prime the second liens, and the inability to prime makes a longer case less attractive to the first lienholder.⁹⁴

We examine this hypothesis with a dummy variable that takes on a value of one if second-lien debt is present in the firm's capital structure. Table 4 showed that creditor-control allegations were statistically associated with the presence of second-lien debt in the cross-section. We use regression models to test the robustness of that observed correlation. To identify firms with second-lien debt, we reconstruct the firm's capital structure from the firm's debt documents to identify the presence of second-lien debt.

Second, the models suggest that creditors will buy control when they seek to protect their pre-bankruptcy entitlements from attack in Chapter 11.⁹⁵ To identify cases where entitlement disputes are pertinent, we run word searches to identify discussion of potential avoidance actions in the corpus of filed objections to management's proposed debtor-in-possession financing.⁹⁶

Our primary specifications below focus on allegations of process sales. As explained above, a process-sale allegation is an allegation that the "controlling" creditor is using some method, typically debtor-in-possession financing or a restructuring support agreement, to dictate the outcome of the Chapter 11 process. For robustness purposes, Appendix Table A2 estimates the same models from Table 7 below with a different dependent variable: the observation of an allegation of inappropriate creditor control more generally. This measure is

94. Another possible reason for the result is that the second-lien lender is better positioned than unsecured creditors to finance a rival transaction and to capture incremental value. This increases the demand for process sales to the first lien.

95. See *supra* Part III.

96. To be more explicit, we ran the following search over 301 filed objections to management's proposed debtor-in-possession financing ("DIP Objections") corresponding to 136 cases: "transfer OR conveyance" within 20 words of "avoidance fraudulent avoidable preferential preference." We identify 37 DIP objections from 33 cases that contain discussion of potential avoidance actions. For a robustness check, we compare the models in Table 4 to an alternative specification where we identify cases with avoidance actions from manual review of proposed disclosure statements and we find that the results are qualitatively similar.

broader and does not require that the allegation mention a specific plan, process or agreement. But since process sales as we describe them—preventing management from switching teams—can be implemented in a variety of ways, this makes for a useful robustness check. We show that the results are similar with this broader measure.⁹⁷

97. We rerun the Models from Table 7 with this alternative dependent variable in Appendix A2. The “avoidance action” variable remains statistically significant and positively associated with the likelihood of a “creditor-control” allegation through all five regression models. The “second-lien loan” variable is statistically significant and positively associated with the dependent variable in Models 2 through 4 but loses its statistical significance with industry fixed effects and the secured-debt-to-debt ratio in Model 5, although the sign remains positive. Overall, the story with this alternative specification is similar to the one illustrated in Table 4.

Table 7: Determinants of Process-Sale Allegations

	(1) Process-Sale Allegation?	(2) Process-Sale Allegation?	(3) Process-Sale Allegation?	(4) Process-Sale Allegation?	(5) Process-Sale Allegation?
Second-Lien Loan in Capital Structure	0.583* (0.345)	0.625* (0.354)	0.775** (0.376)	0.839** (0.402)	0.872** (0.440)
Avoidance Actions Mentioned in DIP Objection		1.205*** (0.410)	0.900** (0.437)	1.078** (0.477)	0.993** (0.468)
Log Funded Debt			-0.027 (0.107)	0.002 (0.122)	-0.001 (0.140)
Prepackaged Filing			-2.057** (1.029)	-2.110* (1.116)	-2.322** (1.127)
Prenegotiated Filing			0.111 (0.361)	0.076 (0.393)	0.187 (0.454)
Sale Intended			0.702* (0.411)	0.744* (0.452)	1.001** (0.488)
Industry Distress			0.473 (0.363)	-0.000 (0.583)	0.170 (0.670)
Secured Debt to Total Debt Ratio					-0.103 (0.655)
Constant	-1.702*** (0.190)	-1.904*** (0.210)	-1.616 (2.192)	-0.848 (2.732)	-2.542 (3.420)
Obs.	279	279	271	271	257
Pseudo R ²	0.011	0.041	0.087	0.151	0.197
Year FE	No	No	No	Yes	Yes
Law Firm FE	No	No	No	Yes	Yes
Industry FE	No	No	No	No	Yes

The Table shows logistic regression models with robust standard errors in parenthesis. The dependent variable “*Process-Sale Allegation*” takes on a value of 1 if we observed an allegation from creditors of a “process sale” of the bankruptcy case to a creditor, which we define as an allegation of a “Sub Rosa Plan”—a transfer of the control that was otherwise vested in management to the creditor. Process-sale allegations are a subset of creditor-control allegations whereby management is tied to a specific plan, plan process, restructuring support or similar agreement. Industry fixed effects are Fama-French 12. “*Industry Distress*” is a variable that takes on a value of 1 if the firm’s four-digit SIC Code industry suffered a -20% or lower weighted average return in the equity markets in the 365 days prior to the bankruptcy filing. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

The results in Table 7 provide some support for the predictions of the models.⁹⁸ In Model 1, we find that the dummy variable for the presence of a second-lien loan takes on the predicted sign, but it is not statistically significant or very precisely estimated without any control variables. In Model 2, we introduce a dummy variable that takes on a value of 1 if there is an objection to the DIP loan that describes significant litigation over avoidance actions.⁹⁹

98. In Ellias, *supra* note 81, at 119-49, one of us showed evidence that market pricing of Chapter 11 financial claims appears to become more accurate after the court approves the firm’s bankruptcy financing arrangement.

99. In unreported results, we find that an alternative measure of avoidance actions—the mention of avoidance actions in the disclosure statement, which would suggest that avoidance actions were an important part of the Chapter 11 process—yields similar results.

Consistent with Hypothesis 2, which predicted that entitlement challenges would be likely to create incentives for senior creditors to buy control of the bankruptcy process, the presence of entitlement litigation predicts process sales and is statistically significant at the 1% level.

In Model 3, we introduce control variables for bankruptcy and firm characteristics that are commonly used in the empirical bankruptcy literature.¹⁰⁰ This includes a proxy for the size of the firm (long-funded debt) to try to account for variation explained by heterogeneity in firm size, whether or not the bankruptcy was prepackaged or prenegotiated, whether a sale was intended at filing, and whether the firm's industry is distressed. All of these bankruptcy-filing characteristics could also be associated with the allegations of a process sale. We now find that both of the independent variables of interest are statistically significant and positively associated with allegations of creditor control, even after controlling for these variables. In Model 4, we introduce fixed effects for year and the debtor's law firm, and in Model 5 we control for industry and the ratio of secured debt to debt in the debtor's capital structure.¹⁰¹ We add these variables to try to account for additional variation that is not actually explained by our variables of interest, but our results are robust to all of these alternative specifications. In terms of economic magnitudes, Model 5 suggests that the presence of second-lien debt raises the probability of a process sale allegation by 8.9%; the mention of avoidance actions in the objection raises the probability of a process sale allegation by 10.2%.¹⁰²

3. Do Creditors Buy Control to “Cut Short” Bankruptcy Cases?

Finally, we examine the relationship between process-sale allegations and the length of the case. Examples 1 and 2 predict that senior creditors want to buy control of the bankruptcy process to “cut short” a restructuring, suggesting that we might see an association in the data between a creditor-control allegation and shorter bankruptcy cases in the cross-section. A shorter case could also be a benefit of process sales, to the extent it minimizes bankruptcy costs and moves a firm through the bankruptcy process faster.

There is an important confounding factor when trying to determine the relationship between our measure of creditor control and case length. Longer

100. See, e.g., Lynn M. LoPucki & Joseph W. Doherty, *Bankruptcy Survival*, 62 UCLA L. REV. 970, 986 (2005) (specifying a similar regression model); Tim C. Opler & Sheridan Titman, *Financial Distress and Corporate Performance*, 49 J. FIN. 1015 (1994) (examining industry distress).

101. We control for the ratio of secured debt to debt to try to isolate the effect of second-lien debt explicitly as compared to the effect of a large amount of secured debt. While caution is due in interpreting the results, the robustness of the second-lien variable even after controlling for the secured debt to debt ratio suggests that we are picking up on an association between capital-structure complexity and bargaining frictions and not just the amount of secured debt.

102. Logit coefficients are log odds ratios and do not have the same marginal effects interpretation as OLS coefficients; the magnitudes reported here are the marginal effects in Model 5 (akin to OLS coefficients) when evaluated at the means of the other independent variables.

cases also provide more opportunities for complaints about the process, which could lead to a purely mechanical association between creditor-control allegations and the length of the case. To address this, we present some specifications in which the control-allegations variable is set equal to one only when a control allegation occurs in the first 60 days of the case. We show results relating process-sale allegations and case length in Appendix Table A3.

As Appendix Table A3 shows, the evidence is consistent with a mechanical effect confounding the results: the coefficient estimates are generally positive when a control allegation can occur at any time during the case, but the estimated effect decreases when the control variable is restricted to the first 60 days. In the regressions using the 60-day measure, we find the expected negative relationship between creditor control and case length—consistent with the view that creditor control will be associated with shorter cases because of the DIP lender’s interest in either defending an entitlement or protecting against excessive continuation—but the results are not statistically significant. For robustness purposes, we run the same models with a looser measure of creditor-control allegations—any allegations of creditor control, including allegations that stop short of a transfer of all control of the bankruptcy process from management to creditors—in Appendix Table A4, and we observe a similar pattern.

Overall, the results provide, at best, only weak support for the models’ predictions for creditor control shortening bankruptcy cases. As other work has shown that the participation of creditors in governance might alter bankruptcy outcomes,¹⁰³ there may be countervailing forces at work that would make it harder to identify the association between process sales and the ultimate duration of the bankruptcy case. First, while the models predict that creditor control, and especially process sales, will be associated with shorter cases, our identification strategy—identifying the cases where there are complaints about creditor control—also identifies the cases where creditors have decided to fight back or, at the least, complain to the judge about the bankruptcy process. When the junior creditors successfully resist the process sale, as in the *Pliant* case described in Section II.B, the case may be longer as a result.¹⁰⁴ Second, senior creditors may not want shorter cases in all instances. As we show in Appendix B, a creditor might use control to make a DIP loan at an above-market interest rate. If the court so permits, the creditor would prefer to lend at a longer horizon to enjoy the benefits of the profitable loan.

103. See, e.g., Edward I. Altman, *The Role of Distressed Debt Markets, Hedge Funds and Recent Trends in Bankruptcy on the Outcomes of Chapter 11 Reorganizations*, 22 AM. BANKR. INST. L. REV. 75, 75 (2014); Elias, *supra* note 60; Michelle M. Harner, Jamie Marincic Griffin & Jennifer Ivey-Crickenberger, *Activist Investors, Distressed Companies, and Value Uncertainty*, 22 AM. BANKR. INST. L. REV. 167 (2014); Wei Jiang, Kai Li & Wei Wang, *Hedge Funds and Chapter 11*, 67 J. FIN. 513, 556 (2012).

104. See Elias, *supra* note 59, at 494-96, 529.

V. Proposal: Temporary Priming DIPs for “Stalking Horse” DIP Loans.

Our theory argues that harmful process sales are a consequence of the debt-overhang problem. In simple terms, the debt-overhang problem says that a potential bankruptcy lender would never make a loan whose proceeds merely bail out other creditors ahead of it in priority. In our simple models, the first-lien debt is the only party who benefits from any DIP financing provided in the earliest stage of the case; hence, they may be the only willing financier at the outset. The absence of competition for the DIP loan gives the senior lenders the ability to lock in an outcome by buying control of the bankruptcy process, to the detriment of the other creditors. If there are no other competing offers, and the firm’s reorganization depends upon the new loan, there may be little a judge can do to resist an inefficient process sale.

One implication of this Article is that it provides a framework for bankruptcy judges to assess complaints from creditors that the debtor is not representing the interests of all constituents and is proposing to transfer control to DIP lenders.¹⁰⁵ The results in this paper suggest that, in cases where there are multiple secured lenders or potentially important avoidance actions, judges should apply extra scrutiny to the debtor’s proposals and consider whether they are truly in the best interests of creditors as a whole. The interests of administrative efficiency and expediency must be balanced with respect for the pre-bankruptcy bargained-for rights of creditors.

However, the results in this paper could also be the basis of a more significant proposal. One well-known solution to the debt-overhang problem is to allow the new debt to be senior to the existing debt.¹⁰⁶ Seniority allows the new lender to earn a sufficient return on the new money to make a new loan worthwhile. Granting new lenders seniority has been a crucial aspect of bankruptcy practice since the days of the equity receivership used to reorganize railroads.¹⁰⁷ Suppliers to bankrupt railroads received senior claims on the railroad to encourage them to provide supplies while the railroad restructured its claims.

The Bankruptcy Code gives bankruptcy financiers priority through Section 364. In simplified terms, current bankruptcy practice makes it relatively simple for a DIP lender to obtain seniority over the existing unsecured creditors but

105. Janger and Levitin focus on a related topic, the use of restructuring support agreements, and advocate that courts look for “badges of opportunism” that could invite further scrutiny. *See* Janger & Levitin, *supra* note 3, at 185-57. They ask bankruptcy judges to focus on problematic provisions in the proposed RSA, such as provisions that redistribute value, while we advocate also examining elements of the bargaining environment. Our thinking is broadly compatible with theirs.

106. *See* Kenneth Ayotte & David A. Skeel, *Bankruptcy Law as a Liquidity Provider*, 80 U. CHI. L. REV. 1557, 1576-77 (2013); George G. Triantis, *Financial Slack Policy and the Law of Secured Transactions*, 29 J. LEGAL STUD. 35, 57-58 (2000); George G. Triantis, *A Theory of the Regulation of Debtor-in-Possession Financing*, 46 VAND. L. REV. 901, 901 (1993).

107. *See* DAVID A. SKEEL, *DEBT’S DOMINION: A HISTORY OF BANKRUPTCY LAW IN THE U.S.* 59-60 (2001).

difficult for a DIP lender to be senior to existing secured creditors without their consent. These priority rules were more than sufficient to finance a reorganization process when capital structures were mostly unsecured debt; but as secured debt now dominates the capital structure of bankrupt companies, the ability to prime only the unsecured debt has limited utility.

One way to mitigate the costs of process sales is to require a temporary period at the outset of the case (perhaps 60-90 days) in which a DIP loan can prime all pre-bankruptcy creditors, even senior secured creditors. The loan can contain standard financial covenants to protect the lender's loan from downside risk, but it cannot tie access to the financing to any particular case outcome (such as by tying the DIP to a restructuring support agreement) or predetermine any entitlement dispute. After the initial period ends, the court can consider a more expansive set of DIP loan proposals in the usual way.

The most important benefit of the temporary priming lien is that it encourages competition for the lending opportunity at the outset of the case. This alleviates the debt-overhang problem and the associated market power it conveys to the existing senior lender. Thus, it can alleviate the inefficient "plan-protection" motive for process sales. Recall Example 1 of our theory, in which First was the only willing lender. This happens because we assumed the DIP loan must be junior to the secured creditors, so First was the only party who could benefit from the loan over the initial period. If we allow Second to prime First between dates 0 and 1, the inefficient process sale to First would no longer occur. Second would provide a priming DIP until date 1. Second would then be willing to finance an efficient continuation of the case when state HH is reached, even if their loan cannot prime the first liens after date 1.

Another benefit to temporary priming is the additional time window it can provide for other creditors and the bankruptcy judge to acquire information. In particular, the unsecured creditors committee can use the time to investigate avoidance actions that might benefit the estate. This ensures that a senior lender will not be able to use the debtor's liquidity emergency strategically to shield themselves from the consequences of pre-bankruptcy misbehavior. As we saw in Example 2, this "entitlement-protection" motive of process sales can create pressure to end the case too quickly as a means to suppress litigation. Using process sales to stymie avoidance actions also undermines their purpose, which is to deter pre-bankruptcy fraudulent transfers and other undesirable activities.

Recall that both plan-protection and entitlement-protection motives were alleged by the second-lien and unsecured creditors in the *Walter Energy* case discussed in Part II. They argued that the RSA gave these excluded creditors too little time to investigate defects in the first lien and to pursue alternative transactions. Yet, despite obtaining some traction with the bankruptcy judge, they were not able to advance a serious alternative, because the first-lien creditors controlled the debtor's access to financing. When the judge pushed back on the RSA, the first-lien creditors simply cut off financing and effectively ended the case. With the power to offer senior financing, the excluded creditors might have

been able to extend the case, postponing the first lien's exercise of control and buying time to pursue a more value-maximizing alternative.

In some ways, an embrace of this proposal by bankruptcy judges would treat DIP loans the way judges already treat requests to sell the firm's assets to a preferred buyer. When a debtor asks the judge to authorize a sale of substantially all of the firm's assets, the judge will not simply rubber stamp a proposed transaction. Instead, the judge will allow a preferred buyer to serve as a stalking horse and force the debtor to conduct a full auction process where new bidders can bid against the preferred buyer. This practice ensures the integrity of the auction process. Under our proposal, lenders can volunteer to serve as a stalking horse to provide bridge financing to a full DIP loan, and judges can scrutinize the stalking horse and the financing process to make sure that the debtor is conducting a full and fair search for the DIP loan that will maximize the value of the estate for the benefit of all creditors.¹⁰⁸

Our proposal does not necessarily require a change to the Bankruptcy Code to implement: a nonconsensual priming lien is specifically permitted under Section 364(d). But in current practice, judges rarely grant them. The main obstacle is the debtor's burden to prove that the primed secured creditor's security interest is adequately protected. Effectively, this means the secured creditor's interest does not decline in value. This typically requires a costly valuation fight that debtors and creditors would rather avoid. In particular, priming an undersecured lender would require specific projections demonstrating that the collateral value will increase by more than the amount of the priming DIP loan.¹⁰⁹

One way to implement our proposal would be to amend 364(d) by creating a presumption that a primed secured creditor is adequately protected in the initial 60-90 day window, as long as the priming DIP is made on competitive terms.¹¹⁰ Adequate protection is a reasonable assumption in many cases, particularly when the secured creditor's interest is based on the going-concern value of the company, and the DIP loan proceeds are used to benefit the going concern. The

108. While bankruptcy judges already engage in some scrutiny of the process that led to the selection of a proposed DIP lender, *see, e.g., In re L.A. Dodgers LLC*, 457 B.R. 308, 313 (Bankr. D. Del. 2011), running a standardized process under court supervision will both enhance the judge's ability to scrutinize the selection of a lender and create expectations for market participants to engage in active bidding with the ability to petition the judge for recourse if the debtor attempts to unduly favor one lender over another.

109. Courts have granted nonconsensual priming liens using the projected collateral value increase as the basis for adequate protection. *See, e.g., First Sec. Bank and Trust Co. v. Vegt*, 511 B.R. 567, 583-84 (N.D. Iowa 2014), *In re 495 Cent. Park Ave. Corp.*, 136 B.R. 626, 630-31 (Bankr. S.D.N.Y. 1992); *In re Hubbard Power & Light*, 202 B.R. 680, 684 (Bankr. E.D.N.Y. 1996); *Desert Fire Prot. v. Fontainebleau Las Vegas Holdings, LLC (In re Fontainebleau Las Vegas Holdings, LLC)*, 434 B.R. 716, 754 (S.D. Fla. 2010).

110. Another potential concern is that such a change would create takings concerns. For an argument that such concerns are overstated, *see Charles J. Tabb, The Bankruptcy Clause, the Fifth Amendment, and the Limited Rights of Secured Creditors in Bankruptcy*, 2015 U. ILL. L. REV. 765 (2015).

DIP financing avoids an immediate “fire-sale” liquidation, which benefits the primed creditor.

The downside to priming liens is that senior financing may encourage inefficient continuation in bankruptcy at the behest of junior creditors, even when a quick resolution is the best course for the firm.¹¹¹ If priming liens of indefinite horizon were permissible, secured creditors would be justifiably worried about dilution of their collateral value. Our proposal makes the mandatory priming temporary to limit the costs of excessive continuation when the firm is not viable or a quick resolution is the best course of action. If the firm belongs in bankruptcy at all, it is likely that the expected value to the creditors of operating in bankruptcy for 60-90 days is positive. If it is not, the creditors can move for the case to be dismissed or converted. Thus, the potential costs of excessive continuation that would result from temporary priming should be small.

Conclusion

In this Article, we examine an important long-term trend in large Chapter 11 cases: the transfer of control over the case to senior creditors through DIP loans. We show that lenders have acquired increasing amounts of control through DIP loans over time. In some cases, control is direct, committing the debtor to a specific plan of action and outcome favored by the financing creditors. We call these transfers “process sales.” Our theory identifies two situations when we should be particularly concerned about process sales resulting in inefficient bankruptcy outcomes: when there are multiple levels of secured debt and when the DIP lenders have incentives to protect themselves against litigation. We present empirical evidence from a new dataset of all court documents from the 278 major firms that filed for bankruptcy between 2004 and 2012. We show that creditor conflicts over process sales are associated with the presence of a second-lien loan in the capital structure, as well as avoidance actions against senior creditors. These findings are consistent with senior creditors engaging in inefficient control purchases to buy plan protection and entitlement protection. Our results suggest that, at the very least, judges should be skeptical of control transfers through DIP loans when there are multiple levels of secured debt and when the DIP lenders have incentives to protect themselves against litigation. We further suggest that temporary priming of secured creditors can weaken the incentive for premature sale of the bankruptcy process to creditors.

111. See *supra* Section III.A.5.

Appendix

*A. Additional Tables*Appendix Table A1: Number of Sample Cases by Judicial District

<u>District</u>	<u>Number of Cases</u>	<u>Percentage of Sample</u>
D. Del.	152	0.55
S.D.N.Y.	73	0.26
E.D. Mich.	6	0.02
N.D. Tex.	6	0.02
D. Nev.	6	0.02
E.D. Va.	4	0.01
N.D. Ill.	4	0.01
D.N.J.	4	0.01
S.D. Ohio	4	0.01
D. Mass.	3	0.01
W.D. La.	3	0.01
E.D. Mo.	2	0.01
W.D. Mich.	2	0.01
W.D. Tex.	2	0.01
E.D. Tenn.	1	0
D. Md.	1	0
M.D. Pa.	1	0
D. Me.	1	0
D. Minn.	1	0
S.D. Ind.	1	0
W.D. Mo.	1	0

Appendix Table A2: Determinants of Creditor-Control Allegations.

	(1)	(2)	(3)	(4)	(5)
	Creditor-Control Allegation	Creditor-Control Allegation	Creditor-Control Allegation	Creditor-Control Allegation	Creditor-Control Allegation
Second-Lien Loan in Capital Structure	0.567** (0.289)	0.605** (0.290)	0.678** (0.315)	0.714** (0.337)	0.587 (0.384)
Avoidance Actions Mentioned in DIP Objection		1.193*** (0.379)	0.959** (0.417)	1.029** (0.453)	1.077** (0.467)
Log Funded Debt			0.155 (0.098)	0.231** (0.106)	0.236* (0.125)
Prepackaged Filing			-1.881*** (0.624)	-2.000*** (0.699)	-2.092*** (0.728)
Prenegotiated Filing			-0.156 (0.296)	-0.156 (0.311)	-0.176 (0.336)
Sale Intended			0.196 (0.364)	0.300 (0.383)	0.321 (0.412)
Industry Distress			0.166 (0.316)	0.358 (0.486)	0.302 (0.546)
Secured Debt to Total Debt Ratio					0.782 (0.531)
Constant	-0.721*** (0.146)	-0.883*** (0.159)	-3.805* (1.961)	-4.613* (2.472)	-6.025** (2.914)
Obs.	279	279	271	271	271
Pseudo R ²	0.011	0.038	0.091	0.125	0.167
Year FE	No	No	No	Yes	Yes
Law Firm FE	No	No	No	Yes	Yes
Industry FE	No	No	No	No	Yes

The Table shows logistic regression models with robust standard errors in parenthesis. The dependent variable “*Creditor-Control Allegation*” takes on a value of 1 if we observed an allegation from creditors of that another creditor had taken control of the bankruptcy case, ranging from dictating some aspect of the Chapter 11 all the way to a full transfer of control from managers to creditors. Creditor control is typically effectuated through contractual provisions that reduce management’s discretion. Industry fixed effects are Fama-French 12. “*Industry Distress*” is a variable that takes on a value of 1 if the firm’s 4-digit SIC Code industry suffered a -20% or lower weighted average return in the equity markets in the 365 days prior to the bankruptcy filing. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. This Table presents the same specifications as Table 4 above, but with a dependent variable that encompasses a wider range of allegations about creditor control that fall short of a process sale.

Bankruptcy Process for Sale

Appendix Table A3: Case Length and Allegations of a Process Sale

	(1)	(2)	(3)	(4)	(5)	(6)
	Log Days of Bankruptcy	Log Days of Bankruptcy	Log Days of Bankruptcy	Log Days of Bankruptcy	Log Days of Bankruptcy	Log Days of Bankruptcy
Process-Sale Allegation	0.159 (0.128)	0.047 (0.113)	0.083 (0.120)			
Total Process Allegation in First 60 Days of Case				-0.013 (0.128)	-0.120 (0.107)	-0.070 (0.122)
Log Funded Debt		0.194*** (0.047)	0.209*** (0.047)		0.195*** (0.047)	0.208*** (0.047)
Prepackaged Filing		-1.230*** (0.121)	-1.065*** (0.121)		-1.251*** (0.121)	-1.086*** (0.121)
Pre-negotiated Filing		-0.250** (0.099)	-0.378*** (0.106)		-0.256** (0.098)	-0.380*** (0.105)
Sale Intended		-0.603*** (0.148)	-0.537*** (0.143)		-0.588*** (0.148)	-0.523*** (0.144)
Industry Distress			0.194 (0.186)			0.194 (0.186)
Constant	5.166*** (0.065)	1.758* (0.953)	1.930 (1.177)	5.196*** (0.064)	1.772* (0.951)	1.968* (1.174)
Obs.	273	273	265	273	273	265
R-squared	0.004	0.382	0.455	0.000	0.384	0.454
Year FE	No	No	Yes	No	No	Yes
Law Firm FE	No	No	Yes	No	No	Yes
Industry FE	No	No	Yes	No	No	Yes

This Table shows ordinary least squares regression models with robust standard errors in parenthesis. The dependent variable “*Log Days of Bankruptcy*” is the number of calendar days between the petition date and the earliest of: (a) the date the debtor filed a notice that substantially all of the firm’s assets were sold; (b) the date the Court approved a motion to sell substantially all of the firm’s assets, in the event no notice of the sale was available and such sale was not consummated pursuant to a plan of reorganization; (c) the effective date of the final sale of the debtor’s assets in a piecemeal liquidation; (d) the last order approving a sale of substantially all of the debtor’s assets; or (e) the date the plan of reorganization or the plan of liquidation became effective, if the debtor disposed of its assets through a plan of reorganization or a plan of liquidation. The independent variable of interest “*Process-Sale Allegation*” takes on a value of 1 if we observed an allegation from creditors that management was selling complete control over the outcome of the case to creditors, usually through debtor-in-possession financing. “*Industry Distress*” is a variable that takes on a value of 1 if the firm’s 4-digit SIC Code industry suffered a -20% or lower weighted average return in the equity markets in the 365 days prior to the bankruptcy filing.

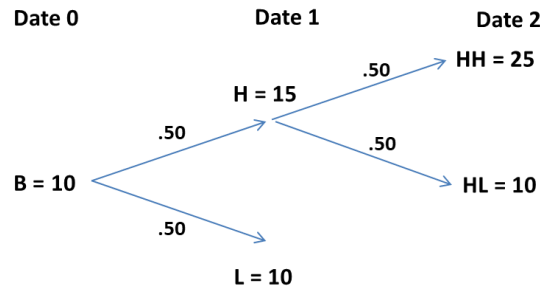
Appendix Table A4: Case Length and Allegations of Creditor Control

	(1)	(2)	(3)	(4)	(5)	(6)
	Log Days of Bankruptcy	Log Days of Bankruptcy	Log Days of Bankruptcy	Log Days of Bankruptcy	Log Days of Bankruptcy	Log Days of Bankruptcy
Creditor- Control Allegation	0.363*** (0.111)	0.119 (0.093)	0.124 (0.104)			
Creditor Control Allegation in First 60 Days				0.041 (0.110)	-0.098 (0.093)	-0.031 (0.094)
Log Funded Debt		0.190*** (0.046)	0.203*** (0.047)		0.195*** (0.046)	0.209*** (0.047)
Prepackaged Filing		-1.203*** (0.121)	-1.040*** (0.123)		-1.256*** (0.124)	-1.085*** (0.124)
Prenegotiated Filing		-0.242** (0.098)	-0.373*** (0.105)		-0.253** (0.099)	-0.378*** (0.105)
Sale Intended		-0.604*** (0.149)	-0.535*** (0.143)		-0.589*** (0.147)	-0.525*** (0.143)
Industry Distressed			0.185 (0.185)			0.195 (0.186)
Constant	5.065*** (0.074)	1.796* (0.950)	2.007* (1.169)	5.183*** (0.071)	1.762* (0.940)	1.953* (1.175)
Obs.	273	273	265	273	273	265
R-squared	0.034	0.385	0.457	0.000	0.384	0.454
Year FE	No	No	Yes	No	No	Yes
Law Firm FE	No	No	Yes	No	No	Yes
Industry FE	No	No	Yes	No	No	Yes

This Table shows ordinary least squares regression models with robust standard errors in parenthesis. The dependent variable “*Log Days of Bankruptcy*” is the number of calendar days between the petition date and the earliest of: (a) the date the debtor filed a notice that substantially all of the firm’s assets were sold; (b) the date the Court approved a motion to sell substantially all of the firm’s assets, in the event no notice of the sale was available and such sale was not consummated pursuant to a plan of reorganization; (c) the effective date of the final sale of the debtor’s assets in a piecemeal liquidation; (d) the last order approving a sale of substantially all of the debtor’s assets; or (e) the date the plan of reorganization or the plan of liquidation became effective, if the debtor disposed of its assets through a plan of reorganization or a plan of liquidation. The independent variable of interest “*Creditor Control Allegation*” takes on a value of 1 if we observed an allegation from creditors that another creditor had taken control of the bankruptcy case, ranging from dictating some aspect of the Chapter 11 all the way to a full transfer of control from managers to creditors. Creditor control is typically effectuated through contractual provisions that reduce management’s discretion. “*Industry Distress*” is a variable that takes on a value of 1 if the firm’s 4-digit SIC Code industry suffered a -20% or lower weighted average return in the equity markets in the 365 days prior to the bankruptcy filing. This Table presents the same specifications as Table A3 above, but with a dependent variable that encompasses a wider range of allegations about creditor control that fall short of a process sale.

B. Process Sales Without Second Lien Debt

Figure 1: Timeline and Company Values



Consider a modified version of Example 1 with the same firm value realizations, but with no second-lien debt. ($F = 15$, $S = 0$, $U = 15$). To further develop the intuition and discuss a court’s limits on DIP interest rates, we need to determine the per-period interest rates at which the first-lien lender and an outsider would be willing to make a DIP loan. The interest rate will be a function of the risk of the new loan and the effect of the new loan on the lenders’ existing loans. Because the risk to the lender’s existing loans changes through the case, the required interest rate will change too.

Consider the first-lien lenders’ incentives to lend. If the first-lien lenders lend for only one period, they will be willing to lend at any interest rate on the DIP loan—in fact, they need not recover anything at all on the DIP loan. This is because the loan increases the recovery on the first-lien claim from 10 to 15. The recovery on the bankruptcy claim is sufficient to encourage the new loan.

But if the first-lien lenders want to lend beyond state H, they require a recovery on the DIP loan to compensate both for the risk of the DIP loan itself, and for the risk that continuation adds to the first-lien claim after state H. As we saw in Example 1, the first-lien lenders must recover a total repayment of 9 on its DIP lending for the first-lien lenders to prefer continuation in state H. Suppose we call r^* the per-period, per-dollar interest rate on the loans that would give a payoff of 9 for the DIP loans made in states 0 and H.¹¹² At any interest rate lower than r^* , the first-lien lenders prefer to end the case at state H, and at any rate higher than r^* , the first-lien lenders prefer a longer-term DIP loan.

Next, consider the incentive of the unsecured creditors to make a DIP loan. Their incentives are the same as the second-lien lenders in Example 1: they are reluctant to lend at date 0 because of debt overhang in favor of the first-lien

112. The DIP loan made at date 0 is for two periods, and the loan made in state H is for one period. Hence, the per period interest rate is the rate r that solves $2(1 + r^*)^2 + 2(1 + r^*) = 9$. Solving for r^* , we get $r^* = .68$ or 68%.

lenders, but they are willing to lend cheaply if state H is reached. In fact, the unsecured creditors are not willing to make a DIP loan at date 0, no matter how high the interest rate.¹¹³ But in state H, they are willing to lend at *any* interest rate¹¹⁴ as long as the expected recovery on their unsecured debt is high enough.¹¹⁵

This leads to two additional reasons the first-lien lenders value process sales, depending on the DIP loan interest rate the court will allow. If the court allows a DIP interest rate greater than r^* , then the DIP loan is at an above-market interest rate that is profitable for the first-lien lenders, so the first-lien lenders will prefer to continue the case in state H. In this scenario, the process sale can be valuable to the first-lien lenders because the unsecured creditors have incentives to make the DIP loan themselves at a lower rate than the first-lien lenders. The first-lien lenders would therefore value direct control as a way of locking in a profitable DIP loan for a longer horizon.

If the court caps the DIP interest rate at some rate less than r^* , then the first-lien lenders prefer to end the case at state H. Again, because the unsecured creditors may want to make a DIP loan to continue the case once state H is reached, the first-lien lenders value the process sale as a means of protecting the value of its claim from the risk imposed by continuation.

113. The maximum recovery is 10 in state HH. Their payoff from extending the DIP financing at states 0 and H would be $-2 + .5(-2 + .5(10)) = -0.5$.

114. The interest rate is irrelevant to the unsecured creditors because the DIP loan is junior to the first-lien lenders. Thus, it merely shifts value between the recovery on the prepetition unsecured debt and the unsecured creditors' DIP loan.

115. If First made a DIP loan from state 0 to state H, this loan would need to be refinanced (repaid) in state H or be added to First's claim to be collected in state HH. Assuming the latter, then the unsecured creditors are willing to provide a DIP in state H as long as $0.5(25 - 15 - D) > 2$, where D is the required repayment to the First-Lien Lenders on the DIP loan. As long as $D < 6$, the unsecured creditors are willing to finance continuation at state H. If the court allows $D > 6$, then a process sale will not be necessary to prevent continuation.

C. Data Appendix

We rely on two samples of data for this project: the sample of DIP loans in Part I and the sample of court documents studied in Part IV. Each of those Parts provided some information on the sample, and this Data Appendix provides additional detail.

1. DIP Loan Sample.

We wanted to understand how DIP loans have changed over time. To gather a comprehensive sample, we began with NextGeneration Research's BankruptcyData list of 3,033 publicly traded firms that filed for bankruptcy between January 1993 and April 2018. We were able to retrieve 2,508 of the 3,033 folders from SEC's Edgar website. For each of these samples, we searched all of the SEC filings that were uploaded in a period of [-90, +150] days around the petition date. As DIP Loans are normally negotiated at the beginning of bankruptcy cases, this time period was most likely to yield a DIP Credit Agreement.¹¹⁶

Our methodology was to identify blocks of text that could contain the full text of DIP Credit Agreements using automated searches that we then examined by hand. We ran the following search, which we refined iteratively to identify the largest potential sample of DIP Credit Agreements:¹¹⁷

1. "agreement" or "contract" identified a potential contract. We used this to generate a block of [-50, +150] words around "agreement" or "contract."
2. We then searched that each corresponding 200-word block for: "credit" or "loan" or "facility" or "revolving." To the extent we found any of these four words near "contract" or "agreement," this indicated a potential match.
3. We then limited each potential match by looking for "exhibit" or "ex," which would indicate the potential match could contain the full contract language instead of simply an announcement of a contract or a reference to a DIP Credit Agreement in a financial statement. We needed the full contract language to conduct our analysis.
4. As our initial search was very broad, we then screened out several types of obvious false positives to produce a more manageable sample.¹¹⁸

116. We also ran searches for "debtor" near "credit agreement" on the entire SEC corpus but found that focusing on the broader search of "credit agreement" on the corpus of firms that we knew filed for Chapter 11 identified more DIP Credit Agreements.

117. We refined this algorithm by examining a random sample of eighty-nine of the underlying SEC files and manually inspecting every SEC filing within a [-365, +365] range around the petition date to make sure that our algorithm would have identified every DIP Credit Agreement that these debtors filed with the SEC. Our algorithm would not have missed any of those DIP Credit Agreements.

118. We specifically eliminated any 200 word block containing the following language: "asset purchase agreement," "agreement shall be governed by," "hypothecation agreement," "asset sale agreement," "this security agreement," "pledge agreement," "pledge and guaranty agreement," "plan support agreement," "restructuring support agreement," "employment agreement," "severance agreement," "amendment no," "first amendment," "second amendment," "third amendment," "fourth amendment," "fifth amendment," "sixth amendment," "seventh amendment," "eighth amendment," "ninth amendment," "tenth amendment," "hereby amended," "shall be amended," "warrant agreement,"

This yielded a sample of 3,091 blocks from 654 Chapter 11 debtors. We then examined each block and identified 868 that could contain the full text of a DIP credit agreement. These blocks corresponded to 319 unique documents filed by 239 Chapter 11 debtors. We then manually reviewed those 319 unique documents and identified 175 unique DIP credit agreements filed by Chapter 11 debtors between January 1995 and April 2018.

This is obviously not the entire universe of DIP Loan Agreements signed by the 2,508 Chapter 11 debtors that we began our sample with. However, many firms cease filing documents with SEC once they fall into financial distress and others may not have thought it was material to file the DIP credit agreement with SEC. Manual inspection and alternative search strings did not yield additional credit agreements that our searches did not identify. To the best of our knowledge, this corpus represents substantially all of the DIP credit agreements filed with SEC between 1993 and mid-2018.

2. Court Document Sample.

Our research design required us to identify cases where someone complained to the court that creditors were in control of the bankruptcy case, or that the company's management team was dominated by, or working for, one creditor (typically a secured lender).

We began by identifying the 581,901 files that were the main document filed in the lead court docket for each of the 278 sample cases for which we were able to download all of the court filings from the court docket.¹¹⁹ We first inspected some of these documents to identify search terms. We then ran the following search over the corpus of main documents:

“control OR steer OR force OR pressure OR dictate”
within ten words of one of:
“creditor OR lien OR lender OR secured OR DIP”

This initial search identified 9,799 potential string matches in the body of 4,275 files from 265 of the sample cases. After a manual review of these matches, we determined there were many false positives and then then excluded all documents with the following case-sensitive phrases from the initial batch of search results:

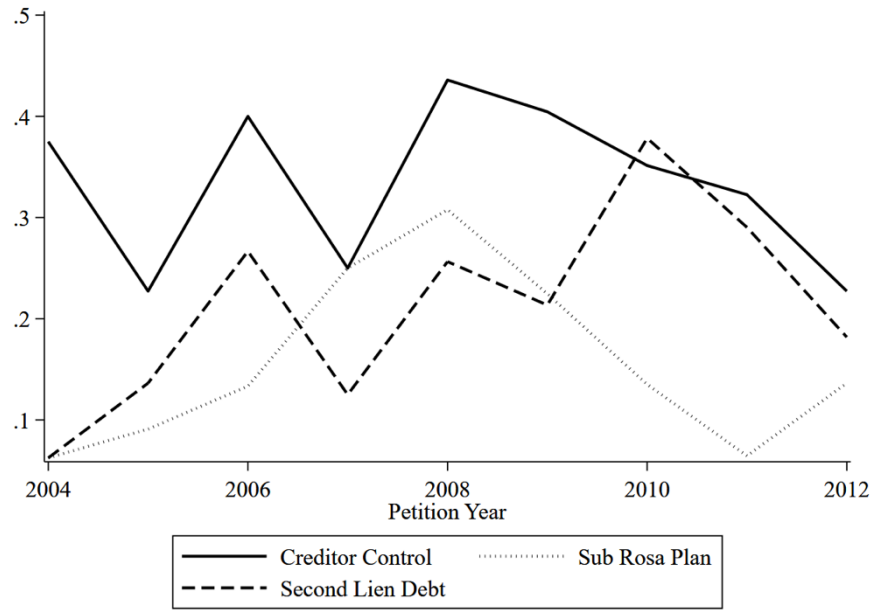
“forbearance agreement,” “standstill agreement,” “exit,” or “isda.” After several exploratory attempts to code the data, this language was always associated with a false positive that was not the full text of a DIP Credit Agreement.

119. Every case in the sample is a collection of court dockets that all correspond to the same corporate family. For example, a parent company might file with six subsidiaries, creating seven Chapter 11 bankruptcy cases. One of those bankruptcy cases is designated the “lead case.” This search was limited to the court filings in the lead case. Each docket row is a legal document, usually filed by the firm or its creditors, that requests some sort of relief from the bankruptcy court or complies with some sort of bankruptcy filing. For example, one row might be a request by the company for debtor-in-possession financing, with several supporting documents, such as a draft order approving the motion and a copy of the prospective loan contract. For an entry like this, the motion requesting approval of the financing is a “Main Document” in the PACER system, while the supporting documents are “exhibits.” We focus this search on main documents only, as main documents are where parties make the heart of their legal arguments.

“possession or control”
“change of control”
“change in control”
“Change of Control”
“Change in Control”
“shall”
“full force”
“Control”
“CONTROL”
“in force”
“control account”
“Control Account”
“force and effect”
“equal force”
“secured party”
“Secured Party”

This reduced the sample to 3,129 matches in 1,936 documents from 243 cases. We then manually inspected expanded versions of the string that was matched, and further reduced our sample to 903 potential text matches in 538 documents from 151 cases worth investigating further as potential allegations of creditor control. Our research assistant then examined each of the underlying documents and coded it to allow us to summarize the allegations and eliminate additional false positives. In total, this method identified 673 bona fide allegations of creditor control from 344 documents filed in 100 cases.

Appendix Figure 1: The Distribution of DIP Credit Agreements by Petition Year in the DIP Credit Agreement Sample



Appendix Figure 2: The Incidence of Creditor-Control Allegations over the Sample Period

