

Bankruptcy Process for Sale

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Abstract

We have witnessed a sea change in Chapter 11 bankruptcy practice since its inception in 1978. A process that was once a safe haven for managers is now controlled largely by secured creditors through control of the debtor's access to bankruptcy financing. In this paper, we explore a recent development toward more direct creditor control over the bankruptcy process. In some cases, secured creditors do not merely steer bankruptcy outcomes through tight covenants and short timelines; instead, they drive cases more directly through agreements with the debtor to pursue a specific case outcome that creditor prefers—effectively, a sale of control over the bankruptcy process by the debtor to a creditor. These agreements are often tied to the debtor's access to financing, whereby any attempt by the debtor to deviate from the creditor's plan is an event of default under the loan.

But what exactly is wrong with selling control over the bankruptcy process to a creditor? We show that when the debtor is liquidity-constrained, the well-known *debt overhang problem* in corporate finance can stifle competition for DIP loans, thus conveying market power to a senior secured lender at the outset of a case. Tying financing to control at an early stage of the case can result in outcomes that benefit the controlling creditor at the expense of the creditors as a whole. The controlling creditor may use its market power to lock in a plan that it prefers, an effect we call “*plan protection*.” It may also use control to protect its claims against litigation, an effect we call “*entitlement protection*.” Both effects can cause distortions in bankruptcy outcomes to the detriment of overall creditor recovery.

We test our theory using a novel dataset of 278 large Chapter 11 cases in which all documents in the case have been converted to readable text. We identify allegations of secured creditor control, and show the prevalence of direct control tied to the DIP loan. Our theory predicts that direct control should occur more often when there is conflict between secured creditor classes, and when there is litigation challenging the a secured lender's entitlement. We find empirical evidence consistent with these hypotheses. Normatively, we suggest that a temporary period whereby priming liens are permitted at the outset of the case under 364(d), while control terms are limited, can open up competition for DIP lending and limit inefficient sales of control over the bankruptcy process.

I. Introduction

When large firms file for Chapter 11, their immediate need for liquidity often dominates the early part of the bankruptcy proceedings.¹ At the turn of the 21st century, bankruptcy practice began to evolve as the secured lenders who often provide loans to Chapter 11 debtors began using those loan contracts to influence corporate governance². While bankruptcy judges occasionally pushed back on what they saw as overreach, in general debtor-in-possession credit agreements became a deeply important channel through which creditors exercised control over a debtor-in-possession. Studying this change, many scholars and practitioners worried that change could challenge the integrity of the bankruptcy system, as the bargaining power of senior creditors could distort bankruptcy outcomes³.

In this Article, we present evidence from a new data source, the text from all court filings in 278 large Chapter 11 cases. We document that secured creditor control is evolving toward a more direct form that can amount to a de facto sale of control over the bankruptcy process to a creditor. In a bankruptcy process sale, access to bankruptcy financing is tied to management's commitment to pursue a specific plan process and outcome the lender favors, and restricts the debtor's options to pursue alternatives. The debtor might sign a restructuring support agreement (RSA) with a lender or lender group that dictates a particular reorganization plan outcome and a timeline for achieving it. Deviations from this plan can trigger default under the bankruptcy loan and cut off access to the liquidity necessary to continue operating in bankruptcy.

That distressed companies transfer control rights to creditors in financial distress is nothing new, and there are benefits to such control shifts from shareholders to creditors when they occur outside of bankruptcy.⁴ Because creditors replace shareholders as the residual owners of the company in distress, it is sensible for creditors to take greater control over the firm's actions. In the context we study here, though—transfers of control of the bankruptcy process at the outset of a case—control transfers are more problematic. Bankruptcy law exists to solve problems caused by creditor coordination failures. To solve these problems, the Bankruptcy Code stays individual creditor remedies, and centralizes control in the debtor-in-possession (“DIP”), who has a fiduciary duty to the creditor body as a whole. Allowing the debtor to sell these rights to a subset of the creditors can undermine the balancing of creditor interests inherent in the DIP's duties⁵. Moreover, the mandatory nature of the Code's grant of control rights to the DIP limits the ability

¹ Even if the firm does not need a new loan, the bankruptcy code requires firms that have pledged a lien in their cash – the vast majority of firms – to get the permission of their secured lenders before they can spend their own money.

² Skeel 2003; Adler JLEO, Baird and Rasmussen 2002

³ Skeel 2003; Ayotte & Morrison 2009; Ellias 2014; Jenkins and Smith 2014

⁴ Aghion and Bolton (1992), Dewatripont and Tirole (1994), Nini, Smith and Sufi (2012)

⁵ To alleviate this fiduciary duties concern, these direct control 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, for example, the fiduciary out could be exercised by management, but would be an event of default under the financing motion if they did.

of the non-controlling creditors to stop a sale of control through the terms of their debt contracts alone.

This leaves bankruptcy courts with a difficult question: how much should they push back against a sale of control to a creditor? Existing scholarship recognizes these developments and the potential problems that flow from them, and advocate for stronger judicial oversight.⁶ We add to this developing literature by constructing a theory to understand the problems that can arise when direct control is tied to bankruptcy financing. Our theory uses standard tools in the bankruptcy and corporate finance literature, but it generates new insights and new predictions that we test with our data.

Our theory starts with a manager of a Chapter 11 debtor, who needs debtor-in-possession (DIP) financing to keep the firm going in bankruptcy. 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 rights attached. They also offer a payoff to management, such as a promise of future stock in the reorganized company. Management, following their self-interest, will choose the package that gives them the highest payoff and seek its approval with the bankruptcy court.

The theory generates two main insights. First, it explains why a senior (i.e. first lien) secured creditor making a DIP loan will value direct control, over and above the indirect control that comes from making a short-term DIP loan. We suggest two different motivations for direct control that we call *plan protection* and *entitlement protection*.

Plan protection is the desire to ensure that the lender’s desired outcome is not undermined by the other lenders. A transfer of direct control to the first lien through the DIP loan ensures that management will not “switch teams” midstream to advance a different plan the other creditors might favor, and are willing to finance themselves. In the model, the first lien lender’s claim is underwater⁷. 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 wants direct control over the case 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,⁸ as

⁶ See Douglas G. Baird, *Bankruptcy’s Quiet Revolution*; Jonathan Lipson, Controlling Creditor Control: Jevic and the End of LifeCare;

⁷ Saying the first lien is “underwater” means that the first lien is owed more than the firm would be worth if it were sold immediately.

⁸ 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.

the process sale might stifle a competing lender’s plan that provides a greater payoff to the creditors overall.

Entitlement protection is the desire to protect a pre-bankruptcy claim from an attack on its validity by the debtor.⁹ 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. 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 distort case outcomes to the detriment of efficiency. A lender seeking to protect itself from litigation might seek to end the case earlier, for example, to stymie the litigation against it,¹⁰ even if a longer case would increase the value to the creditors as a whole.

A second contribution of the theory is to show that the Bankruptcy Code’s DIP financing priority rules can be incompatible with secured debt-heavy capital structures and conflict between secured creditors. The connection between secured debt, DIP financing priority, and direct control in our theory comes from the well-known *debt overhang problem*¹¹ in corporate finance. The debt overhang problem says that a lender may refuse to make a new, lower-priority loan when the benefits of that loan accrue to existing, higher-priority lenders. In bankruptcy, the Code is more permissive in allowing DIP loans to come ahead of the unsecured creditors in priority, but is more restrictive in allowing DIP loans to come ahead of (“prime”) existing secured creditors without their consent.¹² These priority rules were written for a time when capital structures involved mostly unsecured debt. Our theory suggests they are less adequate for resolving conflicts involving secured creditors, as we observe today.

Specifically, we show that the inability to prime existing first-lien secured creditors can stifle competition to provide DIP loans. This reduces the incentive of other secured and unsecured creditors to push back against an inefficient sale of direct control by offering their own alternative financing package. Debt overhang also cause a first-lien lender with direct control to favor shorter cases in the presence of conflict between first and second lien debt. When the first lien cannot prime the second lien with their DIP loan, they cannot capture the benefits of continuing the case, and thus prefer to end it sooner.

With our theoretical framework in place, we then examine the data and test the chief predictions of our model. We use a dataset of more than 1.5 million court documents from all major bankruptcies that occurred between 2004 and 2012. Using a combination of automated methods and manual data collection, we search for allegations of secured creditor control, and identify the subset of those that allege direct creditor control in particular. We find that direct

⁹ Baird refers to these issues as uncertain priority rights and discusses the ways the presence of uncertain priorities complicates bankruptcy bargains. See Baird, *Quiet Revolution*.

¹⁰ A prominent example of this is the Lyondell bankruptcy. See Ellias and Stark, *Bankruptcy Hardball* (2020).

¹¹ George G. Triantis, Financial Slack Policy and the Law of Secured Transactions, *Journal of Legal Studies* 2000. George G. Triantis, “A Theory of the Regulation of Debtor-in-Possession Financing,” 46 *Vand. L. Rev.* 901, 901 (1993), Kenneth Ayotte and David A. Skeel, *Bankruptcy Law as a Liquidity Provider*, *U Chicago L. Rev.*

¹² 11 U.S.C. 364(c), 364(d).

control 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 direct control is involved. These allegations are not merely cheap talk: we find that allegations of control are associated with lower unsecured creditor recoveries. 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.

We also find support for the main predictions of our model. In our data, the presence of second lien debt is associated with an approximately [70% increase] in the likelihood that junior creditors will complain that senior creditors are buying control of the bankruptcy process. In cases where the entitlements of senior creditors appear to be particularly at risk, senior creditors appear to be [150%] more likely to buy control of the case.

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 in the case to provide short-term financing to cover a short period (perhaps 60-90 days) 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 sell control. This proposal would not require a change to the Bankruptcy Code, since 364(d) already allows for priming liens; but courts would need to change existing norms and be willing to presume that primed creditors are receiving adequate protection through the increase in the value of the collateral that would occur in the early stage of a bankruptcy case.

This Article proceeds as follows. Section II provides some illustrative examples involving direct control. Section III can affect a simple theoretical model that explicates the two agency problems that are the focus of the paper. Section IV explains the sample of data we analyze and Section V tests empirical predictions of the model on a sample of major bankruptcy cases from 2004 to 2012. **Section IV offers our proposed policy solution** and Section VI concludes.

II. Examples

The examples below describe how direct control works, how it affects the dynamics of cases, and how the non-controlling creditors and courts respond to the

- A. Walter Energy
- B. Pliant

Pliant was an Illinois-based manufacturer of flexible packaging and film. The Chapter 11 filing in 2009 was its second filing, after emerging from an earlier bankruptcy in 2006. The company listed xxx in assets and xxx in debt. Along with the bankruptcy filing, Pliant filed a lock-up agreement with its first-lien lenders, and requested that the court approve DIP financing to be provided by the first liens that was tied to this lock-up agreement. The lockup agreement

III. Theory

The goal of our theory is to understand the incentives at play when creditors can tie control over a bankruptcy case to the financing they receive at the outset. Normatively, we measure outcomes by how much value they provide to the bankruptcy estate, which represents the creditor body as a whole. Efficient decisions are ones that maximize the value of the estate. In this paper, the key decision relates to when to continue in bankruptcy and when to end the case. Thus, when we refer to an outcome as *inefficient*, we mean that another choice is available that would make the creditors collectively better off.¹³

The numerical examples below will generate several insights:

1. A first lien lender whose claim is partially underwater values direct control. Direct control is valuable to the first-lien because it prevents management from “switching teams” and continuing the case by borrowing from another lender. Direct first lien control comes at the expense of the second lien and unsecured creditors, who prefer a longer case. Overall, direct control can be efficient or inefficient, depending on the company’s circumstances.
2. The presence of debt overhang conveys market power to the first lien lender at the outset of the case. Hence, the other creditors (second liens and unsecureds) may refuse to offer a competing loan proposal, even if the first lien’s direct control comes at their expense.
3. The first lien is 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 from offering a competing loan at the outset of a case, it can also discourage the first lien from financing a longer case, because the first lien cannot prime the second lien.
4. Efficiency would occur if the DIP lender can be senior to everyone for an initial period, and is restricted from including control terms. This is true as long as continuation is known to be efficient for that initial period.

Example 1: Plan Protection

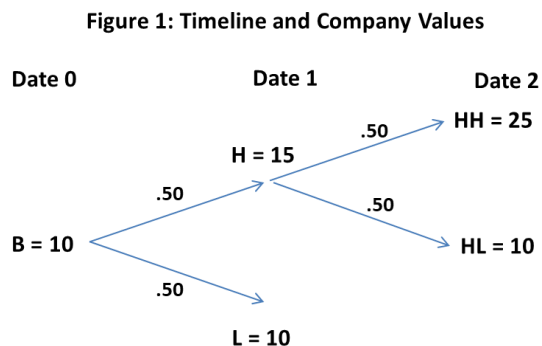


Figure 1 shows the timeline of our game and the value of the company depending on the states of the world that may arise in the future. There are three potential dates in bankruptcy, 0, 1, and 2. At date 0 (the filing date), the debtor has commenced a bankruptcy case. Continuation requires new financing, 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

¹³ This follows from the classic Creditors Bargain Theory of Baird and Jackson. If creditors could agree in advance, they would choose an outcome that would provide them with the highest collective payoff.

reaches state H, another continuation decision must be made¹⁴. 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 1a 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 1: 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 1 gives the variable definitions 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 date in order to continue the reorganization. We suppose that all creditors can come up with the money to fund the loan. 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.

A DIP loan can be provided by any of the lenders (First, Second, or Unsecured). The proposal can transfer control over the reorganization to the lender, along with the terms of the financing. It also provides a transfer of value (call this “ τ ”) to the manager. This transfer can be in the form of a promise of future employment or equity in the reorganized company.¹⁵

If multiple loan proposals are received, the manager 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 the Appendix we describe a different example in which multiple lenders will wish 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 in 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 is a simple way of representing bargaining frictions that necessitate bankruptcy. If perfect bargaining were available, we would not need bankruptcy law at all. In addition, we assume that creditors can

¹⁴ 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.

¹⁵ Importantly, regardless of any agency problems, managers may benefit after the bankruptcy from a plan confirmed at a low valuation and getting valuable stock options at an artificially low strike price (Ellias 2016).

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.

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,¹⁶ 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 it 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 $.50(25) + .50(10) - 2 = 15.5$.

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 $.50(15.5) + .50(10) - 2 = 10.75$.

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 the first lien, then, has the incentive to finance the continuation from dates 0 to 1.

But the situation changes if state H is reached at date 1. Then, continuation benefits the second lien claim, and hurts the first lien claim: 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 the second lien. The first lien claim can only lose from continuation, as firm value falls if state HL is reached. Thus, we should expect that the second lien will lean in favor of financing continuation from state H, while the first lien will lean against it.

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 0.¹⁷ A DIP loan is assumed to be junior to the first and second liens, but senior to the unsecured creditors, in accordance with Section 364(c) of the Bankruptcy Code. In this model, there is

¹⁶ 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.

¹⁷ The unsecured creditors could also make a proposal, but they will never

value remaining to pay the DIP loan only in state HH. After the first and second liens are satisfied, there is $25 - 15 - 7 = 3$ remaining value to pay off the DIP loan.

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

Second Liens Will Not Compete at Date 0

For the second liens, 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, 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's payoff if the game ends at that node is 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 the first lien 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, Second would receive at least $.50(7)+.50(0) - 2 = 1.5 > 0$ ¹⁸.

Now, consider state 0. Second's payoff is 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 $.50(1.5)+.50(0)=1.5$.

Second will not provide a DIP loan to 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. 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 will make a proposal without competition from Second or Unsecured. 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, $.50(15)+.10(10)-2=10.5$. This exceeds 10, the date 0 liquidation payoff, so First prefers to provide a DIP loan at date 0.

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 its Date 0 DIP loan, after the second lien is satisfied.

¹⁸ There is also a 3 remaining value in state HH that Second could potentially collect through its DIP loan. But this would depend on the value of First's DIP loan at date 0. The two loans would likely share equally in this remaining value. If so, then Second's willingness to lend in state H is even stronger.

This means First's payoff from continuation is, at most, $.50(15+3)+.50(10)=14 < 15$. As the firm's condition improves from state 0 to state H, 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 toward the value of the first-lien debt, continuation adds risk that benefits the junior creditors at the expense of the seniors.

The Benefit of Direct Control

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 it profits from the continuation, Second would be willing to pay the manager a positive transfer to do so. First can combat this by taking direct 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.

Since First will be the only bidder for the loan as of date 0, the manager will agree to the loan terms. Second would not find it in its 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.

Secured Creditor Conflict Induces Direct Control

One cause of the inefficient process sale to the first lien in this example is the existence of conflict between secured creditor groups. In particular, one cause of direct control is the presence of second lien debt, which has priority over any DIP loan the first lien might make. This means the first lien cannot capture any of the continuation value after date H; it can only go to the second lien. 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 all of the other creditors. It is easy to see that if First can demand an additional 9 to repay its DIP loans in state 0 and state H, it would be willing to finance continuation in state H¹⁹.

This suggests an empirical prediction that we will bring to our data: *there is a greater likelihood of direct creditor control 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 use direct control to end the case earlier.

Extensions

The numerical example we used is intended to demonstrate one possible scenario in which direct creditor control can occur, and lead to inefficiency. But it is, of course, only one possibility of

¹⁹ In state H, First would receive 15. If it continues, it would receive an expected payoff of $\frac{1}{2}*(15+R) + \frac{1}{2}*10 - 2$, 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.

many. In this subsection, we discuss briefly two alternative scenarios that are worthy of consideration.

First, the example above demonstrates a scenario where direct control enables an inefficient early end to the case. But direct control can also enable an *efficient* early end to the case when the junior creditors would continue it at the expense of the first liens, and overall creditor recovery²⁰. Moreover, identifying the efficient length of time a company should stay in bankruptcy at the outset of a case is unrealistic to expect of any bankruptcy judge. This means that a simple policy that prohibits direct control outright is not necessarily an optimal policy response, and may do more harm than good. We discuss a different policy solution that can manage this difficulty in Section XXX.

Second, the prior example, the entire company value gets divided between first and second liens, no matter what happens with the company in bankruptcy. This will be true in some cases, but for many others, the unsecured creditors will be in the money and recover value from the estate. When unsecured creditors have the potential to recover, direct control can also be valuable to a senior secured creditor, but for different reasons. Recall that DIP loans are senior to 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.

When First's DIP loan interest rate is limited by the court, it can create incentives that give rise to direct control. One possibility is that the court holds the interest rate too low for the First to prefer continuation. Direct creditor control can then function as it did in Example 1, as a means of preventing continuation by the other creditors. Another possibility is that the court allows for an interest rate that is above-market (i.e. greater than the DIP lender would require to make the loan.) In that case, direct control can help the DIP lender lock in an above-market interest rate and earn a supra-normal return for a longer period. The direct control prevents the debtor from securing alternative financing from another lender at a lower interest rate. We leave these examples to the Appendix.

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.

²⁰ To see this with numbers, suppose the payoff in state HL moves from 10 to 5. Then continuation is inefficient, because $15 > \frac{1}{2} * 25 + \frac{1}{2} * 5 - 2 = 13$. Yet, from the point of view of Second, the continuation and lending decisions are no different. The lower payoff in state HL only affects First's recovery, which Second will not take into account.

to advance to Date 1²². In this example, continuation to date 1 is efficient, since the value of the firm under continuation is larger: $(1/2)(20)+(1/2)(6)=13>10$. In addition to the cash flows above, suppose there is a potential challenge to F's first lien position that would reduce his 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 F; hence, suppose that $r=6$ is available only in a case that proceeds to date 1.

In the control auction, the winning bidder can extract a promise by management to bring the entitlement action and recover from F ($r=6$), or a commitment to not bring the action and leave F's claim undisturbed ($r=0$). Since the potential action reduces F's claim, F obviously prefers $r=0$, while S and U prefer $r=6$.

The table 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.

²² 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.

Table 3: Entitlement Shifts and Willingness to Bid For Control				
	Expected Payoff			Willingness to Pay For Control
Entitlement	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	

Benchmark: No Entitlement Shift Available

First, suppose that no entitlement shift occurs ($r=0$). 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 a certain 10. S prefers a date 1 resolution, since it gives her a potential payoff of 8 in state H; this has an expected value of $.50 \cdot 8 = 4$ to Second. If an auction is held for control, Second will be the most aggressive bidder, because her payoff increases by 4 in continuation, while First's payoff decreases by only 2. Continuation benefits Second more than it costs First. An auction for control will result in Second controlling the process, which produces the efficient outcome for the firm.

Bidding with Entitlement Shifts

Now consider the effect of the entitlement litigation. If First is the winning bidder, First will clearly prefer a date 0 end to the case, and full preservation of his claim ($r=0$). Second prefers to reduce First's claim and extend the case to date 1. But in this case, First will be the most aggressive bidder, because he has 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 between Second and Unsecured. In particular, Unsecured receives the benefit of the entitlement shift in state H, while Second receives a (smaller) benefit to the litigation in state L.

IV. Data Collection.

The empirical section of this paper relies on a sample of cases that is roughly equivalent to all major Chapter 11 cases that filed for bankruptcy between January 1, 2004 and December 31, 2019. The sample builds on a less-detailed sample originally collected by one of us,²³ supplemented by roughly 1.5 million court documents.

The sample was originally constructed by matching Next Generation Research's Bankruptcy Datasource's list of firms that filed for Chapter 11 to a list of firms with equity or debt that traded during the firm's bankruptcy period.²⁴ For each firm that appeared to have equity or debt traded, one of us identified the court docket using PACER and 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 (as this is a study of bankruptcy bargaining, we must have something to bargain over); 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.

For this study and a line of research that will follow this, we sought PACER waivers from the various bankruptcy courts to download all of the documents associated with the bankruptcy. Twenty 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 portable document format to text, which yielded a dataset of 1,453,264 documents from 913,537 docket entries.²⁵ The processing of downloading the documents and converting them took more than a year of computing time. Table A1 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, described further in the Research Appendix, to identify documents that might complain about senior creditor control. 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:

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

²³ The core of the sample was collected for Ellias, Jared A. 2018. What Drives Bankruptcy Forum Shopping? Evidence from Market Data, *Journal of Legal Studies* 47:119-149 and Jared A. Ellias, Bankruptcy Claims Trading, 15 *J. EMPIRICAL LEGAL STUD.* 772, 774 (2018).

²⁴ The list of firms with traded debt or equity was compiled by combining records maintained by Bloomberg, MarkIt and TRACE as detailed in Ellias (2018).

²⁵ The missing files result from limitations of the OCR technology we used (Tesseract OCR), which was unable to convert some documents despite several attempts.

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.²⁶

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.

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

²⁶ Case No. 08-10249, Document No. 841.

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.²⁷

V. Empirical Analysis.

Table 1 provides summary statistics on important attributes of the creditor control sample as compared 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.” Panel A shows that there are no obvious statistically significant differences between the pre-bankruptcy capital structures of the two cohorts of firms, with one significant exception: creditor control firms are nearly 50% more likely to have second lien debt in the capital structure, consistent with the theoretical predictions of the model. Panel B shows that non-creditor control firm bankruptcies are significantly more likely to be prepackaged or prenegotiated, which makes sense when you consider how our creditor control variable was constructed. By identifying creditor control firms using allegations of creditor control in documents filed with the bankruptcy court, we identified a subset of firms where junior creditor chose to contest what they alleged was an unfair sale of bankruptcy process. There are likely non creditor control firms where management sold the process at the beginning of the case but juniors did not bother investing in fighting that sale because there was no utility in doing so.

Panel C shows that the creditor control firms were more likely to have DIP financing – no surprise, but DIP financing is so universal across the sample that the magnitude of the difference is small – and more likely to involve Key Employee Incentive Plans, which are court approved bonus plans for senior managers. A higher rate of KEIPs is consistent with the view that at least some bankruptcy bonuses are side-payments to managers, which our model and other work suggest is more likely when management has the bargaining power to sell control (Ellias 2019).

As Panel D shows, in terms of bankruptcy outcomes, the two cohorts of firms are similar. 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. This is again likely an artifact of sample construction, as unsecured creditors complain about creditor control when they are unhappy with their expected bankruptcy outcome.

Table 1. Summary Statistics for No Creditor Control Allegation vs. Creditor Control Allegation.

	No Creditor Control Allegation	Creditor Control Allegation	Difference	St_Err	t_value	p_value
Panel A. Pre-Bankruptcy Balance Sheet.						
Petition Assets (in millions)	27,400	46,200	-18,800	14,500	-1.3	.195
Petition Liabilities (in millions)	27,900	60,200	-32,200	20,800	-1.55	.123
Funded Debt (in millions)	14,800	22,100	-7,330	7,410	-1	.324
Secured Debt (1/0)	.872	.91	-.038	.04	-.95	.335
Private Equity Sponsor (1/0)	.373	.412	-.039	.062	-.65	.531
Levels of Liquidation Priority (# of levels)	2.519	2.81	-.29	.179	-1.6	.105

²⁷ Case No. 08-11111, Doc. 816.

Asset Level Financing (1/0)	.129	.13	-.002	.042	-.05	.972
Second Lien Debt (1/0)	.196	.3	-.104	.052	-2	.048
Panel B. Intentions on Petition Date.						
Sale Intended (1/0)	.19	.24	-.05	.051	-1	.325
Liquidation Intended (1/0)	.044	.05	-.005	.026	-.2	.841
Prepackaged Filing (1/0)	.196	.03	.166	.042	3.95	0
Prenegotiated Filing (1/0)	.71	.59	.119	.059	2.05	.043
Panel C. Bankruptcy Events.						
DIP Financing (1/0)	.939	1	-.061	.024	-2.55	.011
KEIP Approved (1/0)	.296	.48	-.184	.059	-3.1	.002
Days of Bankruptcy Between Petition Date and Emergence (1/0)	248.046	313.31	-65.264	32.918	-2	.049
Panel D. Bankruptcy Outcomes.						
Investment Banker Appraisal of Firm Assets (in millions)	11,000	12,200	-1,210	4,410	-.3	.783
Emerged as Independent Firm	.419	.47	-.051	.062	-.8	.412
Reorganize Through 363 Sale	.252	.31	-.059	.056	-1.05	.293
First Lien Recovery Ratio from Disclosure Statement (n=125)	.867	.816	.051	.048	1.05	.287
Second Lien Recovery Ratio From Disclosure Statement (n=49)	.412	.409	.003	.127	0	.982
Unsecured Recovery Ratio from Disclosure Statement (n=146) ²⁸	.447	.234	.212	.066	3.25	.002

Table 2 uses logistic regression models to examine the robustness of the observed relationship between creditor control allegations and relatively lower creditor recoveries.²⁹ The dependent variable is the observed market value of the debtor’s outstanding unsecured bond for the debtors in the dataset with bonds that are trading at the end of the bankruptcy process.³⁰ 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.

Table 2: Creditor Control Allegations and Creditor Recoveries.

²⁸ 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.

²⁹ The results are qualitatively similar for Models 1-3 if we instead use the “sub rosa plan” 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.

³⁰ 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, I 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.

	(1)	(2)	(3)	(4)	(5)
	Market Value of Unsecured Bond	Market Value of Unsecured Bond	Market Value of Unsecured Bond	Market Value of Unsecured Bond	Market Value of Unsecured Bond
Creditor Control Allegation	-0.182** (0.074)	-0.183** (0.073)	-0.179** (0.071)	-0.176** (0.070)	-0.119* (0.067)
Log Funded Debt		0.058** (0.024)	0.058** (0.024)	0.035 (0.024)	0.038 (0.026)
Prepackaged			0.207** (0.082)	0.210** (0.089)	0.320*** (0.084)
Prenegotiated			-0.173** (0.081)	-0.170** (0.078)	-0.193** (0.081)
Sale Intended				-0.143 (0.092)	-0.165 (0.103)
Liquidation Intended				-0.223* (0.127)	-0.127 (0.127)
Industry Distressed				0.042 (0.077)	0.171 (0.108)
Debt is Subordinated				-0.144** (0.069)	-0.085 (0.070)
Constant	0.469*** (0.043)	-0.735 (0.498)	-0.644 (0.494)	-0.105 (0.509)	-0.254 (0.554)
Obs.	115	115	115	115	115
R-squared	0.053	0.096	0.151	0.201	0.342
Year FE	No	No	No	No	Yes
Law Firm FE	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 same that has a bond trading within 30 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 30 day window, the dependent value is the weighted average price across all trades. Robust standard errors are in parenthesis. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

As Model 1 of Table 2 shows, creditor control allegations are negatively and statistically significantly associated with the market value of the unsecured recovery without any control variables. This remains true in Model 2 after controlling 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 fixed effects for petition year and debtor law firm, and the results are the same. Overall, this result suggests that the observed relationship between creditor control allegations and relatively lower unsecured creditor recoveries is robust to control variables.

In order to gain deeper insight into the creditor control cases, we summarized important aspects of the allegation. Table 3 presents that data. Several trends are worth noting. First, as Panels A and B show, creditor control is largely a story of unsecured creditors (and, in general, junior secured creditors), accusing secured creditors of buying bankruptcy process. Panel C shows

that the vehicle for creditor control is typically the DIP loan agreement., although as Panel D suggests, it is typically coupled with other, non-contractual methods of gaining bargaining power.³¹

Table 3. Summary of Creditor Control Allegations.

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

Party Being Harmed by Control	Mean for Creditor Control Cases (n=100)	Std.Dev.
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.

Party Exercising Control	Mean for Creditor Control Cases (n=100)	Std.Dev.
Any Secured Creditor	.92	.273
First Lien Lender	.3	.461
Second Lien Lenders	.1	.302
DIP Lenders	.74	.441
Other party, not secured creditor	.29	.456

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

Mechanism of Control through Loan Contract, for Cases Alleging Creditor Control	Mean for Creditor Control Cases (n=100)	Std.Dev.
Control Involves Contractual Leverage from Loan Contract	.75	.435
Milestones in Bankruptcy Loan Agreement	.39	.49
Short Maturity	.17	.378
“Sub Rosa” plan	.49	.502
Loan Prepayment Penalty	.11	.314
Loan Disrupts Pre-Bankruptcy Entitlements to Value	.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.

Non-Contractual Mechanism of Control	Mean for Creditor Control Cases (n=100)	Std.Dev.
Control through Non-Contractual Means	.75	.435
Control through Plan Support Agreement	.21	.409
Control Through Bidding Procedures	.19	.394
Control through Credit Bidding	.15	.359
Other	.15	.359

³¹ We should summarize a couple of them.

In Table 4, we estimate logit regression models which show that the basic predictions of the model persist in the data after controlling for cross-sectional differences in firm and bankruptcy characteristics. As Model 1 shows, the presence of second lien debt is positively correlated with creditors complaining about “sub rosa plans,” consistent with the model’s prediction that debt overhang incentives are worsened by the presence of second-lien debt. In Model 2, we introduce a dummy variable that takes on a value of 1 if the disclosure statement describes significant litigation over avoidance actions, which would suggest that senior creditors would have positive *ex ante* incentives to defend their entitlements to value. This variable also takes on its expected positive correlation.

In Model 3, we introduce control variables for bankruptcy and firm characteristics that are commonly used in the empirical bankruptcy literature. We find that the independent variables of interest remain statistically significant and positively associated with allegations of creditor control, even after controlling for firm size, prepackaged and prenegotiated filings and bankruptcy cases where management announces on the first day that a sale or liquidation is intended. 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 results are robust to all of these alternative specifications.

Table 4. Determinants of Sub Rosa Plan Accusations.

	(1)	(2)	(3)	(4)	(5)
	Sub Rosa Plan Accusation?	Sub Rosa Plan Accusation?	Sub Rosa Plan Accusation?	Sub Rosa Plan Accusation?	Sub Rosa Plan Accusation?
Second Lien Loan in Capital Structure	0.680* (0.356)	0.712* (0.365)	0.765** (0.382)	0.937** (0.410)	0.968** (0.471)
Avoidance Actions Mentioned in DIP Objection		1.088*** (0.418)	1.090** (0.434)	1.235*** (0.474)	1.394*** (0.512)
Log Funded Debt			0.046 (0.106)	0.032 (0.123)	0.052 (0.150)
Prepackaged Filing					
Prenegotiated Filing			0.010 (0.355)	0.083 (0.396)	0.056 (0.480)
Sale Intended			0.597 (0.405)	0.632 (0.438)	0.815 (0.524)
Liquidation Intended			0.760 (0.743)	0.473 (0.830)	0.185 (0.892)
Constant	-1.571*** (0.195)	-1.763*** (0.215)	-2.914 (2.184)	-1.463 (2.780)	-3.428 (3.844)
Obs.	241	241	241	241	202
Pseudo R ²	0.015	0.042	0.057	0.133	0.188
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. The dependent variable takes on a value of 1 if creditors alleged that management had entered into a “sub rosa plan,” typically an allegation by junior creditors that senior creditors were dictating the bankruptcy process to the firm. Robust Standard errors are in

parenthesis.

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Finally, the model also predicts that creditors will seek to buy control of the bankruptcy process in order to shorten in. To test this, we examine the relationship between a creditor control allegation and the length of the bankruptcy case. Controlling for observable case and firm characteristics, are the cases in which we observe complaints of creditor control longer?

Table 5 below summarizes those regression models. The independent variable of interest is the logged days of bankruptcy, which is the number of calendar days between the petition date and the date the firm leaves bankruptcy, whether through a plan of reorganization or a sale. The independent variable of interest in Models 1 through 3 is the occurrence of a creditor control allegation in the data. In Models 4 through 6, the independent variable of interest As the Table shows, we do not observe a statistically significant relationship in the data. We hypothesize that this could be an artifact of our research design, where the cases in which creditors complain about a control sale are also the cases in which creditors have invested in litigation to try to contest it, which has the effect of prolonging those cases. In unreported results, we find that the results are the same when we use allegations of sub rosa plans as our independent variable of interest instead.

Table 5. The relationship between creditor control allegations and case length.

	(1)	(2)	(3)	(4)	(5)	(6)
	log_days	log_days	log_days	log_days	log_days	log_days
Creditor Control Allegation	0.363*** (0.111)	0.121 (0.093)	0.144 (0.097)			
Creditor Control Allegation in First 60 Days of Bankruptcy				0.041 (0.110)	-0.087 (0.093)	-0.020 (0.091)
Prepackaged		-1.225*** (0.118)	-1.079*** (0.111)		-1.276*** (0.120)	-1.127*** (0.112)
Prenegotiated		-0.246** (0.098)	-0.421*** (0.104)		-0.256** (0.099)	-0.429*** (0.105)
Log Funded Debt		0.174*** (0.045)	0.186*** (0.044)		0.180*** (0.044)	0.193*** (0.044)
Sale Intended		-0.593*** (0.150)	-0.558*** (0.140)		-0.578*** (0.148)	-0.547*** (0.140)
Liquidation Intended		-0.472 (0.302)	-0.503 (0.343)		-0.461 (0.306)	-0.493 (0.347)
Constant	5.065*** (0.074)	2.130** (0.927)	2.265** (1.004)	5.183*** (0.071)	2.087** (0.913)	2.207** (1.006)
Obs.	273	273	273	273	273	273
R-squared	0.034	0.396	0.461	0.000	0.394	0.457
Year FE	No	No	Yes	No	No	Yes
Law Firm FE	No	No	Yes	No	No	Yes

Standard errors are in parenthesis

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Proposal: Temporary Priming DIP

Our theory argues that harmful direct control is a consequence of the debt overhang problem. Because the first lien debt is the only party who benefits from the early stage of the case, they may be the only willing financier. The absence of competition for the DIP loan gives the first lien the ability to demand direct control over the case, 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 control sale.

One well-known solution to the debt overhang problem is to allow the new debt to be senior to the existing debt. 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 railroads³². 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 courts have been reluctant to allow DIP loans to be senior to existing secured creditors. These priority rules were more than sufficient when capital structures were mostly unsecured debt; but as secured debt now dominates the capital structure of bankrupt companies,

One way to mitigate the costs of direct sales of control is to require a temporary period at the outset of the case (say 90 days) in which a DIP loan can prime even secured creditors. The loan can contain standard financial covenants to protect the lender's loan from downside risk, but it cannot precommit the debtor in possession to any particular case outcome (such as by tying the DIP to an RSA) 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.

This proposal does not necessarily require a change to the Bankruptcy Code to implement. A judge could authorize a temporary priming lien under 364(d) by adopting a presumption that the increase in value that arises from avoiding immediate liquidation provides the adequate protection necessary to protect the primed lenders. But this would require judges to be willing to alter existing norms that make priming liens rare.

The virtue of the temporary priming lien is that it encourages competition for the lending opportunity at the outset of the case. This alleviates debt overhang. In Example 1 of our theory, if we allow for loans to prime the first lien between dates 0 and 1, the inefficient outcome driven by the first liens would no longer occur. The second liens would be willing to provide a priming DIP at Date 0. They 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 virtue of the temporary priming is that it provides a time window for information to be provided to other creditors and to the bankruptcy judge. This ensures that a senior lender will not

³² See David A. Skeel, *Debt's Dominion: A History of Bankruptcy Law in the U.S.*

be able to use the debtor’s liquidity emergency to take direct control of a case and end it before it starts.

The temporary nature of the priming limits the downside to priming liens, which is that senior financing encourages continuation in bankruptcy even if the company is non-viable and a quick resolution is warranted. If priming liens of indefinite horizon were allowed, secured creditors would be justifiably worried about dilution of their collateral value. These concerns are less serious when the priming occurs only over an initial 90 day window. In the event that the debtor is truly non-viable and needs to be liquidated immediately.

VI. Conclusion.

In this Article, we examined an important friction on bankruptcy outcomes: the incentives managers have to engage in inefficient control sales and the incentives creditors have to make inefficient control purchases. We also presented empirical evidence from a new dataset all of all court documents from the 278 major firms that filed for bankruptcy between 2004 and 2012 that provides supportive evidence that creditor control is associated with the presence of a second lien loan the capital structure and avoidance claims against senior creditors, which is consistent with senior creditors engaging in inefficient control purchases to buy plan protection and entitlement protection. Further research is needed to identify additional frictions on efficient bankruptcy outcomes.

Appendix

Table A1 – Number of Sample Cases by Judicial District.

District	Number of Cases	Percentage of Sample
EDTN	1	0.00
MD	1	0.00
MDPA	1	0.00
ME	1	0.00
MN	1	0.00
SDIN	1	0.00
WDMO	1	0.00
EDMO	2	0.01
WDMI	2	0.01
WDTX	2	0.01
MA	3	0.01
WDLA	3	0.01
EDVA	4	0.01
NDIL	4	0.01
NJ	4	0.01
SDOH	4	0.01
EDMI	6	0.02
NDTX	6	0.02
NV	6	0.02
SDNY	73	0.26
DE	152	0.55

Appendix 2: Direct Control Without Second Lien Debt

Consider the Example 1, 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 First 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 First’s incentives to lend. If First lends for only one period, it is willing to lend at any interest rate on the DIP loan—in fact, it 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 pre-bankruptcy claim is sufficient to encourage the new loan.

But if First wants to lend beyond state H, it requires 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, First must recover a total repayment of 9 on its DIP lending for First 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.³³ At any interest rate lower than r^* , First prefers to end the case at state H, and at any rate higher than r^* , First prefers a longer-term DIP loan.

Next, let’s consider the incentive of the unsecured creditors to make a DIP loan. Their incentives are the same as the Seconds in Example 1: they are reluctant to lend at date 0 because of debt overhang in favor of First, 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 rate³⁴. But in state H, they are willing to lend at *any* interest rate³⁵ as long as the expected recovery on their unsecured debt is high enough³⁶.

This leads to two additional reasons First values direct control, 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 First, so First will prefer to continue the case in state H. In this scenario, direct control can be valuable to First because the unsecureds have incentive to make the DIP loan themselves at a lower rate than First. First would value direct control as a way of locking in a profitable DIP loan for a longer horizon.

³³ 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%.

³⁴ The maximum recovery is 10 in state HH. Their payoff from extending the DIP financing at states 0 and H would be $-2 + \frac{1}{2}*(-2 + \frac{1}{2}*10) = -0.5$.

³⁵ The interest rate is irrelevant to the unsecureds because it merely shifts value between the recovery on the pre-petition unsecured debt and the unsecureds’ DIP loan.

³⁶ 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 unsecureds are willing to provide a DIP in state H as long as $\frac{1}{2}*(25-15-D) > 2$, where D is the required repayment to First on the DIP loan. As long as $D < 6$, the unsecureds are willing to finance continuation at state H. If the court allows $D > 6$, then direct control will not be necessary to prevent continuation.

If the court caps the DIP interest rate at some rate less than r^* , then First prefers to end the case at state H. Again, because the unsecureds may want to make a DIP loan to continue the case once state H is reached, First values direct control as a means of protecting the value of its claim from the risk imposed by continuation.

Data Appendix

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 sample case.³⁷ 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:

“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”

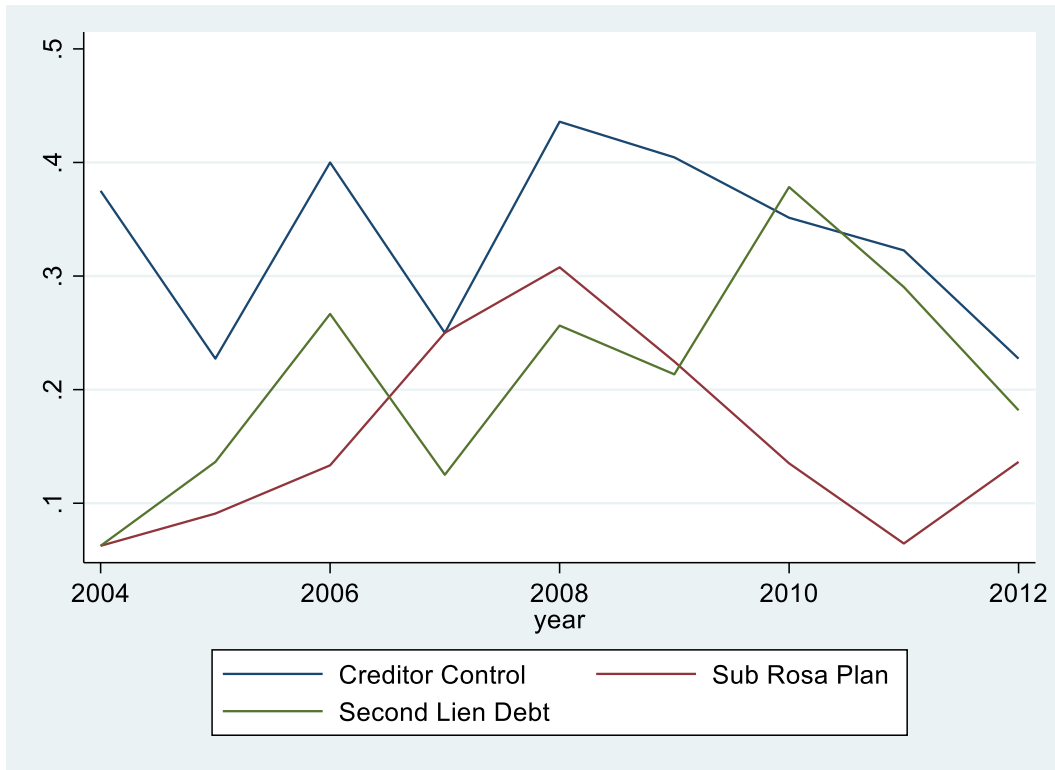
“force and effect”

“equal force”

³⁷ 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.

“secured party”
“Secured Party”

This reduced the sample to 3,129 matches in 1,936 documents from 243 cases. We then inspected expanded versions of the string that was matched manually, and further reduced it to a sample of 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 incidence of creditor control allegations over the sample period.