# R REVIEWS

## Annual Review of Financial Economics The Changing Face of Chapter 11 Bankruptcy: Insights from Recent Trends and Research

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#### Keywords

bankruptcy, Chapter 11, defaults, distressed debt, recovery rate, 363 sales, private equity, creditor rights, leveraged loans

#### Abstract

Several recent trends have reshaped the nature of bargaining in Chapter 11. These include increasingly complex prebankruptcy capital structures, decreasing time in Chapter 11 due to prepacks and prenegotiated plans, growing use of restructuring support agreements (RSAs) and sales of substantially all assets, an increased number of defaulting private equity–owned firms, and an increase in activity of specialized distressed debt investors. These trends have changed the balance of power in favor of senior secured lenders, who further shape the course of out-of-court negotiations. We examine evidence of the impact of these changes on important stakeholders, including creditors and workers.

#### **1. INTRODUCTION**

Now that almost 45 years have passed since the enactment of the US Bankruptcy Reform Act of 1978, it is important to provide some perspective on how the use and outcomes of Chapter 11 bankruptcy have evolved over time. The changing nature of the bankruptcy process has further implications for efforts to restructure firms outside of formal bankruptcy procedures. In this article, we draw on recent and past academic evidence to understand the current state of mechanisms used to resolve financial distress and to point out the unanswered and sometimes contentious issues currently faced by firms with a high risk of defaulting on their debt.<sup>1</sup>

We start our analysis by describing several important trends that have affected the nature of distressed restructurings. We then discuss how these changes reflect a shift in the balance of power that has affected negotiations of outcomes of bankruptcy cases as well as out-of-court restructurings more generally. Finally, we consider the impact of these changes on important stakeholders, including creditors, shareholders, managers, and workers of financially distressed firms.

#### 2. SIGNIFICANT TRENDS SINCE THE US BANKRUPTCY REFORM ACT OF 1978

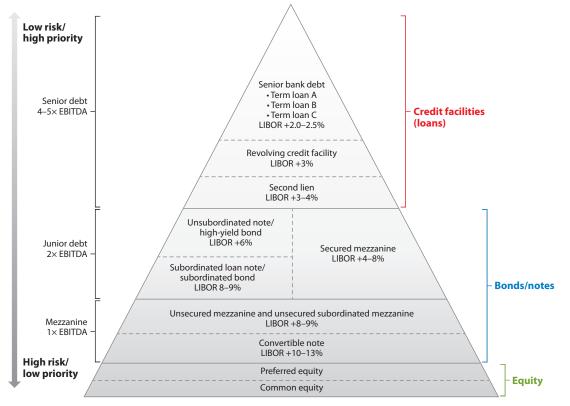
#### 2.1. Increasing Complexity of Capital Structures

Increasingly, firms enter a restructuring having pledged virtually all of their assets to their most senior lenders (Ellias & Stark 2020; Gilson, Hotchkiss & Waldock 2022). A significant revision of Article 9 of the Uniform Commercial Code in 1998 authorized a creditor taking a security interest to declare simply that their interest would cover all assets of the debtor (Harris & Mooney 1999). The impact was to more easily create blanket liens on a company's assets, leading to the waterfall capital structures that are now prevalent even for smaller companies. In this structure, a first-lien loan has priority to the entire firm value (minus perhaps collateral such as inventory pledged to asset-based lenders). Thus, when firms with such loans become distressed, first-lien lenders can have a substantial influence on any restructuring, particularly when the ongoing firm value is argued to be less than the amount of first-lien debt. The influence of secured debtholders becomes especially salient in distress because the likelihood that firms issue secured debt increases as firm credit quality deteriorates (Benmelech, Kumar & Rajan 2022).

The tremendous growth of the syndicated loan market has enabled non-investment-grade companies to access large amounts of debt capital from banks and other lenders (so-called leveraged loans). Leveraged-loan facilities typically consist of a revolver and one or more term loans, as shown in **Figure 1**. In contrast to the more traditional notion of relationship lending, in which loans are held by a small group of banks, term loans are frequently held by nonbank lenders, including collateralized loan obligations, mutual funds, and hedge funds. Further, these loans often trade in the secondary market, particularly as firms become financially distressed (Hotchkiss & Mooradian 1997; Ivashina, Iverson & Smith 2016; Ellias 2018a,b, 2020). Nonbank lenders have provided an increasing share of capital to this market; **Figure 2** shows that their share approached 90% of the total US primary market issuance by 2018.

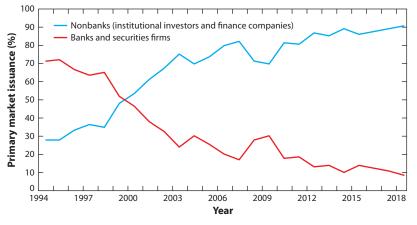
The growth in secured debt of distressed firms and the syndicated loan market plays an important role in the changing nature of many debt restructurings. Firms with the simplest capital structure may have a single first-lien loan, unsecured debt such as trade claims, and equity as the residual claim. Larger firms can have multiple layers of debt, with the proportion and sources varying across firms and over time. The priority of claims is further complicated when

<sup>&</sup>lt;sup>1</sup>A broad overview of US Chapter 11 and earlier academic research is provided by Hotchkiss et al. (2008).



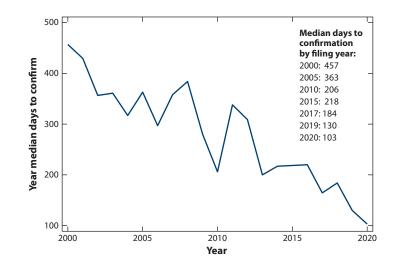
#### Figure 1

Layers of complexity in capital structures. Abbreviations: EBITDA, earnings before interest, taxes, depreciation, and amortization; LIBOR, London interbank offered rate. Figure adapted with permission from Phalippou (2017).



#### Figure 2

US leveraged-loan investor base (1994–2018) (percentage of primary market issuance). Figure adapted with permission from Su et al. (2019).



#### Figure 3

Median days to plan confirmation for large Chapter 11 bankruptcy cases. Figure adapted from the authors' compilation of data from New Generation Research (https://newgenerationresearch.com/).

debt issued at a holding company level is structurally subordinated to a subsidiary's debt. As shown in **Figure 1**, renegotiation can involve a large number of creditors whose interests may be poorly aligned. Moreover, a given investor can hold claims in multiple layers of the firm's capital structure, further complicating their incentives in negotiating a restructuring.<sup>2</sup>

The increasing use of secured debt, with complex covenants and blanket liens on all assets, raises concerns if the borrower later becomes distressed. In addition, when lenders have substantial control over the course of a restructuring, they may steer the borrower toward an outcome favorable to these lenders but not necessarily value-maximizing for the firm as a whole. Further complicating incentives in negotiating a restructuring, lenders may be aligned with private equity (PE) sponsors or sell their claims to nonbank distressed debt investors or even out-of-the-money equity owners (see Section 2.4).

#### 2.2. Decreasing Time in Bankruptcy

**Figure 3** shows the trend of declining time spent in Chapter 11 for public firms with at least \$100 million in assets filing between 2000 and 2020. In the earlier years of Chapter 11, it was not uncommon for firms to spend 2 or more years in court; the average time in bankruptcy fell to 103 days in 2020. In fact, in 2019, two firms (Sungard Availability Services LP and FullBeauty Brands Inc.) obtained court approval for their Chapter 11 plan within 24 hours of filing by reaching an agreement with creditors prior to filing. In this section, we explore the factors contributing to shorter stays in bankruptcy.

**2.2.1. Prepackaged and prenegotiated Chapter 11 bankruptcies.** An early development leading to a shortened stay in bankruptcy was that of prepackaged bankruptcies (prepacks), in which votes on a plan of reorganization are solicited prior to filing. The benefit of such

<sup>&</sup>lt;sup>2</sup>The introduction of credit default swaps (CDSs), insuring holders in the event of a default of the underlying debt claim, has led to concerns about the empty creditor problem, whereby the payoffs to the insured CDS owner may be greater if the company files for bankruptcy. Whether this leads out-of-court restructurings to fail has been debated (Bolton & Oehmke 2011, Subrahmanyam et al. 2014, Danis 2017).

preplanning is to reduce the uncertainty of a free-fall bankruptcy and increase the likelihood of a successful reorganization. Whether prepacks lead to better economic outcomes than do free-fall bankruptcies, measured by lower restructuring costs and higher creditor recovery rates, was first examined by Betker (1995) and Tashjian, Lease & McConnell (1996). Starting in the late 1980s and growing significantly in the 1990s, prepacks were often used in connection with distressed exchange offers, in which public bondholders could simultaneously tender bonds in an exchange and vote on a prepackaged plan. If an insufficient number of bondholders participated in the exchange, the presolicited votes were used to execute the bankruptcy plan already in place.

Over time, many firms have used prenegotiated plans, often with a restructuring support agreement (RSA) in place (see Section 2.2.2), in which a plan is negotiated with some creditors before filing but voting still takes place within Chapter 11. Early critics of prepacks and prene-gotiated plans argued that such restructurings would fix the liability side of firms' balance sheets but not address operating problems, leading firms to fail again after exiting bankruptcy (LoPucki & Doherty 2002).

Prepacks and prenegotiated plans now account for a significant fraction of filings. The Florida-UCLA-LoPucki Bankruptcy Research Database demonstrates that of 1,184 Chapter 11 filings through June 2022 by companies with at least \$100 million in assets, prepacks and prenegotiated bankruptcies account for 26% of the filings between 1980 and 2009 versus 54% of filings in 2010 and later.

**2.2.2. Prefiling negotiation of restructuring support agreements.** An RSA precommits a set of key creditors to support a plan of reorganization with certain agreed-upon elements. Casey, Tung & Waldock (2020) show that RSAs were relatively uncommon before the mid-2000s. However, the proportion of large cases (at least \$100 million in assets) with an RSA in place at filing increased to 20% in 2004 and nearly 50% by 2020.<sup>3</sup> Most recently, RSAs typically involve secured creditors. Additionally, the participation of PE sponsors and other prebankruptcy equity owners has increased with time. Finally, the debtor itself is almost always a party to the agreement, forming a coalition with a subset of constituents and potentially disadvantaging other creditors (Baird 2022).

A positive aspect of RSAs is that they can facilitate coordination among key creditors, setting the roadmap for a less costly bankruptcy case and a greater likelihood that the firm survives as a going concern. The potential negative aspect is that RSAs can also facilitate opportunistic behavior by creditors seeking to improve their priority in bankruptcy, enhancing their ultimate recovery at the expense of others. The darker side of RSAs bears a resemblance to coercive exchange offers for public debt, in which creditors who agree to vote in favor of a plan receive better treatment than those who reject it (Janger & Levitin 2018).

RSAs have been used to specify provisions of management incentive plans; asset purchase agreements; debtor in possession (DIP) financing, including its providers; backstops to rights of-ferings; and other characteristics of plans that, if allowed by the bankruptcy judge, can largely set the course of the case. RSAs can also require the debtor to achieve milestones during the case, for example, completing a sale of the firm by a certain date or confirming a plan to exchange secured creditors' claims for a controlling equity stake in the reorganized firm. Given the support of key constituencies, the costs of opposing the plan can be prohibitive for most other creditors, leaving them little choice but to accept the proposed plan. Prepetition creditors signing the RSA may

<sup>&</sup>lt;sup>3</sup>Court documents become fully electronically available from dockets via Public Access to Court Electronic Records (PACER) starting with cases filed in 2004.

also have an information advantage from working with the debtor prior to filing to devise a plan, setting that plan in motion before other parties have organized.

Casey, Tung & Waldock (2020) further show that RSA provisions related to control have become more commonplace in recent years. However, whether RSAs successfully lead to more efficient case outcomes remains an open question.

**2.2.3.** Sales of substantially all assets. The idea of selling firms rather than reorganizing by reaching a consensual agreement among claimants is not new or unique to the United States. For example, in Sweden, auctions were the only path available for firms in bankruptcy; Thorburn (2000) shows that firms fared well under the Swedish system in terms of survival as a going concern and creditor recoveries. In the United States, asset sales outside of a firm's ordinary course of business must be conducted using Section 363 of the US Bankruptcy Code. Bankruptcy courts first recognized the viability of selling a debtor's assets through Section 363 as far back as 1982, with a key ruling in the bankruptcy of Lionel Corporation. However, because a sale does not require a full vote by creditors, judges were wary of such sales. As cases have been tested in court over time, judges have become more comfortable with this approach, and Chapter 11 has been increasingly used to sell firms in their entirety. The Florida-UCLA-LoPucki Bankruptcy Research Database demonstrates that 12% of cases filed prior to 2000 involve a significant 363 sale compared with 34% of cases between 2000 and 2021. Gilson, Hotchkiss & Waldock (2022) show that sales of substantially all assets have become even more common for somewhat smaller and private firms.

Section 363 has several potential benefits for both sellers and buyers. Assets are sold free and clear of most liabilities, leaving behind claims not specifically assumed, such as unfunded pension liabilities. Because the sale is implemented following a court order, the transaction is generally immune to later legal challenges. The debtor almost always enters into an asset purchase agreement with a proposed purchaser known as a stalking horse bidder. The court then must approve procedures for other potential purchasers to submit bids. If other bidders appear, an auction is held. Following the auction, the court holds a hearing to determine that the bidding procedures have been satisfied and to approve the sale to the winning bidder. The court must find that the sale has a legitimate business purpose, is proposed in good faith, and is justified by the firm's current financial circumstances—that is, absent the sale, the value of the firm and, therefore, creditor recoveries would be lower. The purchase price in the auction is typically paid in cash, though investors sometimes pay for the assets by forgiving the debt they have acquired from the debtor in a practice known as credit bidding.

Using Chapter 11 to sell the firm as a going concern business is consistent with arguments of several scholars that a market-based mechanism for resolving financial distress can improve economic outcomes and remove a bias toward reorganization (Gilson, Hotchkiss & Ruback 2000; Hotchkiss & Mooradian 2003). In addition, Section 363 sales can lead to an expedited disposition of the firm's assets, avoiding lengthier, costly bankruptcy proceedings. In approving such sales, the court considers whether the sale is needed to preserve the value of the assets, sometimes termed the melting ice cube argument (Jacoby & Janger 2014). At its extreme, the immediate sales of the core operating businesses of General Motors and Chrysler at the height of the 2007–2008 financial crisis were designed to avoid the high costs of losing customers during a lengthier bankruptcy case (Hortaçsu et al. 2013, Antill & Hunter 2022).

At the same time, expedited sales have been criticized as a means to circumvent requirements for creditor approval (Roe & Skeel 2010). A quick sale does not provide creditors an opportunity to assess the value of a reorganization alternative; however, creditors do have the ability to object to bidding procedures or to the sale itself. Quick sales can also be a sign of inefficient liquidation pressure from lenders. Indeed, Ayotte & Morrison (2009) and Gilson, Hotchkiss & Waldock (2022) find that higher levels of secured debt are associated with a greater likelihood of selling the assets rather than reorganizing in bankruptcy. Quick sales may also occur at fire-sale prices at the expense of more junior claimants (Baird & Rasmussen 2002, Meier & Servaes 2019).

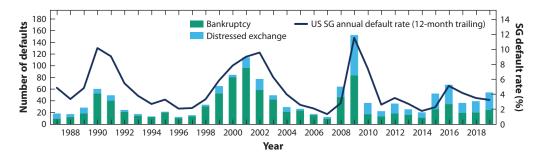
Whether sales of firms in bankruptcy are more efficient at preserving a going concern business is still debated. Gilson, Hotchkiss & Waldock (2022) show that postbankruptcy survival rates of businesses sold in bankruptcy are similar to those of firms emerging by confirming a plan of reorganization. Thus, concerns about the process might focus more on the fairness of the allocation of valuable claims to the postbankruptcy business. If bidding is not competitive, or sales occur at fire-sale prices, more junior creditors would fare better in a reorganization. In finding a stalking horse, often prior to filing, firms typically follow a competitive preauction process similar to that described by Boone & Mulherin (2007) and Gorbenko & Malenko (2014). Most recently, however, RSAs have been structured around an anticipated sale, sometimes committing a creditor to provide DIP financing to be used as payment in the sale (a credit bid). Such practices have raised concerns that the advantages given to parties to the RSA preclude a more competitive sales process.

#### 2.3. Increasing Use of Out-of-Court Restructuring

Restructuring out of court can preserve value by avoiding the direct costs incurred in bankruptcy, as well as delays and uncertainty that can lead to large indirect costs. Still, bargaining outside of bankruptcy occurs against the backdrop of the bankruptcy alternative. Indeed, Donaldson et al. (2022) show that by making the threat of bankruptcy more credible, reducing the costs in bankruptcy can actually increase the likelihood of an out-of-court restructuring that successfully overcomes coordination problems.

When an overleveraged company attempts to restructure public debt out of court, the restructuring is often done through a distressed exchange. The incidence of distressed exchanges increased significantly with the 2007–2008 financial crisis (Altman & Karlin 2009). As shown in **Figure 4**, the proportion of distressed exchanges has increased over time, making up over half of all speculative-grade-rated issuer defaults in 2019.

In a distressed exchange of public bonds, which are considered securities under the Securities Exchange Act of 1934, the company makes a tender offer to exchange bonds for cash, newly issued debt, or equity, with a fair value at a discount to the face value of the bonds. Existing bondholders have an incentive to exchange when the package of claims offered will have higher priority, resolving the holdout problems that might otherwise prevent a successful out-of-court restructuring (Gertner & Scharfstein 1991) but making these exchanges potentially coercive in nature.



#### Figure 4

Distressed exchanges as a percentage of rated SG defaults. Abbreviation: SG, speculative grade. Figure adapted with permission from Moody's Invest. Serv. (2020); copyright 2020 Moody's Investors Service.

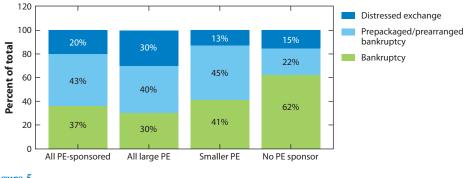


Figure 5

Out-of-court versus in-court distressed restructurings of PE-sponsored versus non-PE-sponsored firms. Abbreviation: PE, private equity. Figure adapted with permission from Moody's Invest. Serv. (2020); copyright 2020 Moody's Investors Service.

Distressed exchanges are often coupled with exit consents that strip nontendering bondholders of certain covenant protections. They are also often combined with the solicitation of votes for a prepackaged bankruptcy plan to be used if an insufficient amount of debt is tendered. Firms may successfully deleverage through a distressed exchange. Nonetheless, as noted by Altman & Karlin (2009), a lack of asset restructuring and continued weak operating performance may soon land the firm in Chapter 11 regardless.

A financially distressed firm can also reduce its debt, either loans or bonds, through open market purchases or privately negotiated transactions. Since the debt of a distressed firm can trade at a significant discount, a company with cash or another source of financing can purchase debt in the open market. A notable example is Ford's repurchases of its own debt during the 2007–2008 financial crisis, helping the company avoid bankruptcy altogether. Debt repurchases are also common for PE-backed companies, since PE owners have a clear advantage in reducing the leverage of distressed portfolio companies when they can use capital from their funds to purchase the debt.

PE sponsors also have a strong incentive to preserve their equity investment in the companies they own. As the share of distressed firms owned by PE sponsors has increased (see Section 2.4), the trend toward out-of-court or prenegotiated restructuring has accelerated. **Figure 5** shows that PE sponsors often use distressed exchanges to restructure the firms they control relative to non-PE-owned firms. Similarly, the proportion of prepacks and prenegotiated bankruptcies is higher for PE-backed firms, consistent with their ability to set in place a quicker resolution in bankruptcy.

#### 2.4. Increased Presence of Private Equity and Distressed Debt Investors

A robust market for trading claims of firms in bankruptcy did not emerge until the 1990s, and the earliest investors were often termed vultures. At that time, Bankruptcy Rule 3001(e) was clarified, removing investors' worries that judges would subordinate claims purchased below par. Since then, the industry of specialized distress investors has grown, such that claims trading is pervasive in nearly all bankruptcy cases of sufficient size. Trading involves claims at all levels of the capital structure, whether or not those claims are securities, including loans, bonds, other unsecured claims such as trade claims, and, less often, the equity of the likely insolvent firms.

Hotchkiss & Mooradian (1997) provide the first study of the impact of distress investors on defaulting firms and show that investors often use this market to gain control of the restructured firm. Prebankruptcy debt claims are frequently converted into a controlling equity stake in the company, with some of the providers of the DIP loan in bankruptcy converting that claim into

some or all of the reorganized firms' equity—a so-called loan to own strategy (Li & Wang 2016). Hotchkiss & Mooradian (1997) also show that investors in a class of debt frequently accumulate at least one-third of the amount of those claims, giving them a blocking position in voting on any reorganization plan. The interest of investors in using debt claims as a means of obtaining control of the company is consistent with the findings of Ivashina, Iverson & Smith (2016) that ownership of debt becomes more consolidated with a few large investors as firms near bankruptcy. Jiang, Li & Wang (2012) and Feldhütter, Hotchkiss & Karakaş (2016) further show that much of the debt trading activity is concentrated in the fulcrum security (i.e., the class of debt expected to receive a majority of the equity of the reorganized firm).<sup>4</sup>

The expansion of the leveraged-loan market described above has been fueled in part by leveraged buyout activity of PE sponsors. Hotchkiss, Strömberg & Smith (2021) examine a large sample of leveraged-loan borrowers and find that approximately half are owned by PE funds at some point and that nearly 25% of these highly leveraged firms default. As a result, a significant portion of distressed firms are portfolio companies of PE sponsors. In addition, several PE firms have established credit funds to invest in the distressed debt of other firms, often seeking control through a restructuring.

Hotchkiss, Strömberg & Smith (2021) find a positive role for PEs in the resolution of distress: PE-backed firms restructure more quickly, avoid bankruptcy court more often, and liquidate less often than highly leveraged non-PE firms. At the same time, PE owners are more likely to retain control postrestructuring, often infusing capital as firms approach distress. Other recent work presents a similarly positive view. Bernstein, Lerner & Mezzanotti (2019) find that during the 2007–2008 financial crisis, PE-backed firms decreased investment less than their peers, raised more equity and debt financing, and increased their assets and market shares. These effects are stronger for PE sponsors with more capital available when needed to support portfolio companies. Focusing on failed banks in the financial crisis, Johnston-Ross, Ma & Puri (2021) find that PE firms acquire weaker, underperforming failed banks when other potential acquires—local banks—are distressed, reducing the overall costs to regulators and stabilizing the financial system. Still, a more negative view of PE sponsors persists, that the high leverage they impose on portfolio companies leads to costly defaults. Several high-profile cases, in which PEs exited their investment and locked in positive returns but where the firm subsequently defaulted, have added to this criticism (Hotchkiss, Strömberg & Smith 2021).

At the same time, in the past several years scholars have paid increasing attention to the aggressive tactics of some investors and PE sponsors in both out-of-court restructurings and bankruptcy. These strategies involve accumulating a significant stake in senior claims and other debt of a distressed company by purchasing claims or direct lending to the firm. As a lender, the investor can provide a failing firm with the short-term liquidity needed to avoid a default while improving its own priority relative to other minority lenders. The legality and fairness of certain of these socalled liability management transaction financings have been debated in several recent cases. In response, some leveraged-loan contracts have evolved to remove some of the lenders' flexibility to behave in a manner that harms creditors that become more junior in a subsequent restructuring (Ivashina & Vallee 2020, Buccola 2022, Buccola & Nini 2022).

#### 2.5. Small Business Chapter 11 Bankruptcies: Introduction to Subchapter V

The high direct and indirect costs of distress and bankruptcy make liquidation more likely for smaller firms (Bris, Welch & Zhu 2006). To streamline the process for rehabilitating smaller

<sup>&</sup>lt;sup>4</sup>The fulcrum security lies at the point in the capital structure where the firm is insolvent (i.e., no significant value is left to distribute to more junior claimants).

businesses, Congress passed the Small Business Reorganization Act (SBRA) of 2019, codifying Subchapter V of Chapter 11. Effective in February 2020, a debtor can elect Subchapter V if its debts do not exceed \$2,725,625. The Coronavirus Aid, Relief, and Economic Security (CARES) Act in March 2020 temporarily increased that limit to \$7.5 million. A preliminary estimate at the time showed that almost 40% of debtors in Chapter 11 cases filed after October 1, 2007, would have qualified to file under Subchapter V (Bonapfel 2019).

Subchapter V modifies certain aspects of a traditional Chapter 11. Specifically, the debtor stays in possession and control of its assets and has exclusive control over its plan of reorganization. However, confirmation requirements are streamlined, and the court can confirm the debtor's plan over the objections of some or all creditors without necessarily eliminating equity interests. A Subchapter V trustee is always appointed to oversee the debtor and monitor the process, and there is a short deadline to file a plan. The burden on the small business debtor is reduced by eliminating the appointment of a creditors' committee and an otherwise required disclosure statement.

The coincidence of the SBRA's passage and the onset of the COVID-19 pandemic likely led to a larger number of firms filing for bankruptcy using Subchapter V. Over 1,350 small businesses filed a Subchapter V case between the effective date of the statute and December 31, 2020. Harner, Lamasa & Goodwin-Maigetter (2021) examine cases from the first 6 months and find that a plan is confirmed in more than 62% of cases that are not dismissed and more than 50% of Subchapter V cases overall. The extent to which small businesses will continue to successfully confirm a plan of reorganization, exit bankruptcy, and remain as ongoing entities postbankruptcy is an important area for future study.

#### 3. SHIFTING THE BALANCE OF POWER: DEBTOR VERSUS CREDITORS

Chapter 11 is viewed as a relatively debtor-friendly system. Its premise is that if the company is worth more as a going concern than in liquidation, it should be given the opportunity to reorganize. Various provisions of Chapter 11 are viewed as important tools to enable firms to successfully reach confirmation of a reorganization plan: the automatic stay to prevent creditors from seizing assets, the ability to reject executory contracts such as leases, voting rules based on less than 100% approval within a class of claims (alleviating holdout problems), and the ability to confirm a plan over the dissent of a class of claims (cramdown), among others.

An efficient bankruptcy system enables firms to survive when the reorganization value exceeds the liquidation value, and leads them to liquidate otherwise. However, neither value is observable, and whether a particular constituency has the incentive to advocate for higher or lower values can depend on their priority in the capital structure (Gilson, Hotchkiss & Ruback 2000). Thus, lower-priority claimants, including prebankruptcy equity owners, have incentive to argue for a reorganization value high enough to justify some distribution to their prebankruptcy claims. Conversely, the most senior claimants—typically senior secured lenders—have incentive to argue for a lower reorganization value or even liquidation.

Empirically, evaluating whether Chapter 11 strikes the right balance between the successful reorganization of viable firms and the liquidation of those that are not is problematic because we cannot observe the counterfactual for a given firm. A key feature of Chapter 11 is that management retains control of the firm in bankruptcy and initially has an exclusive right to propose a plan of reorganization. Early critics of Chapter 11 argued that this structure leads to excessively long and expensive conflicts among claimholders and is biased toward excessive reorganization rather than liquidation (Baird 1986, Bradley & Rosenzweig 1992). The main empirical evidence supporting this concern originated from Hotchkiss (1995), who demonstrated that over 40%

of firms emerging from Chapter 11 as public companies continue to have operating losses and almost one-third undergo a subsequent distressed restructuring or liquidation. Moreover, the phenomenon of firms entering Chapter 11 a second time (so-called Chapter 22) has continued since that time (Altman, Hotchkiss & Wang 2019).

With the rise of leveraged-loan markets and active distressed debt investors, the balance of power in negotiating restructurings has arguably shifted from the debtor to the secured creditors at the top of the capital structure. The influence of secured creditors appears to lead to more firms sold in their entirety using Section 363 of the Bankruptcy Code. Ayotte & Morrison (2009) and Gilson, Hotchkiss & Waldock (2022) show that the likelihood of a sale of substantially all assets increases with the proportion of secured debt. Similarly, Ma, Tong & Wang (2022) show that firms with more secured debt are more likely to sell core innovation (patents) in bankruptcy. Moreover, Ayotte & Ellias (2022) and Eckbo, Li & Wang (2023) show that DIP lenders exert significant influence in assets sales and liquidation through contractual clauses such as milestones on sales.

It is less clear whether these sales are an inefficient redeployment of assets or whether they maximize value but reallocate it to the benefit of secured creditors. Gilson, Hotchkiss & Waldock (2022) further show that the survival rate of the going concern business following sales under Section 363 is not significantly different from that of businesses reorganizing under a plan. Moreover, Maksimovic & Phillips (1998) use plant-level data from the US Census to show that industry conditions rather than the status of being in Chapter 11 itself are the primary determinants of productivity, sales, and closure of assets of bankrupt firms. This evidence suggests that the primary concern is the fair distribution of value to prebankruptcy claimants.

The question whether assets of distressed firms are efficiently redeployed through the Chapter 11 process has been examined more recently in papers that exploit the random assignment of judges to bankruptcy cases as a natural experiment (Chang & Schoar 2013), enabling more causal statements about the impact of Chapter 11. Specifically, a firm assigned to a judge with a higher historical liquidation rate has an increased likelihood of being liquidated rather than reorganized. Bernstein, Colonnelli & Iverson (2019) study small business bankruptcies using data from the US Census to examine asset utilization after filing. Contrasting bankrupt firms reorganized under Chapter 11 with firms that file for Chapter 11 but are converted to Chapter 7 liquidation due to the assignment of the judge allows for a comparison of subsequent asset utilization across the two regimes. The authors conclude that liquidation in bankruptcy can lead to inefficient allocation of assets, particularly when the geographic location offers few alternative users for the assets and lower access to finance. Thus, the bankruptcy system may lead to less efficient outcomes for firms that are ultimately liquidated.

Recent research has also used structural modeling to examine whether reorganization in Chapter 11 is achieved with the least loss in firm value. Dou et al. (2021) show that information asymmetries and conflicts between classes of creditors lead to costly delays and excessively long and expensive stays in bankruptcy. Moreover, Iverson (2018) and Müller (2022) show that higher caseloads for bankruptcy judges are associated with delays and lower debt recoveries. A contrasting view is provided by Antill (2022), who also uses identification based on random assignment of judges, but for a sample of larger firms in bankruptcy. Constructing counterfactuals from a structural model, he compares debt recoveries in reorganizations with liquidations or sales and finds that the latter destroy more firm value. Therefore, he argues that the inefficiencies of Chapter 11 lie in excessive liquidations.

Overall, the debate on whether Chapter 11 leads to an efficient redeployment of assets has shifted from concerns about excessive reorganization to concerns about the reallocation of the value of the ongoing reorganized business through either a reorganization plan or a sale. At the same time, the incidence of firms reentering distress after emergence from bankruptcy remains, questioning the viability of some emerging firms.

#### 4. IMPACT ON STAKEHOLDERS

Finally, we consider the impact on important stakeholders of the shifts in the nature of bankruptcy discussed above.

#### 4.1. Recovery Rates

In the 1980s, equityholders gained from violations of absolute priority (APR) in three-quarters of the Chapter 11 reorganizations, attributed to their ability to hold out and prolong the reorganization process (Franks & Torous 1989, 1994). However, the proportion of cases with APR deviations favoring equityholders has dropped significantly, with the shift in the balance of power toward the firm's senior secured creditors. In the period 1991–2005, equityholders gained from APR deviations in only 22% of the cases (Bharath, Panchapagesan & Werner 2010), whereas they typically have been wiped out, receiving nothing in more recent years.

Demiroglu, Franks & Lewis (2022) explain much of the APR deviations as unintended consequences of poor information about the value of the new securities distributed under a reorganization plan. Revealed when the new claims start trading postbankruptcy (if they trade at all), these misvaluations sometimes benefit the most senior creditors and other times the junior creditors. To the extent the balance of negotiating power in and before Chapter 11 has shifted toward senior secured creditors for a given case, there is greater potential for these creditors to receive distributions worth more than the face amount of their claims. Such distributions can occur when the senior debt is determined to be the fulcrum claim receiving a majority of the stock in an emerging firm based on a low valuation. Altman, Hotchkiss & Wang (2019, p. 109) provide an example of a valuation dispute in Chapter 11 for Cumulus Media, demonstrating that a higher valuation proposed by more junior creditors implies a recovery of greater than 100% for the senior lenders.

The decreased likelihood of any distribution to prebankruptcy shareholders can result from either higher amounts of debt (i.e., more insolvent firms) or weaker negotiating power relative to more senior claims in a restructuring. As described in Section 2.4, the number of defaulting firms whose equity is owned by PE sponsors has risen with the growth in the PE industry. PE owners have strong incentives to preserve some value for their original investment, even in cases where the firm is clearly insolvent. Like other distressed debt investors, PE owners sometimes use additional capital from the same fund to become lenders or purchase the debt of their portfolio firm. When this debt is converted to equity in a restructuring, the PE fund can successfully maintain an ongoing ownership stake in the firm and earn a positive return from a postrestructuring turnaround (Hotchkiss et al. 2021).

#### 4.2. Impact on Workers

Two strands of literature have tackled the question, How large are the ex post human costs of corporate bankruptcy? In the first strand, several studies investigate turnover, wage concessions, and labor market outcomes for senior executives and workers. The second strand estimates how costly the loss of talented employees is to the bankrupt firm.

**4.2.1. Personal bankruptcy costs for executives and workers.** Early research demonstrated that bankruptcy is a costly event for managers in the sense of high turnover (Gilson 1989, Hotchkiss 1995) and pay cuts (Gilson & Vetsuypens 1993). However, as discussed in Section 2, much has changed, which affects the governance of financially distressed firms.

More recently, Eckbo, Thorburn & Wang (2016) trace the employment history of CEOs of large Chapter 11 firms using a multitude of data sources, including social media. Approximately one-third of prebankruptcy CEOs are able to maintain full-time executive employment at either the restructured company or a new company and experience no change in total compensation. However, CEOs that leave the executive labor market suffer a compensation loss with a median present value of five times their predeparture pay. CEOs also experience large losses from the decline or elimination of the value of stock and options at their firm.

The turnover of directors is also extremely high (Gilson 1990, Li & Wang 2016). Further, Ellias, Kamar & Kastiel (2021) show that PE owners frequently appoint new directors to the boards of their distressed firms but sometimes appoint the same individual repeatedly to different firms. Such appointments raise the question whether the prospect of future engagements might bias those directors toward taking actions that favor the PE owners.

Nonexecutive employees stand to lose even more after a firm files for bankruptcy, not only because of layoffs but also because unfunded pension plans are at risk of termination, and 401k plans invested in the company's stock experience significant losses (Duan, Hotchkiss & Jiao 2015). Benmelech, Bergman & Enriquez (2012) find that airlines cut their employees' wages by roughly 10% during bankruptcy. Graham et al. (2023) use data from the US Census to trace workers' wage changes from before to after bankruptcy. Workers' earnings decline by 12% within 1 year of the bankruptcy filing compared with workers' earnings from nonbankrupt firms. The present value of lost earnings over 7 years after bankruptcy amounts to 85% of their prebankruptcy annual earnings. Notably, these workers earn higher wages ex ante, as if to compensate for their ex post wage losses in bankruptcy.

**4.2.2.** How costly is the loss of labor to distressed firms? The loss of human capital can be a significant indirect cost of bankruptcy to the firm. Using employer–employee matched data in Sweden, Baghai et al. (2021, p. 2910) show that skilled employees, measured by their cognitive and noncognitive abilities, are more likely to be "abandoning the sinking ship" as a firm approaches bankruptcy. While all workers are more likely to leave the firm close to bankruptcy, the most talented employees are twice as likely to leave as the average employee. Relatedly, Brown & Matsa (2016) show that high-quality job applicants are aware of distressed firms' financial situations and shy away from applying for jobs posted by these firms. Together, this evidence suggests that distressed firms not only lose highly skilled workers but also may be unable to attract high-quality replacements to fill vacancies.

The innovative activity of distressed firms may also be impaired. Ma, Tong & Wang (2022) find that inventors are 5 percentage points more likely to leave the firm within 3 years of bankruptcy filing. Baghai, Silva & Ye (2023) show that bankruptcy can also disrupt the stability and productivity of team-based inventors, although teams of inventors who relocate together can maintain their productivity. Thus, while financial distress is costly to firms that lose highly paid and productive employees, the reallocation of these employees to new firms implies that the overall impact on employment and economic growth may be less severe.

**4.2.3. Managerial compensation.** Compensation contracts change as firms approach distress. Carter, Hotchkiss & Mohseni (2020) show that CEO compensation contracts are redesigned as equity prices decline, shifting performance-based pay to metrics based on improving cash flows and realigning CEO incentives with maximizing total firm value and creditors' payoffs. Moreover, the use of cash flow–related performance metrics is greater for firms with high levels of secured debt, reflecting the influence of secured creditors.

Companies in Chapter 11 frequently adopt key employee retention plans (KERPs) to incentivize critical employees to stay with the firm when they are needed the most, tying cash bonuses for key employees to a minimum stay with the firm or events such as the completion of a restructuring. In the early 2000s, KERPs faced intense criticism after firms such as Enron and WorldCom filed for bankruptcy as a result of accounting fraud and adopted KERPs paying executives tens of millions of dollars. This led Congress to introduce Section 503(c) into the Bankruptcy Code as part of the 2005 Bankruptcy Abuse Prevention and Consumer Protection Act. While intending to curb the adoption of retention bonuses, firms instead have been able to continue to provide incentive compensation while in Chapter 11 through key employee incentive plans (KEIPs). These performance-based pay plans offer bonuses contingent on achieving predetermined milestones tied to reorganization outcomes, the speed of reorganization, debt recoveries, cash flows, or enterprise value.

Goyal & Wang (2017) show that KERPs and KEIPs are more likely to be adopted by firms with complex operations and strong creditor control, when employees have more outside job options, and for newly hired turnaround specialists. However, Ellias (2018b) and Capkun & Ors (2021) suggest that there was a lack of judicial oversight when the use of KEIPs grew because firms can easily disguise KERPs as KEIPs. It is unclear whether the adoption of KEIPs leads to improved outcomes for bankrupt firms. Further, recent public attention has turned to large bonuses paid to executives right before bankruptcy filing (including, in 2020, firms such as Hertz, J.C. Penny, and Chesapeake), perhaps to avoid the scrutiny of bonus contracts once under court supervision.

#### 5. CONCLUSIONS

In 2002, Baird & Rasmussen wrote, "[B]ankruptcy judges and practitioners have increasingly come to recognize...the face of bankruptcy practice has changed dramatically over the last decade" (Baird & Rasmussen 2002, p. 756). Since then, the nature of distressed restructurings and Chapter 11 proceedings has continued to evolve. This article describes the major trends behind these more recent changes. First, distressed firms' capital structures are increasingly complex, often including first-lien lenders with a blanket lien on all of the firm's assets and nonbank lenders such as institutional investors, collateralized loan obligations, and hedge funds holding a substantial fraction of the leveraged firm's debt. Second, the length of the formal bankruptcy process has shortened substantially due to the increasing use of prenegotiated reorganization plans, prepacks, RSAs that guide the restructuring outcome, and sales of substantially all of the firm's assets. Third, there has been a significant increase in defaults of highly leveraged companies owned by PE firms and in the presence of distressed debt investors when those firms default.

These trends can explain a shift in the balance of power to senior secured lenders, potentially affecting the restructuring outcomes and distributions in their favor. With this shift, the most burning question for researchers may have switched from whether the bankruptcy process produces efficient outcomes to whether these outcomes fairly allocate value among prebankruptcy claimants. Concerns regarding the efficiency and fairness of Chapter 11 outcomes heightened with the onset of the COVID-19 pandemic, yet the number of bankruptcy filings did not increase as expected for most sectors of the economy (Wang et al. 2020). The questions we raise in this article remain relevant for future research in light of weakened credit market conditions and current fears of global recession and the potential for an increase in defaults and bankruptcies that would result.

#### **DISCLOSURE STATEMENT**

The authors are not aware of any affiliations, memberships, funding, or financial holdings that might be perceived as affecting the objectivity of this review.

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