Revitalizing Involuntary Bankruptcy

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ABSTRACT: For the first centuries of bankruptcy's existence, only creditors could initiate a proceeding. "Voluntary" bankruptcy—initiated by the debtor rather than creditors—began in the nineteenth century, but well into the early twentieth century, involuntary bankruptcy accounted for about two-thirds of the money distributed to general creditors. Today, involuntary bankruptcy is a mere vestige. Just 0.05 percent of petitions are involuntary, and most of those are summarily dismissed without any court order formally commencing a bankruptcy case.

Evidence from both theory and practice suggests that the demise of involuntary bankruptcy has had significant social costs, with businesses delaying voluntary bankruptcy too long. To address that problem, other scholars have considered whether incentives should be offered to induce earlier voluntary bankruptcy, but the literature has largely overlooked involuntary bankruptcy. This Article fills that gap in the literature by providing a comprehensive study of the previously vibrant practice of involuntary bankruptcy. Crucially, we find that early twentieth century bankruptcy practice provided de facto incentives for involuntary petitions by rewarding filing attorneys with lucrative post-petition work. Such rewards helped overcome the collective action problems that otherwise discourage creditors from filing. The law of involuntary bankruptcy should look back to that past to find its future. We propose a number of reforms, including instituting a system of de jure "bankruptcy bounties" to encourage involuntary petitions that will revitalize involuntary bankruptcy and restore its rightful place in the law and theory of bankruptcy.

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I. Introduction

Bankruptcy began in sixteenth century England as a remedy for creditors. Creditors initiated a bankruptcy proceeding by filing a complaint against their debtor. Debtors could not file for bankruptcy voluntarily in England or the United States until the middle of the nineteenth century, and American corporations could not file voluntarily until 1910. Yet, despite the late emergence of voluntary bankruptcy, it has come to utterly dominate modern American bankruptcy practice. Involuntary petitions filed by creditors now account for less than 0.05 percent of all petitions. Even that meager number overstates involuntary bankruptcy's modern role because most involuntary petitions are dismissed without a court even issuing an order for relief to formally begin a bankruptcy case.

^{1.} See, e.g., Max Radin, The Nature of Bankruptcy, 89 U. PA. L. REV. 1, 3–4 (1940); Louis Edward Levinthal, The Early History of English Bankruptcy, 67 U. PA. L. REV. 1, 14–15 (1919).

^{2.} See W.J. Jones, The Foundations of English Bankruptcy: Statutes and Commissions in the Early Modern Period, 69 Transactions Am. Phil. Soc'y, no. 3, July 1979, at 25.

^{3.} See John C. McCoid II, The Origins of Voluntary Bankruptcy, 5 Bankr. Dev. J. 361, 361 nn.4–5 (1988).

^{4.} See Garrard Glenn, the Law Governing Liquidation: As Pertaining to Corporations, Partnerships, Individuals, Decedents, Bankruptcy, Receivership, Reorganization 136-40, 310 (1935).

^{5.} See infra Figure 2 and accompanying text.

^{6.} See infra Table III.2 and accompanying text.

The dearth of involuntary petitions likely has significant social costs because firm managers, representing the interests of equity shareholders, have powerful incentives to wait too long to file voluntarily. A firm's "bankruptcy... terminates equity's option on a firm's assets and frequently leads to liquidation." Thus, rational shareholders have little incentive to file for bankruptcy because they get essentially nothing from such filings. By contrast, while delaying bankruptcy in the hope of saving a company is a risky gamble, the rewards of the gamble asymmetrically favor shareholders. If the company is saved and becomes profitable once again, shareholders win, and potentially win big because shareholders get all of the upside. If conditions deteriorate further, it is the creditors who lose.

In short, shareholders of a firm teetering on the brink of bankruptcy are gambling with someone else's money. They have an incentive to delay bankruptcy past the socially optimal point where bankruptcy could increase the aggregate value of a firm and its assets. Bankruptcy can have positive social benefits in multiple ways—reorganizing the firm's capital structure to allow new investment, preventing a race among creditors to seize the firm's assets, or putting the assets to better use under a new business model⁸—but those benefits do not help shareholders if bankruptcy terminates their interest in the firm.

Prominent bankruptcy scholars have long recognized the problem of excessively delayed bankruptcy filings. In 1986, Professor Thomas Jackson observed that the shareholders of a firm have strong incentives "to delay too long in filing a bankruptcy petition." Similarly, a decade ago, then-Professor (now Senator) Elizabeth Warren and her co-author, Professor Jay Westbrook, noted that decisionmakers inside firms have multiple incentives to "delay seeking bankruptcy help until long after the company can no longer be saved." More than five years ago, Professor Barry Adler and his coauthors, summarizing the results of their study, concluded "that delay in bankruptcy filing tends to destroy value. . . . [B]y the time firms get to bankruptcy now, there is less to save." 11

Much of the bankruptcy literature has focused on whether voluntary bankruptcy should be made more attractive to managers and shareholders so that debtor firms will file for bankruptcy sooner.¹² Professors Douglas Baird

^{7.} Barry E. Adler et al., Value Destruction in the New Era of Chapter 11, 29 J.L. ECON. & ORG. 461, 465 (2013).

^{8.} See infra notes 42-43 and accompanying text.

Q. THOMAS H. JACKSON, THE LOGIC AND LIMITS OF BANKRUPTCY LAW 205 (1986).

^{10.} Elizabeth Warren & Jay Lawrence Westbrook, *The Success of Chapter 11: A Challenge to the Critics*, 107 MICH. L. REV. 603, 617 (2009).

^{11.} See Adler et al., supra note 7, at 480.

^{12.} See, e.g., id. at 465; David A. Skeel, Jr., The Law and Finance of Bank and Insurance Insolvency Regulation, 76 Tex. L. Rev. 723, 754–57, 759–60 (1998) (recommending bonuses to managers for initiating bankruptcy). See generally Douglas G. Baird & Robert K. Rasmussen, Control Rights,

and Robert Rasmussen suggest that bankruptcy replace its foundational "absolute priority" rule with a standard that would allow equity to retain some option value in bankruptcy.¹³ In support of their proposal they note that "[a]bsolute priority might also lead [the entrepreneur] to postpone the reorganization past the optimal time."¹⁴ In separate work, both Professor Jackson and Professor Baird have considered the possibility of paying monetary awards to those who file voluntary petitions.¹⁵

Prior scholarship has largely ignored involuntary bankruptcy as a solution to excessively delayed bankruptcy. ¹⁶ That gap in the literature is somewhat understandable for two reasons. First, as previously mentioned, involuntary bankruptcy has become utterly inconsequential in modern practice. As demonstrated by the data discussed in Part III, *infra*, involuntary bankruptcy is essentially moribund. Prior scholarship can be forgiven for overlooking involuntary bankruptcy because there currently is so little to overlook.

Second, and more significantly, involuntary bankruptcy does not currently serve as an effective solution because creditors face a daunting collective action problem. A creditor must incur the costs of monitoring the debtor's financial status to determine when it should file a petition, and the creditor risks liability if the court finds the filing improper. However, while the filing creditor bears the whole of those costs and risks, current law requires the petitioning creditor to share the benefits of bankruptcy pro rata with all others similarly situated. Even worse, a creditor who has learned of the debtor's true financial status can profit by filing a debt collection suit in state court or by demanding a side payment from the debtor instead of filing an involuntary petition. Is If the firm has multiple creditors, no single creditor

Priority Rights, and the Conceptual Foundations of Corporate Reorganizations, 87 VA. L. REV. 921 (2001) (arguing that bankruptcy abandon its system of absolute priority for a system of relative priority to encourage filing).

- 13. See Baird & Rasmussen, supra note 12, at 947.
- 14. Id.
- 15. See JACKSON, supra note 9, at 206–08 (questioning whether the bankruptcy code should offer rewards to filing debtors); Douglas G. Baird, *The Initiation Problem in Bankruptcy*, 11 INT'L REV. L. & ECON. 223, 230–31 (1991) (questioning the same).
- 16. For important exceptions, see Susan Block-Lieb, Why Creditors File So Few Involuntary Petitions and Why the Number Is Not Too Small, 57 BROOK. L. REV. 803, 863 app. A (1991); and Bradley Hansen, Bankruptcy Law in the United States, EH.NET (Aug. 14, 2001), https://eh.net/encyclopedia/bankruptcy-law-in-the-united-states [https://perma.cc/24UM-D3CF]. In 1982 Professor Lynn LoPucki suggested a system that would reward creditors who file involuntary petitions by giving them priority over other creditors. Lynn M. LoPucki, A General Theory of the Dynamics of the State Remedies/Bankruptcy System, 1982 WIS. L. REV. 311, 365–68. For a comparison of his proposal and ours, see infra notes 246–49 and accompanying text.
- 17. See 11 U.S.C. \S 303(i) (2012) (allowing the court to sanction petitioning creditors if the petition is dismissed).
 - 18. See infra notes 218-19 and accompanying text.

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will have sufficient incentives to do the work necessary for involuntary bankruptcy.

Nevertheless, in the past, creditors somehow overcame that collective action problem because involuntary bankruptcy was previously a significant part of bankruptcy practice. Our review of the historical evidence shows how: Early twentieth century bankruptcy practice provided de facto incentives for involuntary petitions by rewarding filing attorneys with lucrative post-petition work. That practice had its weaknesses. Among other problems, it created the possibility of significant conflicts of interest between lawyers and their clients. But the old practice yields a significant and valuable insight. To be effective, a creditor's legal option of filing an involuntary bankruptcy petition may need to be coupled with an incentive system that overcomes the collective action problem among creditors. We thus propose that the law directly reward creditors who file involuntary petitions. Such de jure "bankruptcy bounties" may be essential to overcoming the collective action problem that prevents creditors from filing and to revitalizing involuntary bankruptcy.

This Article proceeds in three Parts. Part II demonstrates that involuntary petitions once played an important role in bankruptcy practice. Although most bankruptcies began with voluntary petitions once they were allowed, involuntary petitions still accounted for more than ten percent of all filings between 1898 and 1933.¹⁹ Perhaps even more surprisingly, the absolute number of involuntary petitions was dramatically higher in the past. Courts received eighteen times the number of involuntary petitions in 1933 (6,207) as they did in 2016 (337).20 We further demonstrate that these aggregate filing statistics understate the historical economic importance of involuntary bankruptcy. From the passage of the 1898 Bankruptcy Act until the government stopped recording the relevant statistics in 1933, more than twice as much money was returned to general creditors through involuntary cases as through voluntary cases.21 Measured by money, involuntary bankruptcy played the leading role. The rate of involuntary petitions began to decline sharply in the mid 1930s, falling to under five percent of all filings in 1940 and under one percent by 1970.22 Among the many changes that led to this decline, we focus on one: the end of a practice in which some districts implicitly (and probably unintentionally) rewarded attorneys who brought involuntary petitions with lucrative post-petition work.23

Part III examines the current practice of involuntary bankruptcy. We use Federal Judicial Center data on all bankruptcy petitions filed between October 1, 2007 and September 30, 2017 to show that involuntary petitions

^{19.} See infra Figure 2 and accompanying text.

^{20.} See infra Figure 2 and accompanying text.

^{21.} See infra note 70 and accompanying text.

^{22.} See infra Figure 2 and accompanying text.

^{23.} See infra Section III.B.

account for just 0.05 percent of all bankruptcy petitions and just 2.2 percent of corporate petitions.²⁴ Even these meager numbers overstate the role of involuntary bankruptcy because most petitions are dismissed before a court formally begins a bankruptcy case by issuing an order for relief.²⁵ As a general rule, involuntary bankruptcy cases are dismissed because petitioning creditors failed to prosecute their case or consented to dismissal, not because they tried and failed to demonstrate that the requirements for beginning a bankruptcy case were satisfied.²⁶ Today involuntary bankruptcy plays almost no role in real world practice except, perhaps, as a power available to creditors that they may threaten but almost never exercise.²⁷

Part IV calls for revitalizing involuntary bankruptcy through reforms that would discourage petitions lacking a valid bankruptcy purpose and encourage petitions that have a valid bankruptcy purpose. The overwhelming majority of involuntary petitions filed by creditors without counsel ("pro se petitions") are dismissed.²⁸ Nonetheless, even dismissed petitions can impose substantial costs on debtors, other creditors, and the legal system. We therefore argue that an involuntary petition filed without an attorney's signature should not be placed on the court's docket or reported to credit bureaus and should not trigger the automatic stay. In short, bankruptcy law should ban pro se involuntary petitions.

Given the very small number of involuntary petitions, the more pressing problem may be the lack of socially valuable involuntary petitions. When the debtor is an individual, the normative analysis is complicated by bankruptcy's competing goals of maximizing creditor recoveries and providing the debtor with a fresh start.²⁹ However, for corporate debtors, a bankruptcy case should begin as soon as bankruptcy would increase the aggregate value of the firm and its assets. Bankruptcy can increase that aggregate value either by preserving the firm's going-concern value through a reorganization or by enabling an orderly sale of the firm's assets.³⁰ However, many debtors wait too long to file voluntarily.³¹

Creditors understand that debtors have an incentive to delay filing voluntarily. Therefore, one might expect creditors to file involuntary petitions

^{24.} See infra Table III.1 and accompanying text. The database we use also contains records of filings made before October 1, 2007 if they were still pending after that date, but we drop these records due to concerns about survivorship bias.

^{25.} See infra Table III.2 and accompanying text.

^{26.} See infra Tables III.7, III.8 and accompanying text.

^{27.} The creditors' ability to threaten an involuntary filing may play an important role even if it is rarely used. That is, the threat of an involuntary filing may induce the debtor to repay or to file voluntarily.

^{28.} See infra Table III.5 and accompanying text.

^{29.} See infra notes 193-97 and accompanying text.

^{30.} See infra note 43 and accompanying text.

^{31.} See supra notes 7-11 and accompanying text.

before the assets are dissipated. But creditors almost never do.32 Rather, as previously discussed, the collective action problem faced by creditors seems to overwhelm any incentives to file.33 Previous efforts to encourage involuntary filings have failed. In 1978 Congress tried to encourage involuntary bankruptcy by tinkering with the standards governing the dismissal of involuntary petitions.34 Attempting to make it easier for an involuntary case to go forward, the 1978 Bankruptcy Reform Act eliminated the requirement that the debtor has committed a statutorily prescribed act of bankruptcy.35 At the same time, the Act requires the dismissal of an involuntary petition, when controverted, if the debtor is generally paying its debts as they become due.³⁶ Congress apparently thought that involuntary cases would continue or be dismissed based on this standard of cash flow insolvency. Congress' attempt to encourage involuntary petitions failed. We argue that further tinkering is unlikely to increase the frequency of involuntary filings because the legal standards for an involuntary case are rarely litigated in dismissal hearings.

To encourage involuntary petitions, Congress must overcome the creditors' collective action problem.³⁷ It can do so by borrowing a page from the past. Legislation could encourage involuntary petitions by paying de jure bankruptcy bounties to reward creditors who file them. More specifically, we argue that petitioning creditors should receive an additional general unsecured claim equal to some fraction of all general unsecured claims in the bankruptcy, though this fraction could vary with the total amount of unsecured claims just as the percentage paid to the Chapter 7 trustee varies with the total amount recovered for general creditors.³⁸ Unlike the compensation for the Chapter 7 trustee,³⁹ however, we would not reward the petitioning creditors in cases in which general unsecured creditors receive nothing.

The law uses bounties or other rewards to encourage desired behavior in contexts ranging from patents for inventors to bounties for ship salvage.⁴⁰ Although some reward systems have imposed unacceptable costs,⁴¹ the benefits of a well-designed system of bankruptcy bounties would offset its costs and increase the amount recovered by all general creditors. A sufficiently

- 32. See infra Part III.
- 33. See supra text accompanying notes 17-18.
- 34. See infra note 147 and accompanying text.
- 35. Cf. Frank R. Kennedy, Report of the Commission on the Bankruptcy Laws of the United States, H.R. Doc. No. 93-137, at 15 (1973); text accompanying notes 135–39.
 - $36. \quad \textit{See} \ \text{11 U.S.C.} \ \S \ 303(h)(1) \ (2012).$
 - 37. For a longer discussion of this problem, see JACKSON, supra note 9, at 205.
 - 38. See 11 U.S.C. § 326(a).
 - 39. Id.
 - 40. See infra notes 228-33 and accompanying text.
 - 41. See infra text accompanying notes 249-54.

generous reward system would attract socially valuable involuntary petitions that would not otherwise have been filed. The possibility should be taken seriously.

II. INVOLUNTARY PETITIONS AND THEIR ROLE IN HISTORY

Although many view bankruptcy as synonymous with failure, it is often a firm's best option. Once a firm's debt obligations become too large, the firm suffers from a "debt overhang" that limits its access to capital and distorts the incentives of its management.⁴² Assume, for example, that the firm has debts of \$100 and assets of just \$40 and that the firm has the opportunity to invest in a project that would immediately and certainly turn an investment of \$40 into \$50 (a \$10 profit). Outside investors would be unwilling to invest the needed \$40 in return for equity or unsecured debt because the firm would still be insolvent and most of the \$10 profit would go to the existing creditors. Moreover, the manager has an incentive to reject this certain \$10 profit and use internal corporate funds on a much riskier venture. Assume, for example, that the manager can also use the firm's existing \$40 to invest in a project that yields nothing ninety percent of the time and \$200 ten percent of the time. This project has an average or expected value of just \$20, far worse than the certain project's \$50. However, the risky project is better for equity because it gives them a ten percent chance of increasing the value of their equity to \$100, while the certain project will leave the firm insolvent. By removing the debt-overhang and fixing these problems, a bankruptcy reorganization could increase the value of the firm.

Bankruptcy can even increase the value of a firm that is liquidated. Sometimes a firm's assets are worth more sold than in operation under the firm's failed business model. Although a firm's creditors can seize and sell its assets outside of bankruptcy, non-bankruptcy law's priority system can create a race to the assets among the firm's unsecured creditors.⁴³ To seize assets, creditors must sue, obtain a judgment, and then execute on the assets. Because courts allow execution in specific assets, the firm is sold piecemeal even if its assets would have fetched more if sold in larger blocks. Moreover, creditors have a strong incentive to race quickly to the courthouse because those creditors who wait will be left with nothing.

Before bankruptcy can stop this race to the assets or remove a debt overhang, a bankruptcy case must begin. Under the Bankruptcy Code, a bankruptcy case can be initiated in two ways: by the debtor filing a bankruptcy

^{42.} The phenomenon is described in Stewart C. Myers, *Determinants of Corporate Borrowing*, 5 J. FIN. ECON. 147, 149 (1977). For implications of the phenomenon for bankruptcy law, see Kenneth Ayotte & David A. Skeel Jr., *Bankruptcy Law as a Liquidity Provider*, 80 U. CHI. L. REV. 1557, 1567–70 (2013).

^{43.} See Thomas H. Jackson, Bankruptcy, Non-Bankruptcy Entitlements, and the Creditors' Bargain, 91 YALE L.J. 857, 861–65 (1982).

petition voluntarily⁴⁴ or by one or more of the debtors' creditors filing an involuntary bankruptcy petition against it.⁴⁵ The limitations and requirements for an involuntary petition are somewhat complicated and have changed over time. Consider the current rules. Municipalities, family farmers and non-commercial corporations are not eligible for involuntary bankruptcy at all,⁴⁶ and creditors cannot force individuals into the more common form of individual reorganization under Chapter 13.⁴⁷ However, creditors can force individuals into a Chapter 7 liquidation. Chapter 7 provides individuals with a fresh start but requires them to turn over any non-exempt assets that they own. Creditors can force corporations into either a Chapter 7 liquidation or a Chapter 11 reorganization.⁴⁸

If the debtor has 12 or more creditors with noncontingent claims that are not subject to bona fide dispute as to liability or amount, three of these creditors must join in an involuntary petition.⁴⁹ If the debtor has fewer than 12 of such creditors, one such creditor suffices.⁵⁰ The petitioning creditors' claims must aggregate to at least \$16,750 more than the value of any liens securing them.⁵¹

An involuntary bankruptcy petition invokes bankruptcy's automatic stay, effectively stopping non-bankruptcy collection efforts against the debtor.⁵² However, to exercise jurisdiction over an involuntary case, the court must issue an order for relief.⁵³ If the debtor objects to (controverts) the petition, the court will order relief if the debtor either is generally failing to pay its debts as they become due or a receiver has been appointed to administer most of the debtor's assets.⁵⁴ Note that this failure-to-pay test requires a general default—the petitioning creditors may not satisfy this burden merely by

^{44.} See 11 U.S.C. § 301. Married couples can voluntarily file jointly. See id. § 302.

^{45.} See id. § 303(a).

^{46.} See id. Municipalities are not eligible for involuntary bankruptcy because they are eligible for bankruptcy relief only under Chapter 9. See id. § 109(c).

^{47.} See id. § 303(a).

^{48.} Although Chapter 11 debtors are predominantly corporations or other legal entities, a substantial portion of Chapter 11 debtors are natural persons. See Richard M. Hynes et al., National Study of Individual Chapter 11 Bankruptcies, 25 AM. BANKR. INST. L. REV. 61, 65–67 (2017). An involuntary petition can theoretically be filed against an individual under this Chapter. See Margaret Howard, Bankruptcy Bondage, 2009 U. ILL. L. REV. 191, 197–98. However, the evidence suggests that such involuntary filings are extremely rare. See Hynes et al., supra, at 84.

^{49.} See 11 U.S.C. § 303(b)(1).

^{50.} See id. § 303(b)(2).

^{51.} See id. § 303(b). The Bankruptcy Code requires adjustment of the dollar amount in § 303(b) periodically based on changes in the consumer price index. See id. § 104; Revision of Certain Dollar Amounts in the Bankruptcy Code Prescribed Under Section 104(a) of the Code, 84 Fed. Reg. 3,488 (Feb. 12, 2019).

^{52.} See 11 U.S.C. § 362(a).

^{53.} See $id.~\S~303(h);$ DIR. OF THE ADMIN. OFFICE OF THE U.S. COURTS, BANKRUPTCY FORM B2530 (2015).

^{54.} See 11 U.S.C. § 303(h)(1)-(2).

showing that they are not being paid. The Federal Rules of Bankruptcy Procedure requires the debtor to raise any objections to the involuntary petition within 21 days after it has been served.⁵⁵ Under Federal Rule of Bankruptcy Procedure 1013(a), the court must resolve contested issues with respect to the petition "at the earliest practicable time."⁵⁶

Section III.A describes a modern bankruptcy system in which involuntary petitions play very little role. Involuntary petitions account for a negligible share of bankruptcy filings,⁵⁷ and most of the involuntary petitions that are filed are dismissed before a court even issues an order for relief.58 However, involuntary petitions played a much larger role in the past. The debtor could not file a voluntary bankruptcy petition under America's first two bankruptcy acts.59 Voluntary petitions were first permitted under the Bankruptcy Act of 1841, but this act was repealed after just two years. 60 America's first lasting bankruptcy act, enacted in 1898,61 also allowed voluntary petitions, and voluntary petitions greatly outnumbered involuntary petitions beginning immediately after its enactment.⁶² However, measured in terms of dollars, involuntary bankruptcy continued to predominate until at least the middle of the 1930s. The 1930s saw the beginning of a precipitous decline in involuntary bankruptcy petitions. While creditors filed more than ten percent of petitions in the 1910s and 1920s, they filed less than one percent of petitions by the 1960s,63 and they file less than 0.05 percent of petitions today.64

A. Involuntary Bankruptcy in the Early Twentieth Century

The 1898 Bankruptcy Act allowed both voluntary and involuntary petitions, although not for all debtors. Some debtors, most notably railroads, were not eligible for bankruptcy at all when the Act was first passed. ⁶⁵ Corporations could not file a voluntary petition until 1910, ⁶⁶ and farmers and

^{55.} See FED. R. BANKR. P. 1011(b).

^{56.} See id. R. 1013(a).

^{57.} See infra Table III.1.

^{58.} See infra Table III.5.

^{59.} See Charles Jordan Tabb, The History of the Bankruptcy Laws in the United States, 3 AM. BANKR. INST. L. REV. 5, 14 (1995).

⁶o. Id. at 17-18.

^{61.} See Bankruptcy Act of 1898, ch. 541, § 4(a), 30 Stat. 544, 547 (superseded by Bankruptcy Reform Act of 1978, Pub. L. 95-598, 92 Stat. 2549). Prior to the 1898 Act, the United States enacted bankruptcy laws in 1800 (repealed in 1803), 1841 (repealed in 1843), and 1867 (repealed in 1878). See DAVID A. SKEEL, JR., DEBT'S DOMINION: A HISTORY OF BANKRUPTCY LAW IN AMERICA 3–4 (2001).

^{62.} See infra Figure 2 and accompanying text.

^{63.} See infra Figure 2.

^{64.} See infra Table III.1.

^{65.} See SKEEL, supra note 61, at 17.

^{66.} See GLENN, supra note 4, at 139.

wage earners (those earning less than \$1,500 per year) were ineligible for involuntary relief.⁶⁷ To begin an involuntary case, creditors had to demonstrate that the debtor committed an "act of bankruptcy" within four months of the filing of the petition.⁶⁸ Acts of bankruptcy included fraudulent or preferential transfers, a failure to vacate a lien, a general assignment for benefit of creditors or an appointment of a receiver, or an admission in writing of an inability to pay debts as they mature and a willingness to be adjudicated bankrupt.⁶⁹ Insolvency was an element of these acts, not a separate requirement. Except for the inability-to-pay-debts, insolvency was defined in terms of the balance sheet: The debtor's liabilities exceeded the value of the debtor's assets.

Judged by the amount of money distributed to unsecured creditors, involuntary petitions dominated bankruptcy in the early years of the twentieth century. Between fiscal year 1900 and fiscal year 1933, involuntary bankruptcies distributed almost exactly twice as much money to general creditors as voluntary bankruptcies. 70 Figure 1 demonstrates that this is not an artifact of a single case or a single year. Involuntary cases routinely accounted for about 60 percent to 80 percent of all dividends distributed to general creditors from around 1905 until the Attorney General stopped reporting the amount realized separately for involuntary and voluntary filings in 1933.

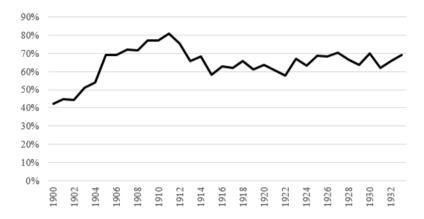
^{67.} Act of June 22, 1938, ch. 575, § 4(b), 52 Stat. 840, 845 (repealed 1978) (amending the Bankruptcy Act of 1898 to discuss ineligibility for involuntary relief); *id.* at § 1(32), 52 Stat. 840, 842 (giving definition of "wage earner"). To put this figure in perspective, \$1,500 in January of 1913 (the first year for which the Bureau of Labor Statistics reports the Consumer Price Index) has the same purchasing power as \$38,508 in May of 2018. *CPI Inflation Calculator*, BUREAU LAB. STAT., http://data.bls.gov/cgi-bin/cpicalc.pl [https://perma.cc/7HF4-Q3G8]. However, Congress did not adjust this figure for inflation, and \$1,500 in January of 1972 had the same purchasing power as \$9,144 in April of 2018. *Id.*

^{68.~} See John C. McCoid II, The Occasion for Involuntary Bankruptcy, 61 Am. Bankr. L.J. 195, 208–09 (1987).

^{69.} Id.; see Bankruptcy Act of 1898, ch. 541, § 3(a), 30 Stat. 544, 546.

^{70.} Creditors received a total of \$461,788,815.70 from involuntary bankruptcies and \$231,665,375.44 from voluntary bankruptcies. This data does not include the money that creditors received in equity receiverships, which occurred outside of the bankruptcy courts in this era. See, e.g., Paul D. Cravath, The Reorganization of Corporations; Bondholders' and Stockholders' Protective Committees; Reorganization Committees; and the Voluntary Recapitalization of Corporations, a Lecture Delivered before the Association of the Bar of the City of New York (Mar. 1 and 8, 1916), in SOME LEGAL PHASES OF CORPORATE FINANCING, REORGANIZATION AND REGULATION 160–61 (MacMillan Co. 1917). The data used in this Part is drawn from the Annual Report of the Attorney General of the United States (1900–1939) and the Tables of Bankruptcy Statistics with Reference to Bankruptcy Cases Commenced and Terminated in the United States District Courts (1940 and thereafter). Most years are available at Hathi Trust. Access and Use Policies, HATHI TRUST, http://www.hathitrust.org/access_use#pdgoogle [https://perma.cc/C4RV-F3BM].

Figure 1. Share of General Creditor Dividends from Involuntary Cases



Although general creditors received more money from involuntary cases, there were many more voluntary than involuntary petitions filed in this time period. At their peak in 1921, involuntary petitions accounted for 27 percent of all filings, and between 1899 and 1933 they accounted for just 15 percent of filings.⁷¹

Figure 2. Involuntary Petitions 10,000 30 9,000 25 8,000 7,000 20 6.000 15 5,000 4,000 10 3,000 2,000 5 1,000 0 ••••• % of Cases Number Involuntary

71. The data prior to 1997 is taken from Hansen, *supra* note 16. Data from subsequent years come from either the Statistical Abstract of the United States or from the Administrative Office of the U.S. Courts. Unfortunately, the government did not publish the number of involuntary petitions from 1934 to 1936. It did, however, publish the number of involuntary and voluntary cases closed in those years. The percentage of involuntary cases closed in those years was consistent with the trend implied by the surrounding years.

There is a simple explanation for this apparent contradiction: Involuntary cases tended to be concentrated among merchant and manufacturer bankruptcies, and these were the cases with assets available for distribution to general creditors. Table II.1 presents involuntary cases by occupation of debtor as categorized under the 1898 Act at the time. Between 1920 and 1930 merchants and manufacturers accounted for nearly three-quarters of the involuntary cases, and involuntary petitions accounted for about 31 percent of merchant bankruptcies and just under 50 percent of manufacturer bankruptcies.⁷² By contrast, involuntary petitions accounted for less than 0.5 percent of farmer or wage earner bankruptcies, and farmers and wage earners together accounted for just 1.5 percent of involuntary cases.⁷³ The real puzzle is why there were any involuntary petitions filed against farmers and wage earners, as they were ineligible for bankruptcy relief.⁷⁴ Perhaps these petitions were filed by mistake.

Creditors complained that merchants and manufacturers frequently had no assets when they arrived in bankruptcy: "The bankruptcy court has increasingly become a dumping ground for the refuse of commercial wreckage."⁷⁵ However, a contemporary study reported that "[i]t is to [the merchants and manufacturers] that [creditors] must look for what assets there are in bankruptcy."⁷⁶ Note that the involuntary cases must have been disproportionately concentrated in the largest or at least most lucrative merchant and manufacturer cases. This was because the involuntary cases' share of the total dividends distributed was much greater than the involuntary cases' share of manufacturer or merchant filings.⁷⁷ It's almost certainly the

^{72.} See infra Table II.1.

^{73.} See infra Table II.1. Nearly a quarter of involuntary petitions were filed against debtors described as "other classes." Some of these debtors may have been individuals who earned more than the \$1,500 cap for wage earners, or they may have been self-employed. William O. Douglas & J. Howard Marshall, A Factual Study of Bankruptcy Administration and Some Suggestions, 32 COLUM. L. REV. 25, 26 (1932). For example, a music teacher who charged by the hour was not a "wage earner." See First Nat'l Bank of Wilkes-Barre v. Barnum, 160 F. 245, 248–49 (M.D. Pa. 1908). In addition, married women who worked primarily in the home were not wage earners. See In re Remaley, 23 Am. B.R. 29, 36 (1916) (E.D. Pa. 1909).

^{74.} See Bankruptcy Act of 1898, ch. 541, § 4(b), 30 Stat. 544, 547.

^{75.} STRENGTHENING OF PROCEDURE IN THE JUDICIAL SYSTEM, S. DOC. No. 72-65, at 6 (1932); cf. Douglas & Marshall, supra note 73, at 26 (noting small average dividend distributed to creditors).

^{76.} *Id.* at 7. Between 1935 and 1939 just 24 percent of merchant and 44 percent of manufacturer bankruptcies were nominal or no asset cases. By comparison, Sturges and Cooper reported that in 1930 almost 85 percent of all wage earner bankruptcies no asset cases were distributed to creditors. *See* Wesley A. Sturges & Don E. Cooper, *Credit Administration and Wage Earner Bankruptcies*, 42 YALE L.J. 487, 488 (1933).

^{77.} Figure 1 suggests that involuntary cases accounted for about two-thirds of all dividends, but Table III.1 suggests that involuntary cases accounted for less than half of all merchant and manufacturer bankruptcies.

case that few wage earners had significant assets,⁷⁸ and, while farmers may have had significant real and personal property, these were typically pledged to secured creditors, leaving little for general creditors.⁷⁹

	Number of Involuntary Cases Closed	Involuntary Cases as Percent of Cases for Occupation	Percent of All Involuntary Cases
Farmers	179	0.32%	0.3%
Wage Earners	699	0.41%	1.2%
Merchants	35,513	31.1%	61.2%
Manufacturers	6,737	49.8%	11.6%
Professionals	503	5.34%	0.9%
Other	14,400	18.4%	24.8%
Total	58,028	13.2%	

Table II.1. Petitions by Debtor Occupation, 1920 to 1930

A modern reader might assume that manufacturers and merchants were corporations. However, the corporation was not the organizational form of choice for firms in the early twentieth century. Between 1899 and 1930, less than half of all (not just bankrupt) manufacturers in the United States were incorporated. Even when owners chose to incorporate their firms, they still could have ended up with substantial personal liability. The experience of President Harry Truman provides a good illustration. After returning home from the First World War, President Truman opened a haberdashery as a partnership with Eddie Jacobson. Although they later incorporated the

^{78.} Although we lack data for the relevant years, between fiscal years 1935 and 1939 the Attorney General reported that over 90 percent (92.43 percent) of wage earner and professional cases were nominal or no asset cases. *Cf.* Sturges & Cooper, *supra* note 76, at 487 (reporting 84.90 percent of wage and salary earners had no assets in fiscal year 1930).

^{79.} Between fiscal years 1935 and 1939 the Attorney General reported that over 69 percent (69.30 percent) of farmer cases were nominal or no asset cases. $Cf.\ id.$

^{80. 13.57} percent of U.S. manufacturers were incorporated in 1899, 25.89 percent in 1909, 28.34 percent in 1914, 31.55 percent in 1919, and 48.26 percent in 1929. See U.S. DEP'T OF COMMERCE, CENSUS OF MANUFACTURERS 135 (1910), https://www2.census.gov/library/publications/decennial/1910/volume-8/volume-8-p3.pdf [https://perma.cc/7HNF-8NJF]; U.S. DEP'T OF COMMERCE, CENSUS OF MANUFACTURERS 108 (1920), https://www2.census.gov/library/publications/decennial/1920/volume-8/06229683v8ch4.pdf [https://perma.cc/Q9NN-2NQF]; U.S. DEP'T OF COMMERCE, CENSUS OF MANUFACTURERS 96 (1930), https://www2.census.gov/library/publications/decennial/1930/manufactures-volume-1/03450419v1 cho5.pdf [https://perma.cc/L5KM-RLM8]. Percentages are calculated from Census "ownership" figures.

^{81.} See Michael Beschloss, For Harry Truman, the Buck Stopped at a Brush with Bankruptcy, N.Y. TIMES (Apr. 9, 2016), https://www.nytimes.com/2016/04/10/business/for-harry-truman-the-buck-stopped-at-a-brush-with-bankruptcy.html [https://perma.cc/EA8J-GCT2].

firm,⁸² its failure left Truman and Jacobson heavily in debt. Truman was able to avoid bankruptcy by settling with his creditors for pennies on the dollar, but Jacobson eventually filed for relief.⁸³ Their experience was not unique. The Attorney General's reports for 1934 through 1939 list the number of bankruptcies by occupation and by type of debtor. The Attorney General reports that during these years 73 percent of bankrupt merchants were individuals, and 40 percent of bankrupt manufacturers were individuals.⁸⁴

Consistent with their concentration among merchants and manufacturers, involuntary bankruptcies were disproportionately located in the largest cities. In 1930 the four largest American cities were New York, Chicago, Philadelphia, and Detroit. The four districts encompassing these cities (Southern District of New York, Northern District of Illinois, Eastern District of Pennsylvania, and Eastern District of Michigan) accounted for 31 percent of involuntary filings and just nine percent of voluntary filings. Put another way, involuntary filings accounted for 25 percent of the filings in these districts and just seven percent of the filings in the rest of the country.

B. THE DECLINE IN INVOLUNTARY FILINGS

Although in 1933 the government stopped publishing the amounts distributed to general creditors in voluntary and involuntary cases, it has continued to publish the number of voluntary and involuntary petitions each

^{82.} Sven Raphael Schneider, *Harry S. Truman—President & Haberdasher*, GENTLEMAN'S GAZETTE (Oct. 18, 2012), https://www.gentlemansgazette.com/harry-s-truman-suits-haberdasher [https://perma.cc/E5UK-AHX3].

^{83.} *Id.*; see also Carl Wiegman, Truman Debts As a Business Man Go Unpaid: Records Show Vain Efforts to Collect, CHI. TRIB., July 4, 1947, at 1 & 6.

^{84.} See Office of the Att'y Gen., U.S. Dep't of Justice, Annual Report of the Attorney GENERAL OF THE UNITED STATES FOR THE FISCAL YEAR 1936, at 192 (1936); OFFICE OF THE ATT'Y GEN., U.S. DEP'T OF JUSTICE, ANNUAL REPORT OF THE ATTORNEY GENERAL OF THE UNITED STATES FOR THE FISCAL YEAR 1937, at 202 (1937); OFFICE OF THE ATT'Y GEN., U.S. DEP'T OF JUSTICE, ANNUAL REPORT OF THE ATTORNEY GENERAL OF THE UNITED STATES FOR THE FISCAL YEAR ENDED JUNE 30, 1938, at 247 (1938); OFFICE OF THE ATT'Y GEN., U.S. DEP'T OF JUSTICE, ANNUAL REPORT OF THE ATTORNEY GENERAL OF THE UNITED STATES FOR THE FISCAL YEAR ENDED JUNE 30, 1939, at 232 (1939). The 1936 to 1939 reports list the type of debtor separately for asset and nominal or no asset cases. If one focuses only on asset cases, the percentage of merchants who were individuals falls to 69 percent and the percentage of manufacturers who were individuals falls to 22 percent. It is likely that the percentage of manufacturers who were individuals is overstated and the percentage of merchants who were individuals is understated due to a data-entry error in the 1938 Attorney General report. In all other years the number of no asset merchant cases that are individuals is far higher than the number of no asset manufacturer cases that are individuals. However, this is reversed in 1938. While it is possible that this reflects actual practice, it is also possible that the numbers were entered into the wrong columns.

^{85.} U.S. Bureau of the Census, Table 16. Population of the 100 Largest Urban Places: 1930 (1998), https://www.census.gov/population/www/documentation/twpsoo27/tab16.txt [https://perma.cc/ G_5XG_4YHD].

^{86.} See Office of the Att'y Gen., U.S. Dep't of Justice, Annual Report of the Attorney General of the United States for the Fiscal Year 1933, at 148-51 (1933).

fiscal year (with the exception of 1934 to 1936). This data, summarized in Figure 2, shows a sharp decline in involuntary filings both as a percentage of all bankruptcies and in absolute numbers. While involuntary petitions accounted for more than ten percent of all filings in the 1920s and early 1930s, they accounted for less than five percent of all filings by the late 1930s, and they never exceeded one percent of filings after the mid-1960s.⁸⁷ Today involuntary petitions account for less than 0.05 percent of all petitions.⁸⁸

To put this change in perspective, consider that neither wage earners nor farmers were even eligible for involuntary relief during the 1920s. 89 Nonetheless, the percentage of these bankruptcies that began with an involuntary petition (and, one hopes, quickly dismissed) is almost an order of magnitude higher than the percentage of all modern petitions that are involuntary. 90 Moreover, there has been a decline in the absolute number of involuntary bankruptcies. In 1930, there were 6,555 involuntary petitions, in 1960, there were 1,296, and in 2016, there were just 337. 91

During their heyday, involuntary bankruptcies were concentrated among merchant and manufacturer bankruptcies—what we would consider business bankruptcies today. The explanations for their decline fall into three rough categories: (1) causes of an increase in the number of non-business bankruptcies, (2) causes of a decrease in the number of business bankruptcies, and (3) changes that made it less likely that a business bankruptcy would begin with an involuntary petition.

Creditors are extremely unlikely to file an involuntary petition against a non-business debtor, as there are no assets to seize. Prior to 1978, the wage earner, the most common type of non-business debtor, wasn't even eligible for involuntary bankruptcy. Therefore, a rise in (voluntary) non-business filings reduces the share of petitions filed by creditors. The number of non-business bankruptcies has risen dramatically since the 1930s. In 2017, there were over 765,000 non-business bankruptcies. In 1930, there were fewer than 65,000 total bankruptcies. Of course, there are many explanations for the growth of non-business bankruptcies, and scholars debate their relative importance. Nearly everyone agrees that the growth in consumer credit

^{87.} See supra Figure 2.

^{88.} See infra Table III.1.

^{89.} See supra note 46 and accompanying text.

^{90.} See infra Table III.1.

^{91.} See supra Figure 2 and accompanying text.

^{92.} See infra note 161 and accompanying text.

^{93.} See supra note 67 and accompanying text.

^{94.} See Newsroom: Annual Business and Non-Business Filings by Year (1980–2017), AM. BANKR. INST., https://s3.amazonaws.com/abi-org/Newsroom/Bankruptcy_Statistics/Total-Business-Consumer1980-Present.pdf [https://perma.cc/JFU3-SNL7] (describing 2017 business filings).

^{95.} See Office of the Att'y Gen., U.S. Dep't of Justice, Annual Report of the Attorney General of the United States for the Fiscal Year 1930, at 207 (1930).

played a major role,⁹⁶ but some argue that other factors, such as a decline in the stigma of filing for bankruptcy, played important roles as well.⁹⁷

The rise of voluntary non-business bankruptcies is, however, only part of the story. It does not explain the fall in the absolute number of involuntary bankruptcies. This decline was due at least in part to a decline in business bankruptcies generally. The government's method of dividing business and non-business bankruptcies has changed over the years, and some of the changes that occurred after 1978 probably overstated the decline of business bankruptcies.98 However, there appears to have been a decline in merchant and manufacturer bankruptcies long before these changes took effect. For example, 13,580 merchants found themselves in bankruptcy in 1930.99 In 1960 the number was just 3,157.100 Again, there are a host of possible explanations for this change. There was a decline in business failures. Dun & Bradstreet reports 26,335 business failures in 1930 and just 15,445 in 1960.101 Other changes may have made a non-bankruptcy resolution of a business failure more likely. For example, in the late 1920s the Association of Credit Men launched a chain of adjustment bureaus to handle the "vast number of merchant insolvencies in its own commercial forum."102

^{96.~} See, e.g., Teresa A. Sullivan et al., The Fragile Middle Class: Americans in Debt 18 (2000).

^{97.} See F.H. Buckley & Margaret F. Brinig, The Bankruptcy Puzzle, 27 J. LEGAL STUD. 187, 200–02 (1998); Scott Fay et al., The Bankruptcy Decision: Does Stigma Matter? 27–28 (Univ. of Mich., Working Paper 98-01, 1998). For a more thorough discussion of this debate, see Richard M. Hynes, Bankruptcy and State Collections: The Case of the Missing Garnishments, 91 CORNELL L. REV. 603, 609–19 (2006).

^{98.} See generally Robert M. Lawless & Elizabeth Warren, The Myth of the Disappearing Business Bankruptcy, 93 CALIF. L. REV. 743 (2005). Before 1978 the government counted non-business bankruptcies as the sum of "wage earners" and "others in business." Id. at 758. After 1978 the government counted as non-business bankruptcies those in which the debts were primarily non-business debts. Id. at 759. Lawless and Warren argue that this shift caused little change in the percentage of bankruptcies that are reported as business bankruptcies. Id. at 758. However, other changes appear to have had a material effect. Most notably, the person responsible for making the classification shifted from the clerk to the petitioner, and most lawyers adopted filing software that set a non-business filing as a default that was rarely changed. Id. at 764–65. By their estimates, the percentage of bankruptcies that were business did not really decline at all since the passage of the 1978 Act. Id. at 793–95.

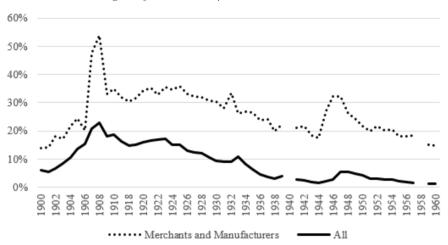
^{99.} OFFICE OF THE ATT'Y GEN., supra note 95, at 207.

^{100.} Edwin D. Goldfield, U.S. Bureau of the Census, Statistical Abstract of the United States $508\ (1963)$.

^{101.} Hansen, *supra* note 16. Again, this is only a partial explanation because business failures rose sharply to over 60,000 by the 1990s, and the number of business bankruptcies did not follow. *Id.*

^{102.} MORTON KELLER, REGULATING A NEW ECONOMY: PUBLIC POLICY AND ECONOMIC CHANGE IN AMERICA, 1900–1933, at 98 (1990); Thomas Clifford Billig, Extra-Judicial Administration of Insolvent Estates: A Study of Recent Cases, 78 U. PA. L. REV. 293, 295 (1930) (arguing that the Association of Credit Men's bureaus were exceedingly more efficient than bankruptcy).

Figure 3. Involuntary as Percent of All Cases



Finally, the percentage of involuntary bankruptcies declined even among business bankruptcies. Figure 3 shows the percentage of cases that were begun with an involuntary petition. The solid line represents all cases. It is a little different than Figure 2 because instead of reporting the number of petitions filed in a year, the relevant tables report the number of cases "closed," terminated," disposed," concluded," or "referred." However, the general lesson is the same: Involuntary petitions accounted for somewhat more than ten percent of bankruptcies until the mid-1930s, before declining to one or two percent by 1960. Of more interest is the dotted line depicting the percentage of merchant and manufacturer bankruptcies over time. Recall that contemporaneous creditors claimed that these were the bankruptcies with significant assets.

^{103.} The Administrative Office did not report the relevant statistics in 1940, and we are still trying to locate the report for 1958.

^{104.} See OFFICE OF THE ATT'Y GEN., U.S. DEP'T OF JUSTICE, ANNUAL REPORT OF THE ATTORNEY-GENERAL OF THE UNITED STATES FOR THE YEAR 1901, at 391 (1901) (using the word "closed" in 1901).

^{105.} See Office of the Att'y Gen., U.S. Dep't of Justice, Annual Report of the Attorney General of the United States for the Fiscal Year 1921, at 144, 151 (1921) (using the word "termindated" in the year 1921).

^{106.} See Office of the Att'y Gen., U.S. Dep't of Justice, Annual Report of the Attorney General of the United States for the Year 1915, at $87\ (1915)$ (using the word "disposed" in the year 1915).

^{107.} See Office of the Att'y Gen., U.S. Dep't of Justice, Annual Report of the Attorney General of the United States for the Fiscal Year Ended June 30, 1938, at 246 (1938) (using the word "concluded" in the year 1938).

^{108.} See Office of the Att'y Gen., U.S. Dep't of Justice, Tables of Bankruptcy Statistics with Reference to Bankruptcy Cases Commenced and Terminated in the United States District Courts tbl.F.2 (1951) (using the word "referred" in the year 1951).

^{109.} See supra note 76 and accompanying text.

involuntary petitions still accounted for more than 18 percent of merchant and manufacturer bankruptcies in 1960. While bankruptcy courts no longer record the number of merchant and manufacturer bankruptcies, the number is many times higher than the percentage of corporate bankruptcies that are started with an involuntary petition today.¹¹⁰

The decline in involuntary petitions within business bankruptcies might have been the result of changes in commercial practice or bankruptcy law that made the filing of involuntary petitions less necessary for or attractive to creditors. Because a secured creditor's threat to foreclose is likely to be sufficient to force the debtor to file for bankruptcy voluntarily, the decline in filings may be partly explained by the growing importance of secured credit for firms. However, it is hard to identify major changes in the law of secured credit that correlate with the decline in filings. Article q of the Uniform Commercial Code recognized the floating lien, instituted the scheme of notice filing, and increased the range of collateral governed by the Article.¹¹¹ These changes in secured transactions law decreased the cost to the debtor of collateralizing potentially all of its personal property assets.¹¹² Accordingly, a creditor with a security interest in a defaulting debtor's principal assets is in a position to credibly threaten to foreclose on them, forcing the debtor out of business. But the first state to adopt Article 9, Pennsylvania, did so in 1959, 113 well after the secular decline in the number of involuntary filings.¹¹⁴ Thus, the causal impact of these changes on the frequency of involuntary filings is not apparent.

Several aspects of the 1898 Bankruptcy Act could have made involuntary petitions unattractive. For instance, the 1898 Bankruptcy Act required petitioning creditors to prove that the debtor had committed an act of bankruptcy, and the elements of some acts of bankruptcy were difficult to prove. ¹¹⁵ In addition, procedural rules under the Act that delayed the court's order for relief kept the debtor in control of assets that might be better

^{110.} See infra Table III.1.

^{111.} See U.C.C. § 9-204(a) (AM. LAW INST. & UNIF. LAW COMM'N 2001) (recognizing after-acquired property clauses); id. § 9-502 cmt. 2 (scheme of notice filing underlying central filing); id. § 9-109(a) (governing inter alia security interests in personal property created by contract); id. § 9-109(a) (13) (implicating that Article 9 governs assignments of deposit accounts in nonconsumer transactions); id. § 9-104 (perfection requirements for security interest in deposit accounts as original collateral); id. § 9-310(a) (general rule requiring filing of financing statement to perfect security interest); id. § 9-102(a) (13) (definition of "commercial tort claim").

^{112.} For speculation that Revised Article 9's coverage of deposit accounts enabled secured creditors to control an important liquid asset of their debtors, see Adler et al., *supra* note 7, at 462, 478.

^{113.} See William A. Schnader, A Short History of the Preparation and Enactment of the Uniform Commercial Code, 22 U. MIAMI L. REV. 1, 8 (1967).

^{114.} See supra Figure 2.

^{115.} See McCoid, supra note 68, at 207-09.

liquidated immediately.¹¹⁶ However, it is hard to see why these aspects of the law would cause a decrease in involuntary filings after the mid-1930s.¹¹⁷

When the 1898 Bankruptcy Act was first enacted, railroads and other large corporations reorganized outside of bankruptcy via the equity receivership.¹¹⁸ Congress granted firms the ability to reorganize in bankruptcy in 1933,119 extended this power to public firms in 1934,120 and enhanced this power by passing the Chandler Act in 1938.121 The relevant statutes allowed both voluntary and involuntary petitions to start a reorganization, 122 but the availability of reorganization should have made bankruptcy more attractive to debtors. To the extent that this caused debtors to file voluntarily, it should have made involuntary filings less necessary. The Chandler Act also added a form of reorganization for individuals: the "wage earner plan." 123 However, these changes are unlikely to provide a complete explanation. The decline in involuntary filings began before the enactment of the Chandler Act, and other changes to the 1898 Bankruptcy Act made a voluntary filing less attractive to individual debtors. In particular, Congress amended the Act in 1903 to add grounds for refusing a discharge. 124 These additional grounds remained unchanged until the Bankruptcy Act was repealed in 1978. The Act's discharge provisions therefore do not explain the increase in voluntary petitions, driven by wage earner filings (but not necessarily wage earner plans)¹²⁵ throughout the first third of the twentieth century, and the decline in involuntary filings near the beginning of the 1930s.

Perhaps more explanatory was the change in the method by which bankruptcy trustees or receivers were selected. During the first decades of the

^{116.} See, e.g., Strengthening of Procedure in the Judicial System, S. Doc. No. 72-65, at 126, 128 (1932) (describing rule requiring service of petition and return within 15 days of filing; allowing nonpetitioning creditors contesting petition to answer and be heard).

^{117.} See supra Figure 3.

^{118.} See, e.g., Cravath, supra note 70, at 154. For this reason, it is unlikely that the reporting requirements of the 1933 and 1934 Securities and Exchange Acts played any role in the decline of involuntary bankruptcy.

^{119.} See Vincent L. Leibell, Jr., The Chandler Act—Its Effect Upon the Law of Bankruptcy, 9 FORDHAM L. REV. 380, 390 (1940).

^{120.} See 1 COLLIER ON BANKRUPTCY ¶ 21.05 (Richard Levin & Henry J. Sommer eds., 16th ed. 2010).

^{121.} Chandler Act of 1938, Pub. L. No. 75-696, 52 Stat. 840, *repealed by* Bankruptcy Reform Act of 1978, Pub. L. No. 95-598, 92 Stat. 2549.

^{122.} See Edward H. Levi & James Wm. Moore, Bankruptcy and Reorganization: A Survey of Changes, 5 U. CHI. L. REV. 1, 3, 6 (1937).

^{123.} See Leibell, supra note 119, at 404–05. Today both individuals and corporations can reorganize under Chapter 11. See Hynes et al., supra note 48, at 65. However, under the Chandler Act individuals could not make use of the corporate reorganization procedures. See Chandler Act, § 106(5), 52 Stat. at 883 ("debtor" for purposes of Chapter X limited to corporate debtors).

^{124.} See Act of Feb. 5, 1903, Pub. L. No. 57-62, § 4, 32 Stat. 797, 797; Charles Jordan Tabb, The Historical Evolution of the Bankruptcy Discharge, 65 AM. BANKR. L.J. 325, 366-67 (1991).

^{125.} See OFFICE OF THE ATT'Y GEN., supra note 86, at 148. The number of voluntary petitions filed by wage earners in 1933 was 27,385 on a total of 59,787 voluntary filings. Id.

twentieth century, the fees of the trustee and receiver were fixed by statute at a very low amount, but the fees of their counsel were not limited. Some jurisdictions adopted a practice of routinely appointing the attorney representing the petitioning creditors as the attorney for the trustee or receiver, frequently at the debtor's suggestion. This appointment significantly increased the attorney's remuneration and provided an incentive for them to initiate involuntary cases. Accordingly, bankruptcy lawyers are alleged to have aggressively sought creditors to join in involuntary petitions. 128

By the early 1930s scholars and the bar noticed the incidence and distribution of involuntary filings. In response to complaints about the administration of bankruptcy law, the Donovan Report¹²⁹ in 1931 and the Thacher Report¹³⁰ in 1932 documented numerous failures. Both described corruption (particularly the Donovan Report) and inefficiencies in bankruptcy administration, and proposed reforms.¹³¹ Among the described inefficiencies were bankruptcy procedures that affected involuntary cases.

Critics charged that the appointment of the petitioning creditors' attorney as the attorney for the receiver led to a practice of "voluntary involuntary" or "friendly involuntary" proceedings. This sort of proceeding involved the debtor's attorney providing the creditor's attorney with a list of creditors and having her file an involuntary petition against the debtor on behalf of creditors on the list she was engaged to represent. Some practitioners reported that as many as 90 percent of the involuntary petitions

^{126.} See SKEEL, supra note 61, at 76.

^{127.} See Frank R. Kennedy, Report of the Commission on the Bankruptcy Laws of the United States, H.R. Doc. No. 93-137, at 104 (1973); William Donovan, Administration of Bankrupt Estates 1 (1931), reprinted in H. Comm. on the Judiciary, 71st Cong., 3d Sess. (Comm. Print 1931) [hereinafter Donovan Report]. If the filing was voluntary, these districts would typically appoint the attorney for the creditor who made a motion to appoint a receiver. However, not all districts followed this practice. Donovan Report, at 95–96. In fact, some districts flatly prohibited the hiring of the attorney for the petitioning creditors. *Id.* at 99.

^{128.} See Donovan Report, supra note 127, at 1.

^{129.} *See generally id.* (describing abuses in the bankruptcy system, problems in the system, and recommended policy prescriptions).

^{130.} See generally STRENGTHENING OF PROCEDURE IN THE JUDICIAL SYSTEM, S. DOC. NO. 72-65 (1932) (discussing problems in the U.S. bankruptcy system and providing policy prescriptions).

^{131.} See Donovan Report, supra note 127, at 1-4, 26-33; S. DOC. NO. 72-65, at 26-38, 39-41.

^{132.} See Donovan Report, supra note 127, at 18. This phenomenon was not new to the 1898 Act. Critics of America's first bankruptcy act, enacted in 1803, charged that it was common then as well. See CHARLES WARREN, BANKRUPTCY IN UNITED STATES HISTORY 20 (1935). Similarly, critics charge that this was also true of the equity receivership in which, as a formal matter, a creditor would begin the process by filing a complaint against the debtor. See SKEEL, supra note 61, at 64. The Donovan Report raised a number of other arguments against the appointment of the creditors' attorney as the attorney for the receiver. See Donovan Report, supra note 127, at 101 (arguing that the practice results in: (1) "indiscriminate selection of counsel;" (2) "conflicts of interest;" (3) "friendly involuntary proceedings;" (4) "improper methods of securing business;" and (5) "laxity, inefficiency, and opportunity for corruption").

were in fact orchestrated by the debtor. 133 If true, the heyday of involuntary petitions was more apparent than real.

A "voluntary involuntary" petition was thought to offer the debtor three advantages over a voluntary petition. First, practitioners believed that creditors were more likely to agree to a composition (a type of reorganization or adjustment of debts) if the filing were involuntary than if it were voluntary.134 Second, in some districts the debtor could complete a composition without being adjudged bankrupt if the filing were involuntary but not if it were voluntary. 135 Third, if the debtor filed a voluntary petition and a creditor then filed a motion to appoint a receiver, the attorney for this creditor would likely be appointed as attorney for the receiver. 136 Coordinating an involuntary petition with a friendly attorney allowed the debtor to effectively select opposing counsel. Critics argued that the debtor's effective selection of counsel for the trustee or receiver assured that the creditors' attorney would take the debtor's interests into account in administering the estate. This was possible because the appointed trustees or receivers often were inexperienced and were insufficiently compensated to induce them to provide much oversight.¹³⁷ The creditors' attorney therefore could control the administration of the estate.138

The Donovan and Thacher Reports noted the apathy of creditors in initiating and prosecuting involuntary cases. They focused on procedural rules that allowed the debtor to remain in control of assets when liquidation would maximize creditor recoveries and protected creditors who received voidable transfers of assets. The Donovan Report was backed by statistics on recent bankruptcy filings and their distribution by district, type of debtor and type of case, as well as testimony from bankruptcy practitioners. Both reports proposed rules for involuntary cases that, among other recommendations, shortened the time within which the debtor was to file a schedule of its assets and liabilities, file an answer to the petition, and the court to order relief.¹³⁹

The proposals made in the Donovan and Thacher Reports assumed that some of these procedural rules affected the proportion and absolute number of involuntary petitions. In partial confirmation, the Donovan Report documented that when in 1929 the Southern District of New York appointed a standing referee and ended the practice of appointing the attorney for the petitioning creditors as the attorney for the receiver, the percentage of bankruptcy cases begun with an involuntary petition fell from 54 percent to

^{133.} See Donovan Report, supra note 127, at 18.

^{134.} Id. at 95-96.

^{135.} Id.

^{136.} Id.

^{137.} See id. at 9, 11, 13, 100.

^{138.} See id. at 241.

 $^{139.\}quad$ $\it Id.$ at 26–34; Strengthening of Procedure in the Judicial System, S. Doc. No. 72-65, at 39–41, 125–26 (1932).

34 percent.¹⁴⁰ Thus, the number of involuntary petitions declined sharply, but they did not disappear.

Later reform efforts supposed that involuntary cases were inefficiently delayed or never initiated under the 1898 Bankruptcy Act. The most important of these efforts were reforms proposed by the Commission on the Bankruptcy Laws of the United States ("Commission") in 1973.¹⁴¹ The Commission recommended, as part of a new bankruptcy act, statutory changes to the 1898 Bankruptcy Act. Its report accompanying the proposed changes included an analysis and criticism of the Bankruptcy Act's regulation of involuntary proceedings. Without supporting its finding with statistics, the Commission reported the belief among bankruptcy professionals that estate assets often are partly or entirely dissipated by the time a bankruptcy proceeding was initiated.¹⁴² The stated purpose of its proposed reforms was to encourage a bankruptcy filing earlier rather than later, either by the creditors or the debtor.¹⁴³

With respect to involuntary petitions, the Commission found two sources of the delay in the initiation of an involuntary case: the Bankruptcy Act's requirement that debtor have committed an act of bankruptcy and the need for a jury trial to adjudicate the matter.¹⁴⁴ Proving the elements of an act of bankruptcy, particularly balance sheet insolvency, was difficult for creditors.¹⁴⁵ In addition, the requirement of a jury trial on the issue delayed adjudication while the debtor retained control over the estate.¹⁴⁶ The Commission's proposed principal reform eliminated acts of bankruptcy as a requirement for an involuntary case.¹⁴⁷ In their place the Commission recommended that cash flow insolvency be enough to commence the proceeding.¹⁴⁸ In addition, the Commission's proposal eliminated the jury trial and gave the court discretion to order relief (subject to specific requirements) in a timely manner.¹⁴⁹ The 1978 Bankruptcy Reform Act incorporated both recommendations in the Bankruptcy Code. Note that the sources of delay dated back to the 1898 Act and so could not have explained the decline in involuntary petitions.¹⁵⁰ Figure

^{140.} See Donovan Report, supra note 127, at 18.

 $^{141.\,}$ See Frank R. Kennedy, Report of the Commission on the Bankruptcy Laws of the United States, H.R. Doc. No. 93-137, at 1–33 (1973).

^{142.} Id. at 190.

^{143.} See id. at 190-91.

^{144.} See Chandler Act of 1938, Pub. L. No. 75-696, \S 19(a), 52 Stat. 840, 852, repealed by Bankruptcy Reform Act of 1978, Pub. L. No. 95-598, 92 Stat. 2549; H.R. DOC. No. 93-137 at 14; see McCoid, supra note 68, at 207–12.

^{145.} See H.R. DOC. NO. 93-137, at 14; McCoid, supra note 68, at 207-12.

^{146.} See H.R. DOC. NO. 93-137, at 188.

^{147.} Id. at 15.

^{148.} See id. at 75; McCoid, supra note 68, at 211-12.

^{149.} See H.R. DOC. NO. 93-137, at 14-15.

^{150.} See id. at 14 (noting that demand for jury trial under the Act delayed disposition of involuntary petitions).

2 also suggests that the reforms did not have their intended effect. Involuntary bankruptcies continued to decline both as a percentage of all filings and in absolute numbers.

III. INVOLUNTARY BANKRUPTCY IN CURRENT PRACTICE

This Part reports on a study of filings of modern involuntary petitions. Section III.A uses the Federal Judicial Center's ("FJC") database of all bankruptcy petitions filed between October 1, 2007 and September 30, 2017 to examine all involuntary petitions filed over this decade. 151 Although this analysis is limited by the variables that the FJC chose to code, a few important lessons emerge. Chief among them is that most involuntary bankruptcies are dismissed and that the dismissal rate for petitions filed against individual debtors exceeds 75 percent. 152

The FJC data does not tell us why or when the cases were dismissed. To discover the grounds for dismissal, Section III.B examines a random sample of the cases included in the FJC's database. Using Bloomberg Law to access case filings, we find that almost 60 percent of cases are dismissed before a court issues an order for relief.¹⁵³ This rate is much higher in cases in which the debtor is a natural person, no attorney is listed on the petition, or the petitioning creditors are natural persons.¹⁵⁴ Interestingly, once one controls for the lack of an attorney, whether the debtor is a natural person no longer strongly predicts whether the court will issue an order for relief.¹⁵⁵ Most of the cases were not dismissed because the creditors failed to meet the standards set forth in § 303.¹⁵⁶ They were dismissed because the petitioning creditors did not prosecute the case or because the petitioning creditors consented to a dismissal.¹⁵⁷

A. AGGREGATE DATA

The Federal Judicial Center provides a data set of all bankruptcy petitions filed between October 1, 2007 and September 30, 2017. 158 This data includes

1150

^{151.} This database also contains records of filings made before October 1, 2007 if they were still pending after that date, but we drop these records due to concerns about survivorship bias. We also drop cases that were originally filed before this date and then reopened thereafter. FED. JUDICIAL CTR., BANKRUPTCY PETITION NEWSTATS SNAPSHOTS DATABASE: BNPS DATABASE CODEBOOK (2018), https://www.fjc.gov/sites/default/files/idb/codebooks/Bankruptcy%20 Codebook%202008%20Forward%20%28Rev%20January%202018%29.pdf [https://perma.cc/82XE-QKYL].

^{152.} See infra Table III.2.

^{153.} See infra Table III.5 and accompanying text.

^{154.} See infra Table III.5 and accompanying text.

^{155.} See infra Table III.6 and accompanying text.

^{156.} For a discussion of these standards, see *supra* notes 48–55 and accompanying text.

^{157.} See infra Table III.7 and accompanying text.

^{158.} The data set also includes some petitions filed before October 1, 2007 if the case was still active after this date. We exclude such cases.

variables that identify whether the case began with a voluntary or involuntary petition, whether the debtor is an individual, a corporation, or some other entity, and the status of the case.¹⁵⁹

Involuntary bankruptcy remains primarily a business bankruptcy phenomenon.¹⁶⁰ Because modern bankruptcy exemptions are so large relative to the asset holdings of most financially distressed consumers,¹⁶¹ creditors have little to gain from filing involuntary petitions against them. Overall, involuntary petitions account for 0.05 percent of all bankruptcy cases. They account for just 0.01 percent of the non-business bankruptcy cases, 0.43 percent of business cases with a natural person debtor and 2.3 percent of entity bankruptcies.¹⁶² However, because non-business cases are much more common than business cases, non-business petitions still account for an appreciable share, 18 percent, of all involuntary petitions.

^{159.} The data also includes variables that track other useful information, such as the debtor's assets and liabilities, but these variables are blank for so many of the involuntary filings that we cannot use them.

^{160.} The Administrative Office divides cases into "business" and "non-business" categories based on whether the filer of the petition declares that the debtor's debts are primarily business or non-business debts. All of the entity debtors in our sample are business cases, and most of the individual debtors are non-business cases. This classification system may have a high rate of error. *See* Lawless & Warren, *supra* note 98, at 747.

^{161.} See, e.g., Nathaniel Pattison & Richard M. Hynes, Asset Exemptions and Consumer Bankruptcies: Evidence from Individual Filings 25–26 (Univ. of Va. Sch. of Law: Law & Econ. Paper Series, Working Paper No. 2019-14, 2019), https://papers.ssrn.com/sol3/papers.cfm? abstractid=3413911 [https://perma.cc/DGE5-3LQX] (finding that although increased homestead exemptions increase the probability that debtor's with substantial home equity will file for bankruptcy they have little effect on the aggregate number of bankruptcy filings); see also Dalie Jimenez, The Distribution of Assets in Consumer Chapter 7 Bankruptcy Cases, 83 AM. BANKR. L.J. 795, 797, 819–20 (2009) (finding that just seven percent of individual Chapter 7 cases had assets available for distribution to unsecured creditors and that many of these debtors could have avoided any distribution with better pre-bankruptcy planning).

^{162.} Of the 3,156 involuntary petitions filed against entities, 2,942 (93 percent) were filed against corporations. As a result, excluding partnerships does not materially affect the result. Note, however, that almost five percent of partnership petitions are involuntary. This is due in part to the fact that a petition filed by fewer than all of the partners is considered involuntary. See 11 U.S.C. § 303(b)(3) (2012).

Involuntary Total Percent **Petitions Petitions Involuntary** All 0.05% 5,512 11,244,521 Entity 3,156 2.30% 137,076 Corporate 2.22%132,729 2,942 Partnership 4.92% 214 4,347 Individual 0.02%11,103,314 2,211 **Business Debts** 1,016 238,906 0.43% Non-Business Debts 10,861,275 0.01% 1,195

Table III.1. All Filings from October 1, 2007 to September 30, 2017

The most striking fact about involuntary bankruptcy petitions is that they are dismissed so often. Table III.2 records the status of the bankruptcy cases as of September 30, 2017, but it excludes all cases filed in 2017 because these cases will have had little time to fail. Over half of all involuntary petitions were dismissed, and over three-quarters of those filed against individuals were dismissed. The dismissal rate for corporate involuntary petitions was about 40 percent. These dismissal rates are as a percentage of all petitions, and the status of some cases was blank. It is possible that some of the cases with missing status were dismissed as well and that the true dismissal rate is higher. Indeed, we find a higher dismissal rate in the random sample of cases discussed in Section III.B.

All Individuals Entities Discharge 7.4%7.6% 7.5%Discharge Denied, Revoked, Withheld 21.8% 6.5% 32.7%or N/A Dismissed $76.2\overline{\%}$ 41.0% 55.7%Transfer or filed or closed in error 1.1% 1.3% 1.3%Blank 13.8% 8.6% 17.5% Total 5,302 2,125 3,040

Table III.2. Case Status

Involuntary petitions are not distributed evenly across the country. The extremely high dismissal rate for individual cases is due in part to the results in a single district: the Central District of California. The Central District of California accounted for more than a quarter (28 percent) of involuntary filings over the decade while accounting for just seven percent of all bankruptcy filings. It played an especially outsized role with respect to involuntary petitions filed against individuals, accounting for nearly half (47

percent) of these filings while accounting for just seven percent of all individual filings. 163

Individual involuntary petitions fared extremely poorly in the Central District of California. Ninety-five percent of these petitions were dismissed. Elsewhere the dismissal rate for individual involuntary petitions was a still high 55 percent. For entities, the Central District of California is less of an outlier, as it had a dismissal rate of 43 percent and the rest of the country had a dismissal rate of 40 percent. We are not sure why the Central District of California has such a high number of involuntary petitions or dismissals, but this bankruptcy district is unusual in other respects. In particular, debtors in the Central District of California file pro se voluntary petitions at a rate that is much higher than the national average. 164 It is reasonable to infer that some of the same factors that induce debtors in the Central District to file pro se voluntary petitions at an above average rate also induce creditors to file pro se involuntary petitions there at a similarly high rate. 165 Section III.B finds that creditors filing involuntary petitions naming a natural person debtor in the Central District almost invariably file pro se, 166 and Table III.5 reports that pro se involuntary filings are very likely to be dismissed.

B. RANDOM SAMPLE

We decided to supplement the variables gathered by the FJC by hand-coding a random sample of 350 involuntary petitions. Ten of these petitions were unusable, leaving us with a sample of 340. 167 One of the first things that we noticed was that the creditors who are filing the involuntary petitions are not the typical creditors one finds in bankruptcy. In particular, we found that a very large number of the petitioning creditors were individuals. Fifty-four percent of the petitions listed at least one individual as a petitioning creditor, and 41 percent only had individuals as petitioning creditors. If we restrict the sample to cases in which the debtor is an entity, 39 percent of cases still have at least one individual petitioning creditor and 22 percent have only individual petitioning creditors. If we restrict the sample to cases in which the debtor is an individual, these numbers rise to 71 percent and 62 percent. The claims listed by these creditors were typically things like "breach of contract,"

^{163.} See U.S. BANKR. COURT CENT. DIST. OF CAL., ACCESS TO JUSTICE IN CRISIS: SELF-REPRESENTED PARTIES AND THE COURT 1 (2011). The Central District of California accounted for 15.59 percent of involuntary petitions filed against entities and 9.31 percent of all entity bankruptcy petitions.

^{164.} See id. at 1 (finding about 28 percent of individual voluntary petitions file pro se as compared to nine percent average nationwide in the District).

¹⁶⁵. Id. at 8 (reporting that most creditors in the Central District represent themselves when filing claims).

^{166.} See infra Table III.4.

^{167.} We used a random number generator to select cases. A few petitions were unusable because they could not be retrieved electronically, were originally filed prior to our sample period, or were subject to an intra-district transfer.

"services rendered" or simply "loans." ¹⁶⁸ Most of the entities that signed the petition as creditors were not household names. Rather, they were typically LLCs or LLPs. Rarely did we find large institutions such as Goldman Sachs or Bank of America, and, when we did, they almost exclusively appeared on petitions filed against very large firms with multiple cases jointly administered.

	All (340 cases)	Individual Debtor (162 cases)	Entity Debtor (178 cases)
At least one natural person petitioning creditor	54%	71%	39%
Only natural persons petitioning creditors	41%	62%	22%

Table III.3. Petitioning Creditors

More than 40 percent of the petitions did not list an attorney, suggesting that they were filed pro se. This was especially true when both the debtor and all petitioning creditors were individuals. In these cases, 85 percent of the petitions did not list an attorney. In Section III.A we reported that the Central District of California had a very high rate of dismissal for involuntary petitions naming an individual debtor. Here we report that involuntary petitions filed against an individual debtor in this district are nearly always (94 percent) filed pro se. About 17 percent of entity debtor petitions were filed pro se, and this number rises to 41 percent for petitions that did not include an entity creditor.

Table III.4. Percentage of Petitions with No Attorney	(Tota	i of Type	;)
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	All	Entity Debtor	Individual Debtor
All	41% (340)	17% (178)	67% (162)
At least one individual petitioner	61% (185)	30% (70)	79% (115)
All individual petitioners	73% (139)	41% (39)	85% (100)
Central District of California	71% (116)	19% (36)	94% (80)

^{168.} We also recorded the amount the petitioning creditors claimed to be owed. The median claims for all cases was about \$200,000. For entity debtors the median amount was about \$517,000, and for individual debtors the median amount was about \$73,000. *See infra* Appendix Table 4.

^{169.} See supra note 165 and accompanying text.

Our main focus is on whether the court issued an order for relief. An order for relief is, of course, an imperfect proxy for a socially desirable filing or a "success." But the same is true of just about any measure of success that a researcher can easily use. For example, empirical studies of consumers filing under Chapter 13 of the Bankruptcy Code frequently focus on whether the debtor received a discharge after completing a three to five-year repayment plan. ¹⁷⁰ However, even if the debtor fails to receive a discharge she may receive some relief in the form of an automatic stay that prevents her creditors from using non-bankruptcy collection measures (including home foreclosure) while the case is pending. ¹⁷¹ Indeed, only 62 percent of Chapter 13 debtors state that obtaining a discharge was very important to them, and only five percent list a discharge as the single most important goal of their filing. ¹⁷² Even so, most scholars agree that the fact that more than half of Chapter 13 filings do not lead to a discharge is an indicator that something is amiss. ¹⁷³

Petitions that are dismissed before an order for relief is issued can still serve a valid bankruptcy purpose and play a socially useful role. These petitions could prevent a race to the assets where the parties later have agreed to use a non-bankruptcy remedy to "collectivize" debt collection. This occurs where the petitioning creditors voluntarily agree to dismiss the case or abandon prosecution because the debtor assigned its assets to a receiver for the benefit of creditors or used some other state law remedy, 174 or the debtor and the creditors reached a work-out agreement in which the creditors agree to reduce their claims. These petitions could also be socially valuable if they are a cost-effective means of convincing debtors to repay debts that they *should* pay (however this is defined). However, if a substantial share of the involuntary petitions are dismissed without an order for relief, this is cause for concern as the creditor may have filed the petition for a socially undesirable reason. For example, the creditor may have filed the petition to embarrass the debtor or to delay an otherwise valid foreclosure proceeding.

We find that most petitions are dismissed without an order for relief. Overall, courts issued an order for relief in 43 percent (146 of 340) of our cases. However, the rate varies substantially by subpopulation. For example, a court is much more likely to issue an order for relief when the debtor is an

^{170.} See, e.g., Katherine Porter, The Pretend Solution: An Empirical Study of Bankruptcy Outcomes, 90 Tex. L. Rev. 103, 117 (2011); see also Scott F. Norberg & Nadja Schreiber Compo, Report on an Empirical Study of District Variations, and the Roles of Judges, Trustees and Debtors' Attorneys in Chapter 13 Bankruptcy Cases, 81 AM. BANKR. L.J. 431, 453–55 tbls.13 & 14 (2007).

^{171.} Creditors can sometimes pursue non-bankruptcy collection measures after asking the court to grant them relief from the automatic stay. 11 U.S.C. \S 362(d) (2012).

^{172.} See Porter, supra note 170, at 134–35 fig.3. Another 75.9 percent state that their primary goal is to "get a fresh start." Id. at 134 fig.2.

^{173.} For example, despite finding that most debtors do not file Chapter 13 to seek a discharge, Porter is highly critical of this procedure due to the lack of discharge. *Id.* at 134 fig. 2, 153.

^{174.} See, e.g., N.J. STAT. ANN. § 2A:19 (West 2010); VA. CODE ANN. § 55 (2012).

entity (58 percent) than when the debtor is an individual (26 percent), when an attorney is listed on the petition (64 percent) than when no attorney is listed (12 percent), when there are no individual creditors on the petition (58 percent) than when there is at least one individual petitioner (30 percent), when at least some entities join the petition (58 percent) than when all of the petition creditors are individuals (22 percent), and when there are at least three creditors listed on the petition (52 percent) than when there are just one or two (29 percent). We also tracked whether the case was a lead case or it was jointly administered with the case of a related debtor and the related case was the lead case. As one might expect, courts were much more likely to issue an order for relief if the case was not a lead case (90 percent) than if it was (40 percent). The Cases that are jointly administered tend to be substantially larger, and the case must survive at least some time in order to be jointly administered.

	Yes (#cases)	No (#cases)
Entity Debtor	58% (178)	26% (162)
Attorney on Petition	64% (201)	12% (139)
No individual petitioners	58% (155)	30% (185)
At least one entity petitioner	58% (201)	22% (139)
At least three petitioners	52% (209)	29% (131)
Not lead Case	90% (21)	40% (319)

Table III.5. Percentage of Cases with Order for Relief

Table III.6 shows the odds-ratios and the p-values for logistic regressions in which the dependent variable is whether the court issued an order for relief.¹⁷⁶ Odds ratios above one suggest that the variable is correlated with the issuance of an order for relief, and odds ratios below one suggest that the variable is negatively related to the issuance of an order for relief.¹⁷⁷ If one includes controls for the type of debtor, the presence of an attorney, and the type and number of creditors, what really seems to matter is the presence of an attorney and the type and number of creditors. The presence of an attorney has an odds-ratio between 7.7 and 8.9, and all of the petitioner variables have odds ratios below o.6. The coefficients on the presence of an

^{175.} All of these differences are statistically significant at the 0.01 level.

^{176.} For the notion and use of an odds ratio, see *infra* note 177.

^{177.} An odds ratio is the odds of "success" with the treatment divided by the odds of success without the treatment; it is not the ratio of the probabilities of success. Therefore, one cannot claim that the presence of an attorney makes an order for relief eight times more likely. Consider an example from our data. In our sample we found 129 cases with an attorney and an order for relief and 72 with an attorney and no order for relief. Therefore, the odds of success are 129/72 or 1.79. We also had 17 cases with no attorney and an order for relief and 122 with no attorney and no order for relief. Therefore, the odds of success are 17/122 or 0.14. The odds ratio is therefore 1.79/0.14=12.86. However, the ratio of the probabilities of success is 0.64/0.12 or 5.3.

Not lead case

Pseudo R2

4.73**

(.04)

0.26

attorney and a petition with fewer than three creditors are always significant at a p-value of 0.01, and the coefficients on the presence of a natural person as a petitioning creditor are always significant at a p-value of 0.1.

	Regression 1	Regression 2	Regression 3
Entity debter	1.30	1.28	1.25
Entity debtor	(.38)	(.41)	(.46)
Attornov listed	8.91***	8.42***	7.71***
Attorney listed	(.00.)	(.00.)	(.00.)
Fewer than 3	0.38***	0.42***	0.46***
petitioners	(.00.)	(.00.)	(.00.)
At least one individual	0.59*		
petitioner	(.07)		
Only individual		0.56*	0.57*
petitioners		(.06)	(.07)

Table III.6. Regression Results

All regressions have 340 observations. * significant at 0.1, ** significant at 0.05, *** significant at .01. Odds ratios, and p-values in parentheses.

0.25

0.25

Interestingly, once one controls for other factors, whether the debtor is an entity or an individual is not statistically significant. This can be shown with simpler statistics. If we restrict our sample to cases in which attorney is listed on the petition, the probability of an order for relief is nearly as high for individual debtors (0.604 with 53 observations) as for entity debtors (0.655 with 148 observations), and the difference is not statistically significant (p-value of 0.5). When there is no attorney listed the probability of an order for relief is a paltry 0.09 (109 observations) for individuals and 0.23 (30 observations) for entities. This difference is statistically significant (p-value of 0.04).

We, or our research assistants, read the orders and motions to try to determine the reason for each dismissal. Table III.7 summarizes our results for those cases that were dismissed before an order for relief was issued. When we began this project, we naively believed that we would find a good number of cases in which the language of § 303 would matter. To file an involuntary petition, one must be "a holder of a claim against such person that is not contingent as to liability or the subject of a bona fide dispute as to liability or amount, or an indenture trustee representing such a holder." We therefore expected to find claims dismissed because the debtor successfully argued that

the claim was subject to a bona fide dispute. If there are at least 12 such creditors, the Bankruptcy Code requires at least three such petitioning creditors. The Bankruptcy Code requires at least three such petitioning creditors. We therefore thought that there would be a number of cases in which the debtor successfully argued that it had at least 12 such creditors and too few petitioning creditors. Even if the Code's requirements are met and the debtor timely objects to the filing, the petition will be dismissed unless either a receiver has been appointed or "the debtor is generally not paying such debtor's debts as such debts become due unless such debts are the subject of a bona fide dispute as to liability or amount. The We therefore expected to find cases in which the debtor successfully argued that it was paying its debts as they came due.

Our findings did not match our expectations. Just four percent of cases listed an insufficient number of creditors as a (not necessarily the only) reason for dismissal, and just five percent of cases listed a bona fide dispute as a reason.¹⁸¹ Strikingly, we did not find a single case dismissed because the debtor successfully argued that it was generally paying its debts as they came due.¹⁸²

^{179.} See id. § 303(b)(1)-(2).

¹⁸o. *Id.* § 303(h)(1).

^{181.} It is possible that we have undercounted these cases. A sizeable number of cases were dismissed after a court issued an order to show cause before it would issue a summons to the debtor. In these cases, the court was not always clear on the reason for the dismissal, and we will need to revisit the cases to ensure that we did not overcount the number of cases dismissed due to lack of prosecution.

^{182.} Recall that this test focuses on whether the debtor has committed a general default and not whether the debtor has failed to pay the petitioning creditors.

Table III.7. Dismissals for Cases With No Order for Relief

	Number	Percent
Lack of Prosecution	81	42.0%
Lack of Prosecution and Consent	1	0.5%
Lack of Prosecution and Good Faith	1	0.5%
Lack of Prosecution and Venue	1	0.5%
Lack of Prosecution, Good Faith, Insufficient Creditors, and Bona Fide Dispute	1	0.5%
Lack of Prosecution and Other	1	0.5%
Total Lack of Prosecution	86	44.6%
Consent	49	25.4%
Total Consent	50	25.9%
Insufficient Number of Petitioning Creditors	4	2.1%
Insufficient Number of Petitioning Creditors, Bona Fide Dispute	1	0.5%
Insufficient Number of Petitioning Creditors, Other	1	0.5%
Total Insufficient Creditor Numbers	7	3.6%
Bona Fide Dispute	6	3.1%
Bona Fide Dispute and Good Faith	3	1.6%
Total Bona Fide Dispute	10	5.2%
Good faith	3	1.6%
Total Good Faith	8	4.1%
Abstention	3	1.6%
Unknown Reason After Show Cause Hearing	9	4.7%
Other or unknown	27	14.0%
Total	193	

So why were the cases dismissed? Forty-five percent of the dismissals were due to a failure of prosecution: The petitioning creditors failed to serve the debtor or failed to appear at a hearing. Another 25 percent of cases were dismissed with the consent of the petitioning creditor. There are several possible explanations for this finding, and few of them are normatively attractive if one believes that bankruptcy is properly used to solve a collective action problem arising when an insolvent debtor owes money to many creditors. ¹⁸³ Creditors might have abandoned or settled these cases after they found a non-bankruptcy means of solving this collective action problem. For example, we found at least one case in which the petitioning creditors moved to dismiss after the debtor agreed to a receivership under state law. On the other hand, creditors might be using involuntary filings for a different reason

^{183.} See Jackson, supra note 43, at 859–71 (arguing that bankruptcy reflects the hypothetical "creditors' bargain").

altogether. For example, a creditor might use an involuntary filing as an easy way to get the debtor's attention and collect its claim.

It is possible that we have failed to find cases in which the standards of § 303 matter because our sample is too small. To address this possibility, we decided to oversample corporate cases that were dismissed because we thought that the § 303 standards were most likely to appear in these cases. We randomly selected additional dismissed corporate cases so that we had 150 of such cases. After removing one unusable case and 32 cases in which an order for relief was issued, we were left with 117 corporate cases that were dismissed before an order for relief. Table III.8 lists the reasons for dismissal.

Table III.8. Dismissals for Corporate Cases with No Order for Relief

	Number	Percent
Lack of prosecution	20	17.1%
Petitioning Creditor Consents to Dismissal	59	50.4%
Insufficient Number of Petitioning Creditors	5	4.3%
Insufficient Number of Petitioning Creditors and Bona Fide Dispute	1	0.9%
Total insufficient creditors	6	5.1%
Bona fide dispute	13	11.1%
Bona fide dispute and Abstention	1	0.9%
Total bona fide dispute	15	12.8%
Abstention	7	6.0%
Other or unknown - including parallel voluntary filing	11	9.4%
Total	117	

Once again, lack of prosecution (17 percent) and consent (50 percent) are the dominant reasons for dismissal, though their relative importance is reversed. Despite our oversampling, we still failed to find a single case dismissed because the debtor successfully alleged that it was paying its debts as they come due. Within this sample, the existence of a bona fide dispute (13 percent), insufficient petitioning creditors (five percent), and abstention (six percent) account for non-trivial shares of the dismissals. The failure to observe instances in which courts rely on § 303's requirements to dismiss a case is unlikely to be the result of a sampling error.

If the court dismisses a case, it can order the petitioning creditors to pay the debtor's costs and attorneys' fees. 184 Where a court finds that the creditor filed in bad faith, the court also can award the debtor compensatory and punitive damages.¹⁸⁵ In our random sample of approximately 340 cases (and 194 dismissals without an order for relief), we found just three cases in which the creditors were ordered to pay the debtor's attorney's fees and one case in which the debtor was required to pay \$250 to the court for filing a petition in bad faith. We found no cases that awarded damages to the debtor. In our sample of 109 corporate cases dismissed without an order for relief, we found just three cases with a § 303(i) award. Because we worried that perhaps we had missed these awards in our searches, we used Bloomberg Law to search for dockets in which the term "303(i)" appears. Searching between October 1, 2007 and September 30, 2017, yielded a total of 99 cases. Ten began with a voluntary petition, and another was not a 303(i) case, leaving 88 cases. Of these debtors, 66 were corporations, 17 were individuals, four were partnerships, and one was a trust. Using the aggregate number of involuntary petitions from Table III.1 above, the rate at which § 303(i) even appears on the docket is roughly 2.2 percent for corporate cases and 0.8 percent for individual cases. The debtor received at least some relief or settled with the petitioning creditors in about 45 percent of these cases.¹⁸⁶ It is of course possible that our search missed some cases in which attorneys ask for or judges give sanctions because the judges and attorneys did not refer to the section number on the docket. However, a frequent omission of the reference in the docket to the section authorizing damage awards seems unlikely.

IV. REFORM AND THE FUTURE OF INVOLUNTARY BANKRUPTCY

Part III suggests that bankruptcy courts likely receive both too many and too few involuntary petitions—too many bad petitions that lack a valid bankruptcy purpose and too few good petitions that do. This presence of both type 1 and type 2 error greatly complicates the search for an optimal rule because rules that encourage more good petitions may encourage more bad petitions as well.

Section IV.A begins with an easy reform proposal. Our study demonstrates that many involuntary petitions are filed pro se and that these petitions are almost always dismissed without the court issuing order for relief. If dismissal is a proxy for the lack of a valid bankruptcy purpose, 187 discouraging pro se petitions would reduce the number of bad petitions without substantially reducing the number of good petitions. However, this

^{184.} See 11 U.S.C. § 303(i).

^{185.} See id.

^{186.} If we look only at cases in which our research assistants found a settlement or an order, the rate is 42 percent. However, if we include active cases and cases in which they were unsure, the rate rises to 48 percent.

^{187.} See supra notes 170-74 and accompanying text.

reform does nothing to increase the number of good petitions, and the meager number of involuntary petitions suggests that this is the larger problem.

Section IV.B examines a reform that could increase the number of involuntary petitions—rewarding those who file them. Prior literature discusses the use of rewards to induce petitions, ¹⁸⁸ but the literature mostly confines its attention to rewards paid to debtors to induce voluntary petitions. ¹⁸⁹ In Section IV.B we argue that the law should seriously consider rewarding involuntary petitions as well.

A. DISCOURAGING PRO SE PETITIONS

Part III reveals that most involuntary petitions are dismissed before a court issues an order for relief, suggesting that a large fraction of these filings lacked a valid bankruptcy purpose. Even dismissed cases impose costs. Debtors suffer reputational harm from an involuntary petition; involuntary petitions reduce the credit scores of individuals, and they make suppliers and customers less willing to do business with a firm. Involuntary petitions invoke the automatic stay even if the court has not issued an order for relief, 190 and this stay may prevent secured creditors from foreclosing or general creditors from exercising legitimate remedies. Finally, courts incur administrative costs, especially when cases require one or more hearings.

Several Bankruptcy Code provisions attempt to curtail unmeritorious filings. Under § 303(h), the debtor can have the case dismissed if it is paying its debts and has not appointed a receiver. ¹⁹¹ Section 303(k) permits the court to seal a case and gag the credit reporting agencies. ¹⁹² Section 303(i) allows the court to sanction the petitioning creditors if the case is dismissed. ¹⁹³ Finally, § 303(e) allows the court to require the posting of a bond to cover the sanctions to be imposed under § 303(i). ¹⁹⁴

Despite these safeguards, Part III suggests that most involuntary petitions are dismissed and that the dismissal rate is especially high when the debtor is a natural person. One might conclude that the law should simply ban involuntary petitions filed against consumers. There are two plausible versions of this approach. The stronger version would ban all involuntary petitions in which the debtor is a natural person, while the weaker version would ban only those filings in which the debtor's obligations are primarily non-business in nature.

^{188.} See supra note 15 and accompanying text.

^{189.} For an exception, see LoPucki, supra note 16, at 356.

^{190. 11} U.S.C. § 362(a) (stating that an involuntary petition "operates as a stay").

^{191.} Id. § 303(h).

^{192.} Id. § 303(k).

^{193.} Id. § 303(i).

^{194.} *Id.* § 303(e).

Analyzing the proper role of involuntary bankruptcy is more difficult when the debtor is a natural person because bankruptcy has competing goals. According to the Supreme Court, "[t]he principal purpose of the Bankruptcy Code is to grant a 'fresh start' to the 'honest but unfortunate debtor.'"195 Involuntary petitions do little to further this purpose. Indeed, because there are limits on how often an individual can receive a discharge and a fresh start, 196 an involuntary petition can impair this goal by limiting the individual's ability to choose the timing of her fresh start. A debtor who has committed a general default may wish to delay filing until the cause of the financial distress (e.g., unemployment) has been resolved; if she does not wait, she may find herself once again suffering from a crushing debt burden. However, bankruptcy also seeks to maximize creditor recoveries from an insolvent debtor,197 and involuntary petitions may further this goal. Our article focuses on corporate bankruptcy because corporations do not receive a fresh start, 198 and so maximizing recoveries is the primary purpose in these bankruptcies.199

While we do not try to determine the proper balance between an individual debtor's fresh start and the maximization of creditor collections, we do note that there are drawbacks to both the stronger and weaker versions of a prohibition against involuntary petitions against individual debtors. The stronger version may have the unfortunate effect of barring too many socially desirable filings. That is, one can certainly imagine situations in which an involuntary filing against a natural person is perfectly appropriate. For example, the threat of an involuntary petition may deter individual debtors with substantial assets from making voidable transfers. Because so few consumers (those without substantial business debts) have substantial assets, the weaker test is not as susceptible to this problem. On the other hand, the weaker test requires the court to determine the principal nature of the

^{195.} See, e.g., Marrama v. Citizens Bank of Mass., 549 U.S. 365, 367 (2007) (internal quotation marks omitted).

^{196.} See 11 U.S.C. §§ 727(a) (8), 1141(d) (4), 1328(f).

^{197.} See JACKSON, supra note 9, at 205 (arguing that bankruptcy maximizes creditor recovery by stopping a race to the assets); see also STRENGTHENING OF PROCEDURE IN THE JUDICIAL SYSTEM, S. DOC. NO. 72-65, at 6 (1932) ("The primary purpose of [bankruptcy] law was to insure [sic] the prompt and efficient realization and the pro rata distribution, without preferences, of the assets of insolvent debtors.").

^{198.} Corporations do not receive a discharge in Chapter 7. See 11 U.S.C. § 727(a)(1). Although corporations receive a discharge in Chapter 11, the discharge does not give them a fresh start because their future income is an asset of the estate. Id. § 541(a)(6). The corporation's creditors or purchasers of estate assets, not the debtor, receive this income.

^{199.} Many scholars argue that this is the only purpose of corporate bankruptcy and that bankruptcy should focus solely on the interests of the firm's creditors and (when the firm is solvent) shareholders. See, e.g., Douglas G. Baird, Loss Distribution, Forum Shopping, and Bankruptcy: A Reply to Warren, 54 U. CHI. L. REV. 815, 828–31 (1987). Others argue that bankruptcy law should also consider the interests of other stakeholders of the firm. See, e.g., Elizabeth Warren, Bankruptcy Policy, 54 U. CHI. L. REV. 775, 777 (1987).

debtor's obligations. While perhaps difficult for courts and creditors to administer, this is the same test currently used to determine whether the Chapter 7 means test applies to the debtor.²⁰⁰ There is historical precedent for exempting many natural persons.²⁰¹ Until 1978, an involuntary petition could not be filed against a wage earner.²⁰² However, Congress chose to discard this old limitation on the grounds that involuntary proceedings against wage earners were likely to be extremely rare.²⁰³ They were right about this matter.

The results of Section III.B suggest that there may be a better indicator of undesirable petitions or at least petitions likely to be dismissed: the lack of an attorney on the petition. This is perhaps unsurprising. The filing attorney is likely to be better informed about the likelihood that a court will issue an order for relief than an unrepresented creditor. In addition, the attorney is likely to be attentive to the merits of the petition, as she risks reputational consequences in making an unmeritorious filing and is potentially liable for sanctions in doing so.²⁰⁴ By comparison, creditors might use a pro se involuntary petition as a relatively cheap way to use the legal process to get the debtor's attention. The current filing fees for filing an involuntary petition under Chapter 7, \$335,²⁰⁵ are less than the hourly billing rate for some attorneys.²⁰⁶

If pro se involuntary petitions pose a problem, there are several ways to discourage them. Some judges already take steps to at least curtail the harm that these filings create. For example, in one case the bankruptcy judge ordered the petitioning creditors to show cause why the case should not be dismissed before issuing a summons on the grounds that "[t]he court's experience is that petitions for involuntary bankruptcy by individual creditors

^{200. 11} U.S.C. § 707(b).

^{201.} Even today, farmers are not eligible for involuntary bankruptcy. *Id.* § 303(a).

^{202.} See supra note 93 and accompanying text.

^{203.} *Cf.* Frank R. Kennedy, Report of the Commission on the Bankruptcy Laws of the United States, H.R. Doc. No. 93-137, at 14 (1973) (qualifying wage earner ineligibility as an "academic" exclusion); *id.* at 15 (calling the wage earner exclusion "meaningless").

^{204.} See 28 U.S.C. § 1927; FED. R. BANKR. P. 9011.

^{205.} The total filing fees (the sum of the filing fee, administrative fee, and trustee surcharge fee) for Chapter 7 is \$335. The total filing fees for Chapter 11 is \$1,717. 28 U.S.C. § 1930; U.S. BANKRUPTCY COURT, SCHEDULE OF BANKRUPTCY FEES (2018), available at http://www.insb.uscourts.gov/sites/insb/files/FeeSchedule.pdf [https://perma.cc/6gEE-5K8Z].

^{206.} The average hourly billing rate for all attorneys is \$368 in Los Angeles and New York and \$245 nationally. See Dan Packel, Lawyers Maintain an Edge in Rising Billing Rates, Study Finds, LAW.COM (Oct. 4, 2018, 6:34 PM), https://www.law.com/americanlawyer/2018/10/04/lawyers-maintain-an-edge-in-rising-billing-rates-study-finds [https://perma.cc/M3GT-MU9L]. Some bankruptcy lawyers charge much more. To take a somewhat extreme example, the firm retained by Sears is charging between \$1,075 and \$1,600 per hour for its partners and counsels. See Brian Baxter, Wachtell, Weil Unveil Legal Bills, Hourly Rates for Bankrupt Sears, LAW.COM (Oct. 30, 2018, 9:02 PM), https://www.law.com/americanlawyer/2018/10/30/wachtell-weil-unveil-legal-bills-hourly-rates-for-bankrupt-sears [https://perma.cc/HR4V-MCX2].

without an attorney are rarely bona fide cases."²⁰⁷ When the petitioning creditors failed to do so, the judge managed to dismiss the case in 26 days. Current law allows a judge to require the petitioning creditors to post a bond after notice and a hearing.²⁰⁸ Perhaps the law should make this requirement automatic when no attorney is listed to ensure that the debtor and court can easily sanction a creditor who files an undesirable petition.

While less dramatic solutions may address the problem, one can make a good case for an outright ban of pro se involuntary petitions. That is, pro se involuntary filings should not act as a stay, should not enter the court's docket, and should not be reported to the credit bureaus. Just 12 percent of pro se petitions receive an order for relief, and it is likely that some of the creditors who filed these successful petitions would have employed an attorney if one was required.²⁰⁹ This is especially true if Congress adopts the reform proposal discussed in Section IV.B below and rewards the creditors or attorneys who file involuntary petitions.

B. BANKRUPTCY BOUNTIES

Part III demonstrates that involuntary petitions are exceedingly rare. The dearth of involuntary filings is a problem only if increasing the number of involuntary petitions would further some bankruptcy purpose. Here we focus on corporate bankruptcy and assume that bankruptcy's purpose is to maximize the value of the firm and creditor recoveries by removing a debt overhang or preventing a costly race to the assets.²¹⁰ Commentators have long complained that bankruptcy fails to fulfill this second purpose because the "assets are largely consumed or dissipated before the estate is brought into bankruptcy."²¹¹

1. Delay and the Creditors' Collective Action Problem

Rational managers may delay the filing of a bankruptcy petition past the optimal time.²¹² Roughly stated, the shareholders of a firm hold an option that allows them to sell the assets of the firm to the creditors for the face value of the debt.²¹³ If the value of these assets increases, the shareholders will keep

^{207.} In re Estrada, Case No. 104448 MJ (Bankr. C.D. Cal. 2010) (order to show cause).

^{208.} See 11 U.S.C. § 303(e).

^{209.} See supra Table III.5.

^{210.} See supra notes 42-43 and accompanying text.

^{211.} See STRENGTHENING OF PROCEDURE IN THE JUDICIAL SYSTEM, S. DOC. No. 72-65, at 39 (1932).

^{212.} See, e.g., JACKSON, supra note 9, at 204–05; Adler et al., supra note 7, at 465. In addition to the reasons we discuss in the text, managers may not wish to admit failure because doing so would damage their professional reputation or because they are emotionally attached to the firm. See Adler et al., supra note 7, at 479.

^{213.} One can also characterize equity as a call option on the firm's assets that is exercised by repaying the debt in full. See Douglas G. Baird, Priority Matters: Absolute Priority, Relative Priority, and the Costs of Bankruptcy, 165 U. PA. L. REV. 785, 793 (2017) ("The possibility that the project might

the assets and repay the debt in full. If the value of the assets declines, the shareholders can exercise the option by defaulting and walking away. In this case the shareholders "sell" the firm's assets to its creditors, from which the creditors satisfy their claims against the firm. Because a bankruptcy filing accelerates the maturity of the debts and terminates the option, a manager faithful to the firm's shareholders has an incentive to delay filing as long as possible.

The firm's creditors have effectively issued this option to the shareholders and thus have an incentive to terminate the option. One way to do so is to file an involuntary petition.214 The fact that the creditors have issued the option to the debtor means that they have an incentive to file before the optimal time. No one has the correct incentives, and the law must limit the ability to file involuntary petitions. This was an even more serious problem when bankruptcy lacked effective reorganization procedures and bankruptcy was synonymous with liquidation. In the nineteenth century leading politicians argued that bankruptcy should exclude involuntary petitions on the theory that debtors who can recover financially are not forced into bankruptcy.²¹⁵ Even today corporate law generally sets a very high bar for the appointment of a receiver to liquidate a firm. It is not enough for a creditor to show that the firm is insolvent. Rather, it must show that the firm is "irretrievably insolvent" with "no reasonable prospect that the corporation, if let alone, will" be able to carry on with safety to the public and advantage to its stockholders.216

The results of Part III suggest that, as a general matter, creditors are not too quick to file involuntary petitions. They may lack the information necessary to know when to file such a petition, and one reason for this is that information is costly to obtain. By stopping a potential race to the assets, bankruptcy helps solve one collective action problem.²¹⁷ However, in doing so, it introduces a new one. The petitioning creditors bear all the costs of monitoring the debtor and filing the petition, but they must share the benefits

ultimately be worth more than what is owed the senior investor gives option value to the junior investor's stake"); see also Anthony J. Casey, The Creditors' Bargain and Option-Preservation Priority in Chapter 11, 78 U. CHI. L. REV. 759, 759 (2011) ("It is well recognized that this right is the equivalent of a call option on the firm's assets."). Note that this assumes a very simple capital structure. More complicated capital structures with multiple levels of debt and required coupon payments are more accurately modeled as a series of options. See, e.g., Lucian Arye Bebchuk, A New Approach to Corporate Reorganization, 101 HARV. L. REV. 775, 785 (1988) (modelling a firm's capital structure as a system of multi-tiered options).

^{214.} Some creditors may be able to terminate the option without filing an involuntary petition. See infra notes 275-78 and accompanying text.

^{215.} See SKEEL, supra note 61, at 29–34. The opposition also reflected concern that "northern creditors would use bankruptcy to displace southern farmers from their homesteads." *Id.* at 28. Additionally, debtors who might have recovered financially would be forced into bankruptcy. *Id.* at 29.

^{216.} See Quadrant Structured Prods. Co. v. Vertin, 115 A.3d 535, 556-57 (Del. Ch. 2015).

^{217.} See JACKSON, supra note 9, at 7-19.

of bankruptcy pro rata with the other creditors.²¹⁸ The creditor who learns that the debtor is in trouble may be better off pursuing its claim in state court or demanding a payment in exchange for silence.²¹⁹ The end result is the creditor passivity described in Part III.

Perhaps because of this passivity, existing bankruptcy law offers rewards that may cause the debtor to file voluntarily. For individual debtors the carrot is the discharge and the resulting fresh start.²²⁰ For corporations, the carrot is the prospect of a Chapter 11 reorganization that would allow managers to keep their jobs and bargaining rules that may allow equity holders to extract a portion of an insolvent firm's going concern value.²²¹ The carrot offered to the managers and shareholders of a corporation filing under Chapter 7 is less obvious. The entrepreneur may simply use Chapter 7 to prove to the creditors that there are no assets left and that further creditor collection efforts are pointless.²²² However, this would be suboptimal if an orderly liquidation would have yielded a greater recovery than a race to the assets. More optimistically, entrepreneurs may seek relief under Chapter 7 to preserve their reputation and allow them to borrow again.

Some scholars have asked whether bankruptcy should be made more generous to shareholders of insolvent firms.²²³ Part of the motivation for their inquiry is to encourage voluntary filings. Current law insists that junior claims and interests (e.g., shareholders) receive nothing until senior claims (e.g., debt) are paid in full or consent to different treatment.²²⁴ This is bankruptcy law's "absolute priority rule."²²⁵ These scholars would have bankruptcy law replace the absolute priority rule in Chapter 11 with a rule of "relative priority" that permits the judge to award some amount to junior interests even when more senior interests object and are not paid in full.²²⁶ Although the American Bankruptcy Institute has endorsed this proposal,²²⁷ it remains

^{218.} See LoPucki, supra note 16, at 364.

^{219.} *See id.* at 365 (arguing that petitioning creditors should be given priority to induce them to file for bankruptcy instead of filing a state court proceeding).

^{220.} As Tabb observes about then-contemporary English insolvency law which served as the model for the 1800 Bankruptcy Act, "[t]he carrot and stick approach of prior laws was continued: a discharge and an allowance for the debtor who cooperated, and death for the fraudulent debtor." Tabb, *supra* note 59, at 12.

^{221.} See, e.g., Randal C. Picker, Voluntary Petitions and the Creditors' Bargain, 61 U. CIN. L. REV. 519, 538–39 (1992).

^{222.} See Baird, supra note 15, at 226 ("The purpose [of Chapter 7] is not so much to give creditors assets as it is to assure them that no assets are there.").

^{223.} See sources cited supra note 12.

 $^{224. \}quad \textit{See} \ \text{11 U.S.C.} \ \S \ \text{1129(b)(2)(B)(ii)} \ (2012).$

^{225.} Id. § 1129 note (Legislative Statements).

^{226.} See, e.g., Baird & Rasmussen, supra note 12; James C. Bonbright & Milton M. Bergerman, Two Rival Theories of Priority Rights of Security Holders in a Corporate Reorganization, 28 COLUM. L. REV. 127, 159–60 (1928); Casey, supra note 213, at 765–66.

^{227.} MICHELLE M. HARNER, AM. BANKR. INST., COMMISSION TO STUDY THE REFORM OF CHAPTER 11: 2012–2014 FINAL REPORT AND RECOMMENDATIONS 220–26 (2014).

controversial and its adoption is by no means certain.²²⁸ None of the above rewards are conditioned on the debtor filing a voluntary petition much less a petition that a judge determines to be socially desirable. For example, shareholders may be able to use Chapter 11's bargaining rules to extract value even if the firm is dragged into bankruptcy by an involuntary petition. A few scholars have suggested more explicit financial rewards to shareholders and managers for filing voluntarily, but most have dismissed the idea as unworkable.²²⁹

2. Encouraging Petitions with Bankruptcy Bounties

Almost no scholarship discusses the possibility of rewarding creditors—those who file an involuntary petition against the debtor.²³⁰ The lack of relevant literature is particularly surprising because rewards operate elsewhere in a variety of different legal rules. These rules offer a reward to encourage certain behavior or compliance with legal rules. The common law of salvage, for example, offers rewards to salvors who recover ships or cargo in peril and thus encourages salvage.²³¹ Patent law offers patentees exclusive property rights in their inventions as a means of inducing innovations that otherwise would not have been developed.²³² Other mechanisms encourage private enforcement of underlying legal rules. For example, class action law awards fees to the class attorney successfully prosecuting a class-action case.²³³ *Qui tam* statutes allow private parties to bring lawsuits "on behalf of the government" and recover a share of the recovery.²³⁴ Antitrust law offers

^{228.} See, e.g., Barry E. Adler & George Triantis, Debt Priority and Options in Bankruptcy: A Policy Intervention, 91 AM. BANKR. L.J. 563, 564–65 (2017). For a proposal to incentivize managers' performance in bankruptcy by awarding them a portion of the debtor's unsecured debt, see Yair Listokin, Paying for Performance in Bankruptcy: Why CEOs Should Be Compensated with Debt, 155 U. PA. L. REV. 777, 832 (2007).

^{229.} See, e.g., JACKSON, supra note 9, at 206-08; Baird, supra note 15, at 230-31; Skeel, supra note 12, at 754-59.

^{230.} We know of one exception. See LoPucki, supra note 16, at 364. For different recommendations as to when law ought to use rewards or sanctions (generally "carrots or sticks"), see Gerrit De Geest & Giuseppe Dari-Mattiacci, The Rise of Carrots and the Decline of Sticks, 80 U. CHI. L. REV. 341, 366–73 (2013); and Brian Galle, The Tragedy of the Carrots: Economics and Politics in the Choice of Price Instruments, 64 STAN. L. REV. 797, 840–48 (2012).

^{231.} See, e.g., Joshua C. Teitelbaum, Inside the Blackwall Box: Explaining U.S. Marine Salvage Awards, 22 SUP. CT. ECON. REV. 55, 69–71 (2015).

^{232.} See Graham v. John Deere Co., 383 U.S. 1, 11 (1966) (explaining patent law's goal as providing incentives for "those inventions which would not be disclosed or devised but for the inducement of a patent"); Michael Abramowicz & John F. Duffy, *The Inducement Standard of Patentability*, 120 YALE L.J. 1590, 1596 (2011) (defending the inducement standard as the correct touchstone for understanding the award of patent rights).

^{233.} See, e.g., John C. Coffee, Jr., Entrepreneurial Litigation: Its Rise Fall and Future 26–29 (2015).

^{234.} See, e.g., Dayna Bowen Matthew, Tainted Prosecution of Tainted Claims: The Law, Economics and Ethics of Fighting Medical Fraud Under the Civil False Claims Act, 76 IND. L.J. 525, 528 (2001);

successful private plaintiffs treble damages as means of supplementing governmental enforcement of the antitrust laws.²³⁵ In all of these examples the prospective reward is variable rather than fixed. The size of the salvor's recovery depends on the value of the cargo recovered; the patentee's reward, on the commercial success of the invention; *qui tam* plaintiff's share, on the government's recovery; the class action attorney's fee, on the size of the plaintiff classes' recovery or the number of billable hours worked; and the successful antitrust plaintiff's recovery, on the extent of antitrust injury established. Whether variable or fixed, the reward encourages behavior or compliance with legal rules. There is no reason why a reward scheme should not operate in bankruptcy.

There is also historical precedent for rewarding creditors. In the 1920s and 1930s a few bankruptcy districts in effect offered a reward for filing involuntary petitions.²³⁶ They did so by appointing the attorney for the petitioning creditor to be the attorney for the receiver or trustee and allowing the attorney to earn high fees.²³⁷ As a formal matter the fees were paid to compensate the attorney post-petition. However, the prospect of high fees induced the attorney to provide a pre-petition service: the filing of the petition. Although courts probably did not intend this practice of appointment to encourage involuntary filings, it had that effect. The arrangement is loosely analogous to modern class action practice in which attorneys who file a class complaint are rewarded through appointment as lead counsel and thus allowed to earn large legal fees. As a formal matter, the class attorney's fees are paid for services rendered after the representative plaintiff files suit, reflecting work done in prosecuting suit on the class' behalf. However, because the attorneys representing plaintiffs who have filed suit are more likely to be given a share of this work, they are induced to file a class complaint in the first instance.238 A similar incentive operated among bankruptcy attorneys: The prospective of large fees encouraged them to seek creditors on whose behalf they would file an involuntary petition.

The historical record suggests that the implicit reward system was extremely successful at encouraging involuntary petitions. The number of involuntary petitions, which was dramatically higher than it is today,²³⁹ fell

Ann Woolhandler & Caleb Nelson, *Does History Defeat Standing Doctrine*?, 102 MICH. L. REV. 689, 725 (2004).

^{235.} See 15 U.S.C. § 15 (2012).

^{236.} See supra text accompanying notes 130-32.

^{237.} See supra note 131 and accompanying text.

^{238.} Notably, when Congress wanted to discourage the filing of class action securities litigation, one of the steps it took was to end the practice of giving a preference to the first attorney who filed a petition. *See* Private Securities Litigation Reform Act of 1995, Pub. L. No. 104-67, 109 Stat. 737; COFFEE, *supra* note 233, at 73–74.

^{239.} See supra Figure 2 and accompanying text.

sharply when this practice ended.²⁴⁰ Sufficiently generous rewards would undoubtedly encourage involuntary petitions today as well. If debtors wait too long to file voluntarily, such a reward system could potentially increase welfare by bringing debtors into bankruptcy sooner. These rewards offered for involuntary petitions need not displace any rewards offered to debtors to file voluntarily.

We recognize that reward systems raise legitimate concerns but believe that their benefits outweigh the costs. Moreover, we don't believe that the failure of the reward system applied in the early twentieth century proves otherwise. Critics argued that the attorneys did not really represent any real clients and used their control for their own ends. 241 They further argued that the practice wasted resources, encouraged corruption such as the bribing of clerks to gain information,242 and led to conflicts of interest and allowed the debtor to select the person who represents the creditors during the process.²⁴³ Although some of the criticisms might have been exaggerated, they almost certainly contain an element of truth. After all, investigations into bankruptcy practice led to a significant number of criminal convictions.244

In our view, the early twentieth century reward system failed largely because of its particular design (or lack of one). There are many ways one could design a reward system and the range of considerations make it unlikely that there is a uniquely best system. For concreteness, we advocate one design in particular: a monetary reward to the petitioning creditors that is based on the amount recovered by general creditors. The simplest approach would be to grant the petitioning creditors an additional general unsecured claim equal to some fraction of the total allowed unsecured claims.

To give the petitioning creditors some fraction, b, of the total recovery of general unsecured claims, the judge would need to give them a claim equal to the total value of all other general unsecured claims multiplied by b/(1-b). For example, if the total value of general unsecured claims was \$100,000 and the law wanted to give petitioning creditors an additional five percent of the recovery, the petitioning creditors would be awarded a claim for \$5,263. The petitioning creditor's share could decline as the total amount of claims increases just as the share of recoveries awarded to the Chapter 7 trustee declines as the total recovery for general unsecured creditors increases.²⁴⁵ One could more closely copy the compensation of the Chapter 7 trustee and base the percentage given to the petitioning creditors on the amount

^{240.} See supra note 145 and accompanying text.

See Donovan Report, supra note 127, at 2. 241.

^{242.} See id. at 1, 5.

^{243.} *Id.* at 18–19.

Id. at 48-50.

See 11 U.S.C. § 326(a) (2012). 245.

recovered. However, this would require a judicial valuation of assets in Chapter 11 in cases where our proposed system would not. 246

We recognize that our proposal would grant the petitioning creditors greater voting rights and thus greater control in Chapter 11. This greater voice is justified by the fact that our proposal gives petitioning creditors a greater stake in the bankruptcy's outcome in recognition of the service they performed. In cases where petitioning creditors abuse this voice to pursue illegitimate goals, courts can exercise their power to designate (disallow) votes.²⁴⁷

Ours is not the only reward system possible. In 1982 Lynn LoPucki proposed rewarding petitioning creditors with priority over the other creditors.²⁴⁸ Because of the petitioning creditor's priority, the rules of Chapter 11 would require that its claims be placed in a class separate from the general creditors and thus the petitioning creditor could not directly dictate the vote of the general creditor class.²⁴⁹ However, unless other creditors were given similar priority and placed in the same class as the petitioning creditor, the petitioning creditor could veto any consensual plan.²⁵⁰ LoPucki chose this reward form because he wanted to induce creditors to file an involuntary petition rather than using a state law filing to seek priority. However, current bankruptcy law allows other creditors to unwind priority obtained through a state court judgment by filing an involuntary petition and having the trustee invoke her power to avoid preferential transfers.²⁵¹ Bankruptcy law aside, LoPucki's proposal has its own problems. Because the priority granted by LoPucki's reward scheme could not be undone, it may provide an excessively large reward to creditors with large claims. This excessive reward could undermine the recoveries of the non-filing creditors and lead all large creditors to spend excessive time and money monitoring the debtor as each large creditor would want to be the first to file. In addition, LoPucki's priority system may provide little or no filing incentive for small creditors who might discover the debtor's insolvency.

Much of the criticism of the reward system used in the early twentieth century was that attorneys drove the bankruptcy process and did not act in the best interests of creditors. An analogy to class actions is again instructive.

^{246.} If the petitioning creditors would lose their additional claim upon bankruptcy's dismissal, petitioning creditors could unduly oppose dismissal and other unsecured creditors could unduly favor dismissal. Similar problems are created by § 507's bankruptcy-specific priorities and § 1111(b)'s treatment of non-recourse claims in Chapter 11. These problems are mitigated by judicial discretion in determining whether to dismiss a case. *Cf. id.* § 1112(b)(1) (instructing the court to consider "the best interests of creditors and the estate" when deciding whether to dismiss a case).

^{247.} See id. § 1126(e).

^{248.} See LoPucki, supra note 16, at 365.

^{249.} See 11 U.S.C. § 1122.

^{250.} *Id.* § 1129(a) (8) (requiring the unanimous consent of all impaired classes).

^{251.} Id. § 547.

Although the lead plaintiff sometimes is given "a share of class recovery above and beyond her individual claim," 252 most of the reward is given to the attorneys in the form of fees. The result is a system in which attorneys drive the litigation. 253 Similarly, attorneys were said to have played the dominant role in filing in the involuntary petitions back in the 1920s. 254 By rewarding the creditors instead of the attorney, our proposal incentivizes creditors to play a greater role in triggering a bankruptcy case. However, our change does not eliminate the agency problem because it is unlikely that all of the creditors would file the involuntary petition, and those that did file the petition are likely to pursue their own interests rather than those of the body of creditors as a whole. Moreover, creditors are likely to hire attorneys to file the petitions for them, and they may compensate the attorneys with contingency fees.

A more important method of mitigating the agency problem is to provide a financial reward instead of placing the filing party in control of the bankruptcy case. Rewards need not take the form of a cash payment. Nonmonetary rewards are useful when their value is a good proxy for the desired reward, and it would be difficult to determine the size of an optimal cash reward. For example, patent law gives an exclusive property right in the invention to the patentee, not a lump sum or recurring payment.²⁵⁵ The exclusive property right (the patent) enables the patentee to earn supracompetitive profits from exploitation of the patent over the patent's life. The more socially valuable the invention, the greater the value of the grant and more powerful the incentive. 256 Similarly, the hold-up power given to shareholders in Chapter 11 is more valuable when the firm's going concern value substantially exceeds its liquidation value, and this might serve as a proxy for the value of the bankruptcy filing.²⁵⁷ The appointment of the petitioning attorney as the attorney for the receiver may have also served this function if the amount of the attorney's post-petition work was greater when the involuntary petition was more socially valuable.

However, nonmonetary rewards can have efficiency costs. Exclusive rights such as patents or other intellectual property rights may create deadweight losses.²⁵⁸ Granting shareholders hold-up power can increase

^{252.} China Agritech, Inc. v. Resh, 138 S. Ct. 1800, 1811 n. 7 (2018) ("The class representative might receive a share of class recovery above and beyond her individual claim."); *see*, e.g., Cook v. Niedert, 142 F.3d 1004, 1016 (7th Cir. 1998) (affirming the class representative's \$25,000 incentive award).

^{253.} See COFFEE, supra note 233, at 26-27.

^{254.} See Donovan Report, supra note 127, at 1.

^{255.} See 35 U.S.C. § 154.

^{256.} See Ian Ayres & Lisa Larrimore Ouellette, A Market Test for Bayh-Dole Patents, 102 CORNELL L. REV. 271, 287–88 (2017).

^{257.} See, e.g., Adler et al., supra note 7, at 465.

^{258.} See Steven Shavell & Tanguy Van Ypersele, Rewards Versus Intellectual Property Rights, 44 J.L. & ECON. 525, 529–31 (2001). The alternatives to such nonmonetary rewards—such as the monetary prizes sometimes proposed as alternatives to intellectual property rights—also have

bargaining costs and may even lead to the inefficient liquidation of a firm with going concern value if the parties are unable to agree to a compromise. Critics of the system of appointing the filing attorney as the attorney of the receiver argued that this system allowed incompetent attorneys to be appointed and encouraged collusion between the debtor and the petitioning attorney.²⁵⁹ Although an explicit financial reward might still encourage some collusion, as it provides a way for the debtor to favor some creditors over others,²⁶⁰ it dramatically reduces the consequences of this collusion.

A significant problem with reward systems is that they may encourage undesirable behavior.²⁶¹ For example, critics of civil forfeiture laws argue that they not only encourage the police to fight crime but also encourage them to seize the property of innocent citizens.²⁶² In the involuntary bankruptcy context, this concern can take two forms. First, rewards could encourage involuntary petitions against debtors who do not belong in bankruptcy at all, and second, rewards could encourage involuntary petitions against debtors who would have arrived in bankruptcy anyway. Indeed, debtors could cause favored creditors to file an involuntary petition as a means of granting these creditors more favorable treatment.²⁶³ The seriousness of these problems depends on how well judges can police them. As noted in Part II, the law already grants judges the ability to dismiss petitions if the debtor doesn't belong in bankruptcy and to sanction the creditors who file such petitions. Our proposed reward system could be modified to permit judges to deny rewards when they are not deserved.

Current law gives debtors substantial protection against creditors dragging them into bankruptcy when they don't belong. Theory suggests that bankruptcy can increase the value of the firm long before it becomes either balance sheet or cash flow insolvent, because a heavy debt load can inhibit access to capital and distort the incentives of managers loyal to shareholders.²⁶⁴ However, the law has always demanded that the creditor demonstrate some form of debtor insolvency. Even this was not always enough. Prior to 1898 the law required an "act of bankruptcy" which in turn

distortionary costs. See John F. Duffy, The Marginal Cost Controversy in Intellectual Property, 71 U. Chi. L. Rev. 37, 42 (2004) (noting that the prize system proposed by Shavell and Ypersele creates distortionary losses because the prizes must be funded by taxation).

^{259.} See Donovan Report, supra note 127, at 101.

^{260.} See infra note 270 and accompanying text.

^{261.} See generally, e.g., NICHOLAS R. PARRILLO, AGAINST THE PROFIT MOTIVE: THE SALARY REVOLUTION IN AMERICAN GOVERNMENT, 1780–1940 (2013) (discussing the reasons the American government moved from a system of various forms of income to fixed salaries to remove the profit motive).

^{262.} See David Pimental, Civil Asset Forfeiture Abuses: Can State Legislation Solve the Problem?, 25 GEO. MASON L. REV. 173, 178 (2017) (noting financial incentive of law enforcement to raise revenues rather recognizing rights of property owners).

^{263.} See infra note 270 and accompanying text.

^{264.} See supra note 42 and accompanying text.

usually required balance sheet insolvency: The value of the firm's liabilities exceeded the value of its assets. ²⁶⁵ Today the law requires cashflow insolvency: The debtor is unable to pay its debts as they come due. ²⁶⁶

The change in law, which was intended to encourage involuntary filings, did not have its desired effect. ²⁶⁷ Our results suggest that further tinkering with the cash flow insolvency other rules of § 303 is unlikely to have much effect on its own because petitions are rarely dismissed for failing to meet these rules. The law could do more than merely tinker with the rules of § 303. It instead could adopt a broad standard that allowed the creditor to force the debtor into bankruptcy as long as the judge finds that bankruptcy is in the best interests of the estate. The law's unwillingness to adopt such a broad standard reflects a concern that judges lack the information necessary to make this determination. Alternatively, the law could create a rebuttable ground for involuntary relief, such as when unpaid debts remain after a corporate dissolution or cessation of business, or the individual debtor's unexplained disappearance. ²⁶⁸ However, these triggers may occur rarely, and by the time they do occur, it may be impossible to salvage much value.

It is possible that § 303's requirements have a large effect even though they are seldom litigated. The requirements and the threat of sanctions might dissuade creditors from even attempting to file. However, this seems highly unlikely because debtors only infrequently ask for sanctions.²⁶⁹ The risk of liability to a filing creditor therefore is remote. If our proposed rewards substantially increase the number of involuntary petitions and many of these petitions are undesirable, Congress could revise the provisions that allow for sanctions to force creditors to be more selective.

The use of financial rewards is in tension with bankruptcy's norm of equal treatment. Debtors could favor some creditors by inducing them to file an involuntary petition and thus claim the reward. However, this is just one of many ways that debtors can favor some creditors over others, and the law now asks judges to police against such favoritism. For example, bankrupt firms frequently pay additional amounts to some pre-petition creditors because these creditors will provide something of value during bankruptcy.²⁷⁰ In the case of critical vendor orders, this new value takes the form of goods or services. In the case of roll-ups, this new value takes the form of new credit. Judges asked to bless these orders must assess the value provided relative to the additional amount that the creditor seeks to be paid. Similarly, one could

^{265.} See supra notes 68-69 and accompanying text.

^{266.} See 11 U.S.C. § 303(h)(1) (2012).

^{267.} See supra notes 144-50 and accompanying text.

^{268.} See Block-Lieb, supra note 16, at 854.

²⁶q. See supra notes 184-86 and accompanying text.

^{270.} See, e.g., Richard M. Hynes & Steven D. Walt, Inequality and Equity in Bankruptcy Reorganization, 66 U. KAN. L. REV. 875, 875–76 (2018); David A. Skeel, Jr., The Empty Idea of "Equality of Creditors," 166 U. P.A. L. REV. 699, 717 (2018).

ask judges to determine that the reward paid to the petitioning creditors is justified by the additional recovery that the earlier filing secured. However, this task may be somewhat harder than the task of valuing the benefit conferred by critical vendor orders and roll-ups because in those cases the judge can assess the reaction of the other creditors. The consent or objection of these creditors is evidence of the impact of proposed financing arrangements on the value of their claims. If the proposed arrangements really do make all creditors better off, creditors have little reason to object. By contrast, when a petitioning creditor asks for a reward, the involuntary petition will have already conferred its benefit, and the other creditors will have little reason to consent.

Our discussion of the incentives to file a bankruptcy petition assumed a firm with only equity and general unsecured debt. The capital structures of real firms are much more complicated. Most notably, many firms have substantial secured debt that enjoys priority over unsecured debt.271 Although bankruptcy can sometimes offer benefits to secured creditors, ²⁷² it is generally thought of as an unsecured creditors' remedy. In fact, secured creditors cannot initiate an involuntary bankruptcy unless the value of their claims exceeds the value of their collateral, 273 effectively giving them an unsecured claim.²⁷⁴ In some cases the secured creditor will take steps to make it very difficult for the debtor to file voluntarily. For example, the secured creditor may demand provisions in the firm's organizational documents that prohibit a bankruptcy filing without the consent of directors that the secured creditor appoints or votes of shares that the secured creditor owns.²⁷⁵ Courts are often hostile to these techniques, finding them covert waivers of access to bankruptcy and as such against public policy.²⁷⁶ It is unsettled whether contractual arrangements that give a creditor exclusive control over the

^{271. 11} U.S.C. §§ 725, 1129.

^{272.} See, e.g., Melissa B. Jacoby & Edward J. Janger, Ice Cube Bonds: Allocating the Price of Process in Chapter 11 Bankruptcy, 123 YALE L.J. 862, 918–22 (2014).

^{273. 11} U.S.C. § 303(b) (requiring that the total value of claims exceed the total value of liens by some threshold amount).

^{274.} Bankruptcy law would, in fact, split their undersecured claim into a secured and an unsecured claim. See id. § 506.

^{275.} For a description of the strategies that secured creditors have employed, see Lynn M. LoPucki, *Contract Bankruptcy: A Reply to Alan Schwartz*, 109 YALE L.J. 317, 334–37 (1999).

^{276.} See Cont'l Ins. Co. v. Thorpe Insulation Co. (In re Thorpe Insulation Co.), 671 F.3d 1011, 1026 (9th Cir. 2012) ("This prohibition of prepetition waiver has to be the law; otherwise, astute creditors would routinely require their debtors to waive." (quoting Bank of China v. Huang (In re Huang), 275 F.3d 1173, 1177 (9th Cir. 2002))); Klingman v. Levinson, 831 F.2d 1292, 1296 n.3 (7th Cir. 1987) (stating in dictum that "[f]or public policy reasons, a debtor may not contract away the right to a discharge in bankruptcy"); Fallick v. Kehr (In re Fallick), 369 F.2d 899, 904 (2d Cir. 1966) (stating in dictum that "an advance agreement to waive the benefits of the [Bankruptcy] Act would be void").

debtor's access to bankruptcy are valid.²⁷⁷ However, if provisions in corporate bylaws requiring a senior creditor's consent are enforceable, an involuntary petition would be the debtor's only route into bankruptcy.

Whether involuntary bankruptcy should be encouraged in these circumstances depends in part on whether debtors should be able to waive their right to file for bankruptcy or contract for their resolution mechanism.²⁷⁸ Those who believe that debtors should be able to contract for their desired resolution mechanism in advance may worry that a system that encourages involuntary petitions undermines this ability. We recognize this criticism but note that our proposed mechanism only encourages involuntary petitions to the extent that these petitions will result in a substantial recovery for unsecured creditors. We also note that a system that encourages involuntary petitions could make courts more willing to uphold waivers of the right of a debtor to file voluntarily. As noted by Professor LoPucki, "the most common [reason courts give for rejecting a debtor's attempt to waive the right to file voluntarily] is to avoid prejudice to non-signing unsecured creditors."²⁷⁹ Enhancing the role of involuntary petitions undercuts this argument by allowing unsecured creditors to protect themselves.

Many bankrupt estates will have no assets available for distribution to general creditors, and our proposal would not compensate the petitioning creditors in these cases. The alternative would be to fund their reward from the returns of secured creditors or the public fisc.²⁸⁰ Neither source of the reward is desirable. One could argue in favor of allowing a petitioning unsecured creditor to recover from a secured creditor's collateral by analogy to § 506(c)'s collateral surcharge. This section allows a trustee to recover expenses incurred when preserving a secured creditor's collateral to the extent that these actions conferred a benefit upon the secured creditor.²⁸¹ A timely involuntary bankruptcy filing could confer benefits upon a secured creditor either through the court's supervision of the debtor's action or by allowing the secured creditor to dispose of its collateral more efficiently.

^{277.} To date no circuit has decided the question. The Fifth Circuit recently held that a debtor could not voluntarily file for bankruptcy without the consent of a preferred shareholder as required by the debtor's organizational documents. See Franchise Servs. of N. Am., Inc. v. U.S. Tr. (In re Franchise Servs. of N. Am., Inc.), 891 F.3d 198, 203 (5th Cir. 2018). In doing so the court emphasized that the shareholder did not have a significant debt claim. See id. at 212. It therefore refused to decide whether a shareholder's consent required by the debtor's corporate charter is enforceable when the shareholder is controlled by a creditor. See id. at 205.

^{278.} See, e.g., LoPucki, supra note 275, at 338; Robert K. Rasmussen, Debtor's Choice: A Menu Approach to Corporate Bankruptcy, 71 Tex. L. Rev. 51, 56 (1992); Alan Schwartz, Bankruptcy Contracting Reviewed, 109 YALE L.J. 343, 346–47 (1999); Alan Schwartz, A Contract Theory Approach to Business Bankruptcy, 107 YALE L.J. 1807, 1811 (1998).

^{279.} See LoPucki, supra note 275, at 338.

^{280.} We acknowledge that one can make a case for rewarding petitioning creditors when general unsecured creditors receive nothing but there is some distribution to priority unsecured claims such as unpaid wages, employee benefits, and consumer deposits. 11 U.S.C. § 507(a)(4) (2012).

^{281.} *Id.* § 506(c).

Moreover, just as the secured creditor must rely on the trustee to preserve the collateral, a fully secured creditor must rely on unsecured or undersecured creditors to file an involuntary petition because § 303 requires that the petitioning creditors have claims in excess of the total value of their liens.²⁸² However, the fully secured creditor does not need an involuntary petition to force the debtor into bankruptcy. It can instead threaten to foreclose on its collateral. An involuntary petition does not give the fully secured creditor a benefit it could not otherwise obtain for itself by inducing the debtor to file a voluntary petition.

There is some precedent for the public finance of litigation. Although class attorneys in American class actions are compensated from funds paid by the defendant, in other countries class attorneys are compensated from government funds. 283 There is a good reason to fund bankruptcy rewards only from the debtor's bankruptcy estate. In the typical involuntary filing, creditors alone stand to benefit from triggering a bankruptcy case: A bankruptcy proceeding preserves the debtor's assets from which their claims can be satisfied. There is no public interest vindicated in the proceeding.²⁸⁴ A bankruptcy filing instead involves private enforcement of private interests. For this reason, funding creditors' rewards from an external source subsidizes filing creditors without yielding an offsetting social benefit. By contrast, class action litigation sometimes involves the private enforcement of public norms. The enforcement of public norms might have sufficient value to justify funding the litigation from an external source. Thus, unsurprisingly, some countries fund certain class action litigation from tax revenues.²⁸⁵ Debt collection, not the enforcement of public norms, is at heart of an involuntary bankruptcy case.

There are problems with rewarding those who file involuntary petitions even in cases in which the debtor has assets. Although insufficiently generous rewards are ineffective, overly generous rewards create their own problems. First, overly generous rewards create distributional concerns because they divert resources for those the system is trying to help. Second, rewards are designed to cause creditors or attorneys to spend resources monitoring the debtor to determine when to file an involuntary petition. However, if the rewards are too generous, too many resources will be devoted to this purpose. One sees similar problems in other contexts. For example, patent scholars

^{282.} Id. § 303(b).

^{283.} See, e.g., Law Society Act (Class Proceedings Fund), R.S.O. 1990, c. L.8, s. 59.1(1) (Can.); An Act Respecting the Class Action, R.S.Q. 1978 c. R-2.1 (Can.). For the predominance of public financing of class actions in Québec, see Catherine Piche, Public Financiers as Overseers of Class Proceedings, 12 N.Y.U. J.L. & BUS. 779, 780 (2016).

^{284.} For a proposal that bankruptcy law be reformed to take into account a variety of public values, see generally Melissa B. Jacoby, *Corporate Bankruptcy Hybridity*, 166 U. PA. L. REV. 1715 (2018) (recommending that Chapter 11 be reformed to reflect a "public-private partnership").

^{285.} See supra note 283 and accompanying text.

worry that overly generous patents lead to "patent race[s],"286 and overly generous salvage rewards can cause too many vessels to search for ships in distress.287

Setting an appropriate cash reward would be very difficult. A fixed amount would likely be too small in cases with few assets and too large in cases with many. Moreover, a flat bonus is indifferent to the value of the debtor's assets preserved by a timely involuntary filing. It thereby limits the creditors' incentive to file at the point that maximizes the value of the assets preserved. We believe that our proposal to tie the reward to the amount recovered by unsecured creditors addresses these concerns. Alternatively, the law could grant the judge substantial discretion in setting the reward just as judges now enjoy discretion when approving the attorneys' fees in a class action settlement.²⁸⁸ However, judges would face a difficult task in doing so.²⁸⁹ If the court is trying to maximize the recovery of the general creditors, it must balance the cost of the reward against the additional recovery of assets from an earlier filing. To do so, the court must estimate how much additional recovery a reward would generate. This is a hard task, and one could argue that the additional recovery is likely to be guite small. A reward may not lead to a substantially earlier filing as the debtor may have voluntarily filed anyway. Even if it does, the earlier filing may not significantly increase aggregate recovery. Choosing the appropriate percentage of unsecured creditor recoveries to grant to the petitioning creditors raises these same concerns, but it avoids the cost of litigating the matter in each case.

We recognize that general creditors may lack the information necessary to determine when an involuntary petition is desirable or the resources to find this information. Moreover, when the benefit of an early filing is greatest, as it is when a bankruptcy filing can preserve going concern value, the debtor's (or manager's) incentive to file is most obvious. Even when a creditor does identify a debtor who belongs in bankruptcy, the reward must be sufficient to induce the creditor to begin an involuntary bankruptcy proceeding instead of

^{286.} See generally, e.g., Henry Koda, The Global Patent Race, 24 INTELL. PROP. & TECH. L.J. 21 (2012) (explaining that China has been providing financial support for increased patent applications, possibly at the cost of lower quality inventions). The patent system itself includes several features to channel patent racing toward socially desirable ends, such as reducing the private rents associated with the patent and accelerating the time at which the technology enters the public domain. See John F. Duffy, Rethinking the Prospect Theory of Patents, 71 U. CHI. L. REV. 439, 444–45 (2004).

^{287.} William M. Landes & Richard A. Posner, Salvors, Finders, Good Samaritans, and Other Rescuers: An Economic Study of Law and Altruism, 7 J. LEGAL STUD. 83, 105–06 (1978). Admiralty law allows a salvage award only for successful salvage and limits the amount of the award to the value of the property salvaged. By restricting the size of the award, the latter limitation discourages an inefficient level of rescue activity by salvors. See id. at 102–04.

^{288.} See, e.g., 28 U.S.C. § 1712(b) (2012).

^{289.} For a similar concern expressed with respect to monetary rewards given to induce the debtor to file voluntarily, see Baird, *supra* note 15, at 229.

simply pursuing a non-bankruptcy remedy or demanding a side-payment for the debtor. Bankruptcy's preference law mitigates but does not eliminate this problem.²⁹⁰ If a creditor does not push the debtor into bankruptcy and another creditor later does so, the first creditor may be forced to give up any payments that she received from the debtor.²⁹¹ However, the first creditor still may decide to receive payment if she determines that the payment is either immune from preference attack or, if a voidable preference, that a bankruptcy trustee will choose not to recover it. Notably, our proposed reward system does not depend on the size of the petitioning creditor's claim, and so even small creditors would have an incentive to file involuntary petitions.²⁹²

One may also argue that involuntary filings aren't needed to maximize creditor recoveries because secured creditors can, and do, push debtors into bankruptcy by threatening to foreclose. There is some merit to this argument, but it overlooks the fact that the secured creditor's priority makes its interests very different than those of the unsecured creditors. As long as the value of the firm's assets substantially exceeds the value of its claim, the secured creditor has little reason to push the debtor into bankruptcy. As a result, firms may arrive in bankruptcy long after any value that would have been conferred upon the unsecured creditors has been dissipated.²⁹³

Problems with a bankruptcy reward scheme do not make it useless. A strong case can be made that the perfect reward scheme is the enemy of a good one. If the debtor's incentive to file voluntarily is not carefully calibrated to maximize creditor recovery, it may leave substantial room for involuntary filings to increase welfare. This may be especially true for corporate liquidations where there is little incentive for the entrepreneur to file before all of the assets have dissipated. Rewarding creditors for timely filing an involuntary petition, when the debtor otherwise will not file, can increase recoveries. Currently, involuntary petitions play a disproportionate role in corporate Chapter 7 cases, accounting for about 3.5 percent of such cases. However, this is still far below the rate of involuntary petitions in the early

^{290.} Preference law does not deter a creditor from pursuing a non-bankruptcy remedy or receiving a side-payment. The trustee might not discover the preference or choose to pursue it. The only sanction the Bankruptcy Code imposes on the recipient of a preference is disallowance of the transferee's claims if the transferee refuses to return the property transferred or its value. See 11 U.S.C. § 506(d). See generally John C. McCoid II, Bankruptcy, Preferences, and Efficiency: An Expression of Doubt, 67 VA. L. REV. 249 (1981) (discussing the ineffectiveness of preference law to deter preferences).

^{291.} See 11 U.S.C. § 547.

^{292.} The Bankruptcy Code does not allow non-creditors to file involuntary petitions. *Id.* § 303. We leave open the question of whether they should be allowed to do so and whether courts should consider petitioners to be creditors because of our proposed rewards.

^{293.} See generally, e.g., Arturo Bris et al., The Costs of Bankruptcy: Chapter 7 Liquidation versus Chapter 11 Reorganization, 61 J. FIN. 1253 (2006) (finding that general unsecured creditors received approximately one cent on the dollar in corporate bankruptcies filed under Chapter 7 in the Southern District of New York).

twentieth century. Rewarding the filing of an involuntary petition might produce filings that more closely approximate the optimal initiation of bankruptcy than relying on voluntary petitions alone.

The difficulty of fashioning an optimal reward system is not peculiar to bankruptcy. It is present elsewhere in law. Modern class action litigation provides a notable instance of the problem. The optimal fee awarded the class attorney settling or successfully litigating a class action suit encourages litigation of meritorious claims and maximizes the amount settled or awarded in litigation. The information needed to determine the optimal attorney fees is unlikely to be disclosed by passive class members or self-serving class attorneys, or otherwise available to courts. Scholars rightly note that the fee system leads to abuses in which lawyers act in their own interests instead of those of class members and that sometimes unmeritorious claims can lead to lucrative settlements.²⁹⁴ On the other hand, they also correctly maintain that without class actions some meritorious claims could never be brought.²⁹⁵ Similarly, critics argued that the bankruptcy reward system tried in the early part of the twentieth century rewarded lawyers who did not really represent any clients and instead used the system for their own benefit.296 Just as bankruptcy lawyers were once accused of bribing creditors to serve as a petitioning creditor,²⁹⁷ modern class lawyers are sometimes sanctioned for paying kickbacks to their lead plaintiffs.²⁹⁸ More generally, class lawyers may fashion settlements that maximize their fees at the expense of the settlement amounts. The system of rewards for filing involuntary petitions in place in the early twentieth century could have led to the inefficiency and abuse that caused the abandonment of the practice. On the other hand, subsequent history suggests that without some system of rewards, many meritorious involuntary petitions will never be filed, and the race to the assets will not be stopped until the assets are dissipated. Given that we trust courts to make similar determinations in the critical vendor and roll-up contexts, maybe we should trust courts to do it here as well.

V. CONCLUSION

Involuntary bankruptcy needs revitalization. Once the exclusive route to bankruptcy,²⁹⁹ involuntary petitions account for just 0.05 percent of all bankruptcy petitions and just 2.2 percent of corporate bankruptcy petitions.³⁰⁰ Even these meager numbers overstate the current role of

^{294.} See COFFEE, supra note 233, at 136.

^{295.} Id. at 3.

^{296.} See Donovan Report, supra note 127, at 101.

^{297.} See id.

^{298.} Cf. Greg Risling, Class-Action Firm Agrees to Pay \$75 Million to Settle Kickback Case, WASH. POST, June 17, 2008 (settlement in exchange for government dismissing charges against firm).

^{299.} See McCoid, supra note 290, at 260 n.74; see also GLENN, supra note 4, at 310.

^{300.} See supra note 24 and accompanying text.

involuntary bankruptcy because most petitions are dismissed before a court even enters an order for relief.³⁰¹ This is particularly true when the debtor is an individual, as more than 75 percent of these petitions are dismissed; in the Central District of California, the dismissal rate is 95 percent.³⁰²

One step to revitalize involuntary bankruptcy is to reduce the number of petitions that lack a valid bankruptcy purpose. We show that the absence of an attorney listed on the petition strongly predicts dismissal,³⁰³ and we argue that dismissed petitions are likely to have lacked a valid bankruptcy purpose. Therefore, we argue that Congress should require an attorney's signature on an involuntary bankruptcy petition.

The more important step in involuntary bankruptcy's revitalization is increasing the number of involuntary petitions filed against debtors who otherwise would wait too long to file voluntarily. Efforts to encourage involuntary petitions by tinkering with the governing standards are unlikely to produce the desired result.³⁰⁴ There are two reasons for our pessimism. First, we find very few cases in which these standards play a role in dismissals of involuntary cases.³⁰⁵ Second, Congress tried a version of this strategy in 1978, and it failed.³⁰⁶

Congress could increase the number of involuntary petitions by amending the Bankruptcy Code to allow courts to reward those who file them. The idea of bankruptcy bounties has a historical antecedent. During the heyday of involuntary petitions, many courts rewarded the attorney who successfully filed an involuntary petition through additional compensation from serving as the trustee or receiver's counsel.307 Although the practice probably contributed to the high number of involuntary petitions, it created a potential conflict of interest between the creditor and its attorney.308 Because the attorney's compensation ultimately depended on the debtor, the involuntary filing did not reliably serve the interests of creditors. Bankruptcy practice therefore ultimately rejected this approach. We argue that a better designed system would greatly reduce the problems with the earlier system. More specifically, we argue that bankruptcy law should grant petitioning creditors additional unsecured claims when they file involuntary petitions against corporate debtors.³⁰⁹ By bringing firms into bankruptcy sooner, a reward scheme could increase creditor recoveries and social welfare.

- 301. See supra Table III.5 and accompanying text.
- 302. See supra Table III.2 and accompanying text.
- 303. See supra Tables III.5, III.6 and accompanying text.
- $304. \quad \textit{See} \ 11 \ U.S.C. \ \S \ 303 \ (2012).$
- 305. See supra Table III.7 and accompanying text.
- 306. See supra notes 144-50 and accompanying text.
- 307. See supra notes 127-28 and accompanying text.
- 308. See supra notes 241-43 and accompanying text.
- 309. See supra notes 245-46 and accompanying text.

APPENDIX

This appendix reports some additional facts about involuntary bankruptcy that are not central to our thesis but may interest some readers.

A. AGGREGATE FJC STATISTICS

Creditors can only file an involuntary petition under either Chapter 7 or Chapter 11.310 At first glance, it appears that creditors disproportionately select Chapter 11. While less than one percent of all bankruptcy filings are under Chapter 11, over 17 percent of involuntary filings are under Chapter 11. However, this is driven by the fact that involuntary cases are disproportionately business cases. If we look within case types the preference for Chapter 11 disappears or is even reversed. Over 50 percent of all entity filings are under Chapter 11, but just 27 percent of involuntary entity filings are under that chapter. Even within the set of natural person cases, involuntary cases are drawn disproportionately from those with primarily business debts. The Chapter 11 rate for these cases is about same for all filings (5.36 percent) as for involuntary filings (5.61 percent).

	Ch. 7	Ch. 11	Other	Total
All Invol. Petitions	82.60%	17.40%	О	5,512
All Petitions	67.84%	0.87%	31.28%	11,244,521
Indiv. Debtor-Invol.	96.25%	3.75%	О	2,211
Indiv. Debtor–All	68.11%	0.23%	31.66%	11,103,314
Entity Debtor–Invol.	73.42%	26.58%	О	3,156
Entity Debtor–All	46.99%	51.56%	1.45%	137,076

Although the creditors choose the bankruptcy chapter under which their petition is filed, the debtor can move to convert the case to another chapter. However, we find very few converted cases. The FJC data reveals the original chapter under which the petition was filed and the terminal chapter (or the current chapter if the bankruptcy is still active). Of the 959 involuntary petitions filed under Chapter 11, 94.7 percent (908) remained in or finished in that chapter, and 5.3 percent (51) finished in Chapter 7. Of the 4,553 petitions that were filed under Chapter 7, 96.5 percent (4,393) remained in or finished in that chapter, 3.5 percent (159) finished in Chapter 11, and one case finished in Chapter 13. There were no missing records. For entities the conversion rate from Chapter 7 to 11 was only slightly higher at 6.1 percent.

Appendix Table 2	Original and	Ending Chapters	of Involuntary Cases
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	All Involuntary				
		Current or Closing Chapter			
		Ch. 7	Ch. 11	Ch. 13	Total
Original	Ch. 7	4,393	159	1	4,553
Chapter	Ch. 11	51	908	О	959
	Total	4,444	1,067	1	5,512
		Entity D	ebtor		
		Ch. 7	Ch. 11	Ch. 13	Total
Original	Ch. 7	2,187	130		2,317
Chapter	Ch. 11	48	791		839
Chapter	Total	2,235	921		3,156
	Individual Debtor				
		Ch. 7	Ch. 11	Ch. 13	Total
Original	Ch. 7	2,100	27	1	2,128
Original Chapter	Ch. 11	2	81	0	83
Gnapter	Total	2,102	108	1	2,211

Cases that are dismissed still appear to linger in bankruptcy for weeks to months. We drop cases that are filed in 2017 and count the duration of the case as the time between the filing of the involuntary petition and the closing date (the FJC data does not provide the dismissal date). A little over ten percent of all dismissed cases are closed within 30 days, and this rises to 43 percent by 90 days, and 78 percent by 180 days. For petitions filed against individuals, case closure occurs a bit quicker, with 53 percent closed by 90 days and 83 percent by 180 days. For entities, 30 percent were closed within 90 days and 70 percent within 180 days.

Appendix Table 3. Time to Case Closure for Cases that Are Dismissed

	All	Individual Debtor	Entity Debtor
30 days or Less	12.2%	14.7%	7.8%
31 to 60 days	16.8%	22.5%	10.0%
61 to 90 days	14.3%	16.1%	12.1%
91 to 180 days	20.0%	18.5%	22.1%
181 days to 1 year	14.3%	11.3%	18.4%
1 year to 2 years	9.2%	6.2%	13.1%
More than 2 years	11.8%	9.4%	15.0%
Missing Closure Date	1.4%	1.4%	1.3%
Total	2,993	1,642	1,264

B. RANDOM SAMPLE

We recorded the sum of the petitioning creditors' alleged claims.³¹¹ The median value of claims was \$200,821; \$73,100 for individual debtors and \$516,849 for entities. This is well above the inflation-adjusted \$10,000 required by the statute (now \$16,750),³¹² but it also suggests that most involuntary petitions are not filed by creditors with extremely large petitions. However, our sample does include some very large claims, pulling the average claim up to over five million dollars.

Appendix Table 4. Total Claims Alleged by Petitioning Creditors

	All	Entity Debtor	Indiv. Debtor	Indiv. Debtor and all Indiv. Petitioners
25 th Perc.	\$52,000	\$132,000	\$27,000	\$19,500
Median	\$200,821	\$516,849	\$73,100	\$40,000
75 th Perc.	\$1,043,278	\$1,697,808	\$443,759	\$101,300
Mean	\$5,295,630	\$8,023,211	\$2,327,885	\$674,328
Number	332	173	159	97

Consistent with the results from the aggregate data, the dismissed cases lingered in bankruptcy for a significant amount of time. Even if we restrict our attention to those cases in which the court never issued an order for relief or vacated such an order, just 39 percent of these cases were dismissed within 60 days, and almost 25 percent of these cases lasted more than 180 days. Appendix Table 5 does not include the oversampled corporate cases.

^{311.} We lose eight observations because the claim was unavailable, non-sensical (a \$10\$ billion claim against the U.S. Treasury), or irrelevant (general partner filing against partnership).

^{312. 11} U.S.C. § 303; *see* Revision of Certain Dollar Amounts in the Bankruptcy Code Prescribed Under Section 104(a) of the Code, 84 Fed. Reg. 3488 (Feb. 12, 2019) (the dollar amount of \$16,750 is effective from April 1, 2019).

Appendix Table 5. Duration	on of Cases w	with No Order	for Relief
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	Number	Percent	Cumulative
30 Days or Less	33	17%	
31 to 60 days	39	20%	37%
61 to 90	38	20%	57%
91 to 180	41	21%	78%
181 to 1 year	17	9%	87%
1 to 2 years	16	8%	96%
More than 2 years	9	5%	99%
Still Active	1	1%	
Total	194		

We also coded the duration of the cases that had an order for relief. The median time within which a case is closed is a little over three years. Surprisingly, over 20 percent of the cases appeared to still be open. Not all of these cases were filed recently. In fact, two were filed in 2008 and had not been closed by the beginning of June 2018.

Appendix Table 6. Duration of Cases with an Order for Relief

	Number	Percent	Cumulative
Less than 180 days	9	6%	
180 days to 1 year	18	12%	18%
1 to 2 years	19	13%	32%
2 to 3 years	21	14%	46%
3 to 4 years	22	15%	61%
4 to 5 years	10	7%	68%
More than 5 years but closed	19	13%	81%
Still active	28	19%	100%
Total	146		