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Bankruptcy's Rarity: An Essay on Small Business Bankruptcy in the United States

Edward R. Morrison[†]

I. Introduction

Few failing businesses in the United States invoke the Federal Bankruptcy Code to reorganize or liquidate. For every one hundred small businesses that fail, at most 20 file a petition under the federal bankruptcy law. What explains the rarity of bankruptcy filings in the United States? Are they rare because, for most firms, less expensive alternatives are available under state law? If so, what makes these alternatives less expensive to some firms and not others? What features of state law, federal law, and a firm's capital structure make the U.S. Bankruptcy Code a law of last resort for most failing firms?

I explore these questions in this short essay. They have been the focus of my work, and the work of colleagues, during the past few years.¹ The questions are relevant to an international symposium such as this because they highlight a dynamic present in any legal system that regulates insolvency. In every nation, failing firms have options. One is a proceeding under national insolvency laws. Another is an agreement or "workout" among creditors. Another may be the law of secured transactions, which allows creditors to seize assets of a troubled firm. There may be many other options, depending on the legal system. A firm's choice among these "distress options" will depend on internal and external factors. The primary internal factor is the firm's capital structure—that is, the composition of its debts relative to its assets. Some options are better suited to firms with complicated capital structures. External factors are important as well. Some distress options are more expensive than others because they require greater court involvement, more extensive documentation, or more probing investigation by creditors.

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¹ See Edward R. Morrison, "Bargaining Around Bankruptcy: Small Business Distress and State Law," working paper (2008) [hereinafter Morrison, *Bargaining Around Bankruptcy*]; Edward R. Morrison, "Small Business Bankruptcy and the Bankruptcy Abuse and Consumer Protection Act of 2005," A Report to the United States Small Business Administration (2007) [hereinafter Morrison, *Small Business Bankruptcy*]; Ronald J. Mann, *An Empirical Investigation of Liquidation Choices of Failed High-Tech Firms*, 82 Wash. U. L. Q. 1375 (2004).

A nation's formal bankruptcy or insolvency code, then, is only one part—perhaps a small part—of the overall set of laws governing the resolution of distress in small businesses. This observation has three implications.

First, when a nation reforms its insolvency laws, it should anticipate several different responses. The reform will undoubtedly affect the administration and outcomes of cases that are commenced under the insolvency law. At the same time, the reform will alter the attractiveness of the insolvency law relative to alternative modes of liquidation and reorganization. If reform increases the costs of proceedings under the insolvency laws, businesses and their creditors will find it more attractive to restructure the firm's indebtedness voluntarily, perhaps through a "workout." Alternatively, businesses and creditors may find it more attractive to liquidate or auction off the business using the ordinary remedies available to creditors—a foreclosure, or a lawsuit followed by a foreclosure. As businesses and their creditors gravitate toward these alternative distress options, the effects of insolvency reform will be dampened, because fewer businesses will be using the insolvency laws. And there will be another dampening effect: if insolvency laws become highly unattractive, businesses will adjust their capital structures to reduce the need for such laws. A business with only a handful of major creditors can more easily reach a "workout" than one with a wide range of creditors.

This complexity points to a second implication: insolvency law has a limited role to play in the distress of small businesses. It offers a mechanism for resolving distress when the business and its creditors cannot resolve it on their own. But in a surprisingly large number of small business cases, they are in fact able to resolve it on their own. Thus, when we think about the appropriate design of insolvency law, we need to ask: What kinds of firms need this kind of law? My research suggests that it may be needed by relatively large firms that have multiple senior lenders. It may also be needed by firms that have lost the trust of their creditors, who suspect that the owners have been hiding information.

This leads to a final implication: empirical research is essential to any effort to design optimal insolvency law. Once we identify firms that need insolvency law, we need to watch their behavior when these laws are reformed. If insolvency laws become too costly or too cumbersome, these firms will "vote with their feet" and use alternatives, even if the alternatives have their own disadvantages. By watching the behavior of firms, we can determine when insolvency reforms work well and when they do not.

The remainder of this essay will present a series of figures, drawn from prior work. My goal is to establish three points: (1) federal bankruptcy filings are uncom-

mon in the United States, (2) the attractiveness of the federal code depends on the complexity of a firm's capital structure, the firm's relationship with senior lenders, and the laws governing alternative insolvency procedures, and (3) there is still great uncertainty surrounding the reasons why some firms do and most do not use federal bankruptcy law.

II. The Rarity of Bankruptcy Filings

Figure 1 presents the central observation of this essay: the rarity of federal bankruptcy filings in the United States. This figure draws on small-business data collected during the years 2004 and 2006 by Dun & Bradstreet (D&B), a credit-reporting bureau.² D&B gathers detailed information about any business that has or may soon borrow money from a bank or trade vendor. Figure 1 shows that federal bankruptcy filings account for only three to four percent of all business closures. When the definition of "closure" is narrowed to include only businesses that closed at a point in time when they were financially distressed, the percentage rises to around twenty percent among corporations and thirteen percent among non-corporate entities.

<Figure 1 should appear here.>

III. Bargaining Around Bankruptcy: Internal and External Factors

Why are bankruptcy filings rare in the United States? Standard texts portray federal bankruptcy law as an inevitable choice of a distressed business.³ Once it becomes distressed, the business faces a group of uncooperative creditors, each of whom is rushing to be the first to bring suit and foreclose on assets. This race is costly because it generates duplicative collection efforts. It is also wasteful because these collection efforts could lead to dismemberment of a viable firm. Faced with a destructive race among creditors, the distressed business will invoke the protection of the Federal Bankruptcy Code, which stays all creditor collection efforts and gives the business time to sort out its affairs and either conduct an orderly liquidation or reorganization. Yet, we see just the opposite in practice: most distressed firms never file for bankruptcy. Bankruptcy is far from inevitable – it is exceptional. Why? This section proposes several theories and offers evidence consistent with each. The evidence is drawn from D&B data on distressed small businesses that either filed a fed-

² These data are described in detail in Morrison, *Small Business Bankruptcy*, *supra* note 1, at 18-23.

³ *See, e.g.*, DOUGLAS G. BAIRD, THOMAS H. JACKSON, & BARRY E. ADLER, *BANKRUPTCY: CASES, PROBLEMS, AND MATERIALS* 1-3 (Foundation Press rev. 3d ed. 2007); THOMAS H. JACKSON, *THE LOGIC AND LIMITS OF BANKRUPTCY LAW* 7-19 (Harvard Univ. Press 1986).

eral bankruptcy petition (“bankruptcies”) or shut down without filing a petition (“nonbankruptcy closures”) during calendar years 2004 and 2006. With one exception, noted in subsection C, the D&B data are a nationally representative, random sample of distressed small businesses.⁴

A. Capital Structure

Begin first with the uncontroversial observation that bankruptcy proceedings are expensive. Among small businesses with assets worth less than \$1 million,⁵ the median firm incurs professional fees and other direct bankruptcy costs that consume at least five percent of asset value.⁶ Among businesses with assets worth less than \$100,000, direct costs burn twenty-three percent of asset value. The costliness of federal bankruptcy law induces distressed firms to search for cheaper alternatives. In the United States and elsewhere, there are many alternatives.⁷ Some are contractual—the firm could reach a consensual workout agreement with its creditors.⁸ Some are based on trust law—the firm could assign its assets to a trustee, who would then auction them and distribute the proceeds to creditors. In the United States, that procedure is called an “assignment for the benefit of creditors.” Other procedures are based on the law of secured transactions—the firm could permit a secured lender to foreclose on assets. This is called a “friendly foreclosure.” Whatever the legal origin, there are many alternatives to a formal, federal bankruptcy filing. And these alternatives may be cheaper than a federal filing.

To whom will they be cheaper? They will often be cheaper to firms with simple capital structures, that is, firms with a small number of lenders, each of whom holds a claim with well-defined priority. The smaller the number of lenders, the lower the cost of coordination. It is well known that coordination costs—and the risk that a creditor will hold up the bargaining process in order to extract a greater pay-

⁴ Morrison, *Small Business Bankruptcy*, *supra* note 1, at 18-23 (describing the process by which these data were gathered).

⁵ The median small business, in or out of bankruptcy, is actually much smaller, with assets ranging between \$100,000 and \$350,000. See Edward R. Morrison, *Bankruptcy Decision Making: An Empirical Study of Continuation Bias in Small Business Bankruptcies*, 50 *J. L. & Econ.* 381, 386-87 (2007). I use a \$1 million cut-off because it is also used by Arturo Bris, Ivo Welch, & Ning Zhu, *The Costs of Bankruptcy: Chapter 7 Liquidation versus Chapter 11 Reorganization*, 61 *J. Fin.* 1253, 1282 (2006).

⁶ See Bris, et al., *supra* note 5, at 1282.

⁷ For a convenient, brief summary of these alternatives, see James A. Chatz & Joy E. Levy, *Alternatives to Bankruptcy*, 17 *J. Bankr. L. & Prac.* 5 (2008).

⁸ Workouts and other alternatives discussed here are described in detail in Morrison, *Bargaining Around Bankruptcy*, *supra* note 1.

off—tend to fall as the number of creditors shrinks in size.⁹ Coordination is essential because, unlike a federal bankruptcy case, a business generally cannot invoke state-law procedures to halt creditors from pursuing collection efforts. There is, in other words, no “automatic stay” outside federal bankruptcy court.

But it is unnecessary for the *total* number of creditors to be small.¹⁰ All that is necessary is that the number of *senior* lenders be relatively small. By senior, I mean creditors with security interests or large unsecured claims. These creditors have large relatively large claims and, therefore, large incentives to monitor the firm and demand a payout from any procedure that resolves the distress. These creditors should be contrasted with *junior* creditors, such as trade vendors, who have such small claims that they will rarely if ever monitor the debtor or participate in an insolvency proceeding. Because they are silent participants and because their claims are small, junior creditors are often ignored when a firm takes steps to resolve its financial distress.

To be sure, junior creditors can disrupt efforts to resolve distress in or outside federal bankruptcy court. But they rarely do so. Even if they do, dissent can be quelled. A relatively small payment may convince junior creditors that they should not object to whatever procedure the firm and its senior creditors have chosen.¹¹ Additionally, there are procedures under state laws—such as an assignment for the benefit of creditors¹²—which can be implemented without any consent from or payment to junior creditors.

<Figures 2 and 3 about here.>

This theory finds strong support in the D&B data, as Figures 2 and 3 show. In these and the remaining figures, solid black bars measure the characteristics of firms that filed federal bankruptcy petitions (“bankruptcies”); white bars measure businesses that closed without filing for bankruptcy (“closures”). If the difference between bankruptcies and closures is statistically significant at the five percent level, the bar for “closures” is cross-hatched instead of solid white. Here, and throughout this essay, patterns that are statistically significant in the figures are also statistically

⁹ See, e.g., MANCUR OLSON, *THE LOGIC OF COLLECTIVE ACTION* 44-45 (1965); George J. Stigler, *Free Riders and Collective Action: An Appendix to Theories of Economic Regulation*, 5 *Bell J. Econ. & Mgmt.* 359, 360-62 (1974).

¹⁰ Morrison, *Bargaining Around Bankruptcy*, *supra* note 1, at 10-12.

¹¹ This observation is based on interviews with anonymous Illinois attorneys.

¹² See Morrison, *Bargaining Around Bankruptcy*, *supra* note 1, at 10-12.

significant in multivariate logit models, details of which can be found in my other work.¹³

Recall that corporations are twice as likely to file a federal bankruptcy petition as non-corporate entities. Figure 2 shows that corporations also have significantly more complicated capital structures than non-corporate entities. Even when we focus exclusively on corporations, as Figure 3 does, we see that corporations that file for bankruptcy have more complicated capital structures than those that use alternative procedures. We would see exactly the same pattern if we focused on non-corporate entities: firms in bankruptcy have significantly more complicated capital structures. These observations are consistent with the hypothesis that distressed businesses turn to federal bankruptcy law when they face a large number of senior lenders, each of whom can hold up alternative procedures under state law.

B. Firm Size

Another important factor is firm size. The larger the firm, as measured in terms of assets, the greater the potential distribution to creditors, especially lenders with secured claims.¹⁴ A secured lender with a claim equal to, say, \$1 million will have stronger incentive to monitor and bring suit against a large firm than a small one. In some respects, the point here is similar to the one made about capital structure complexity: the larger the firm, the more likely it will face aggressive creditors and be unable to reach agreement without filing a federal bankruptcy case. Indeed, larger firms tend to have more complicated capital structures.

<Figures 4 and 5 about here.>

This theory—that larger firms are more likely to use federal law—also finds support in the data. Recall from Figure 1 that corporations are more likely to invoke federal law than their non-corporate counterparts. Figure 4 shows that corporations are older, have greater annual sales, more lines of business (as measured by Standard Industrial Classification (SIC) codes), and more employees than non-corporate entities. Each of these variables is a direct or indirect measure of firm size, and all indicate that corporations are much larger than their non-corporate counterparts. Figure 5 digs deeper, comparing bankruptcies to closures. The same pattern emerges: among corporations as well as non-corporate entities, firms in bankruptcy are significantly larger than those that resolve distress using alternative state-law procedures.

¹³ *Id.*; Morrison, Small Business Bankruptcy, *supra* note 1.

¹⁴ This argument is developed in greater detail in Morrison, Small Business Bankruptcy, *supra* note 1, at 13.

C. Relationships with Creditors

Even if a firm has a simple capital structure, it may still find federal law attractive. A workout or other non-bankruptcy procedure will not succeed unless senior lenders trust the firm's disclosures or can verify them at reasonable cost. These disclosures include information about the value of the firm's assets, the reasons for its financial troubles, and its prospects for recovery. There is little use in permitting a small business to reorganize if it is destined to fail again, or if the owner is stealing from the firm. If lenders worry about these things, they can audit the firm. But audits are costly and, if multiple creditors demand independent audits, the debtor may prefer to file a federal bankruptcy petition. When creditors pursue their own audits, non-bankruptcy procedures may become just as cumbersome and costly as a federal bankruptcy case.¹⁵

It is difficult, of course, to know precisely when a creditor mistrusts a firm's owner. There are, however, proxies. One is whether the firm has defaulted on senior debt or been habitually late in payments. This kind of behavior damages the business's relationship with the senior lender, which may lead the bank or another senior lender to be more skeptical about the owner-manager's reports.¹⁶ Using this measure as a proxy for creditor mistrust, the data show that mistrust is much more prevalent among firms in bankruptcy than among those that invoke state-law alternatives. Figures 2 and 3 show that firms in bankruptcy are much more likely to be late or have defaulted on large trade debts, which are defined as large liabilities owed to suppliers of goods or services.¹⁷

Similarly, Figure 6 shows that, among small corporations, firms in bankruptcy are significantly more likely to have defaulted on secured debt. The data underlying this figure differs from those underlying the other figures in this essay. Figure 6 summarizes the characteristics of small corporations that were located in Cook

¹⁵ This argument is developed in detail by Morrison, *Bargaining Around Bankruptcy*, *supra* note 1, at 16-19, 41-44.

¹⁶ A large literature documents the importance of "relationship-based lending" among small businesses. *See, e.g.*, Allen N. Berger & Gregory F. Udell, *Relationship Lending and Lines of Credit in Small Firm Finance*, 68 J. Bus. 351 (1995); Mitchell A. Petersen & Raghuram G. Rajan, *The Benefits of Firm-Creditor Relationships: Evidence from Small Business Data*, 49 J. Fin. 3 (1994).

¹⁷ This definition may seem counter-intuitive. For the typical firm, most trade debts are small (perhaps \$100) liabilities owed to suppliers. D&B, however, records information about trade debts only when a creditor reports information to the credit bureau. Creditors report this information only when they have relatively large claims against the firm. For this reason, when D&B reports that a business is late in paying or has defaulted on trade debt, I assume that the business is late in paying or has defaulted on large trade debts.

County, Illinois, suffered distress between 1998 and 2000, and then filed a federal bankruptcy petition or shut down without filing a petition before 2005.¹⁸ These geographic and temporal limitations were necessary because comparable information—about defaults on secured debt—was unavailable in the nationally-representative sample used in the rest of this essay.

<Figure 6 about here.>

I view these patterns as evidence that firms in bankruptcy have worse relationships with their creditors than firms that invoke state-law alternatives. There is an alternative interpretation, of course: firms in bankruptcy are more distressed (as evidenced by the relatively large number of defaults) than firms using state-law alternatives. Although I cannot rule out this interpretation, I do not think it is a complete explanation of the patterns in Figures 2, 3, and 6. These figures compare *distressed* businesses that filed for bankruptcy to *distressed* businesses that resolved distress using alternative procedures. Distress was measured using D&B's proprietary "financial stress score."¹⁹ Assuming this scoring system is an accurate measure of financial distress, Figures 2, 3, and 6 are comparing two groups of firms that are, on average, equally distressed. Though they are equally distressed, one group—firms in bankruptcy—are significantly more likely to have defaulted on or been late in paying secured debts and large trade debts. This, I believe, is evidence that creditor-debtor relationships are worse among firms in bankruptcy.

D. Non-Bankruptcy Law

The level of trust between a business and its senior lenders may depend on the law. In particular, laws governing non-bankruptcy alternatives may affect a creditor's willingness to consent to these alternatives. These laws vary significantly across the fifty states.²⁰ Some states, such as Florida, New York, and Texas, have adopted fairly comprehensive regulations that give courts authority to oversee insolvency proceedings and give creditors rights to sue insiders or other creditors who were singled out for favorable treatment by the business while it sank into distress. Other states give businesses a much freer hand in resolving distress. In states such as Connecticut, Illinois, Nevada, and Oregon, no statute regulates the process. It is instead governed by common law, which imposes relatively few burdens on insolvent

¹⁸ These data are described in Morrison, *Bargaining Around Bankruptcy*, *supra* note 1, at .

¹⁹ See Morrison, *Bargaining Around Bankruptcy*, *supra* note 1, at 23.

²⁰ For detailed discussion of these laws, see *id.*, at 17-20.

debtors. Courts are not directly involved in the insolvency process; creditors have limited power to bring suit against favored insiders or other creditors.²¹

Variation in state law—greater regulation in some states than others—will affect a distressed firm’s choice between federal bankruptcy law and state-law alternatives. First, state-law alternatives will be more expensive in states with relatively rigorous regulation. Court fees and other legal costs, for example, will be paid in states with judicial oversight. If these costs exceed the expense of a federal bankruptcy filing, a distressed small business will invoke federal law. Thus, small businesses may be more likely to file federal bankruptcy petitions in states with vigorous regulation.

Vigorous regulation could, however, have the opposite effect. Suppose the costs of vigorous regulation are less than the expense of a federal bankruptcy case, as they are generally thought to be.²² These regulations may be attractive to senior lenders, because they give the lenders broad power to audit the distressed business and attack various forms of self-dealing.²³ Suppose, for example, that the business repaid loans from insiders, to the disadvantage of third-party creditors, while it was distressed. If the business has filed a federal bankruptcy petition, creditors can recover these “preferential transfers” from the insiders.²⁴ If the business is pursuing non-bankruptcy alternatives, creditors can recover the “preferential transfers” only if the state has adopted section 5(b) of the Uniform Fraudulent Transfer Act.²⁵ As of

²¹ These interstate differences are discussed and summarized in tabular form in *id.*, at 10-14, 16-19, and Morrison, *Small Business Bankruptcy*, *supra* note 1, at 14-16.

²² See, e.g., Malanie Rovner Cohen & Joanna L. Challacombe, *Assignment for the Benefit of Creditors—Contemporary Alternatives for Corporations*, 2 DePaul Bus. L. J. 269, 270 (1990) (“In contrast to a Chapter 7 liquidation under the Bankruptcy Code, an assignment is generally more efficient, less costly, of shorter duration, more successful in terms of the value received for the assets and amounts paid to creditors and more tailored to the needs of debtors and their creditors.”); David S. Kupetz, *Assignment for the Benefit of Creditors: Advantageous Vehicle for Selling and Acquiring Distressed Enterprises*, 6 J. Private Equity 16, 18 (2003) (same); Ronald J. Mann, *An Empirical Investigation of Liquidation Choices of Failed High-Tech Firms*, 82 Wash. U. L. Q. 1375, 1392-93 (2004) (same); Bruce C. Scalambrino, *Representing a Creditor in an Assignment for the Benefit of Creditors*, 92 Ill. Bar J. 263 (2004) (same).

²³ See Morrison, *Bargaining Around Bankruptcy*, *supra* note 1, at 16-19.

²⁴ 11 U.S.C. § 547(b).

²⁵ Unif. Fraud. Transfer Act § 5(b), 7A U.L.A. 129 (2006) (“A transfer made by a debtor is fraudulent as to a creditor whose claim arose before the transfer was made if the transfer was made to an insider for an antecedent debt, the debtor was insolvent at that time, and the insider had reasonable cause to believe that the debtor was insolvent.”).

this writing, it has been adopted in thirty-nine states and the District of Columbia.²⁶ In these states, then, lenders have relatively strong power to audit distressed businesses and unwind self-dealing by insiders. If this power is valuable to senior lenders, they will be more likely to permit a business to use non-bankruptcy alternatives in states that have adopted section 5(b) than in those that have not adopted it. Federal bankruptcy law, then, could be *less* popular in states that heavily regulate their non-bankruptcy alternatives – just the opposite effect from the one predicted in the preceding paragraph.

There is mixed evidence suggesting that state regulations do in fact make non-bankruptcy alternatives more attractive. In related work, I compare states with high and low bankruptcy filing rates, which I define as the number of bankruptcy filings for every hundred failed businesses. I find that filing rates are *lower* in states with strict regulations.²⁷ This is consistent with the hypothesis that creditors (and debtors) are more likely to use a state’s insolvency procedures, instead of federal bankruptcy law, when the laws of that state promote transparency in the insolvency procedures.

The pattern, however, is tentative. In two separate papers, I explore the pattern carefully using statistical methods. In one, I use a nationally representative sample of distressed small businesses, drawn from D&B data.²⁸ I test whether the terms of state law affect a business’s choice between federal bankruptcy law and state insolvency procedures. There appears to be no effect: among both corporations and non-corporations, a distressed small business is no more likely to use non-bankruptcy procedures in states with comprehensive regulations (e.g., New York) than in states with relatively lax regulations (e.g., Illinois).

The analysis in that paper, however, does not distinguish distressed firms seeking to reorganize from those planning to liquidate. State laws may matter more for reorganizing firms than for those that are liquidating. Reorganizing firms need creditor cooperation, and a creditor’s willingness to cooperate may depend on existing law. If state law offers a transparent insolvency procedure—which helps creditors assess whether insiders behaved badly and whether the firm’s prospects are good—creditors may cooperate with a debtor seeking to reorganize via state insol-

²⁶ Forty-four states have adopted the UFTA in whole or in part. These states are listed at <http://www.nccusl.org/Update/uniformact_factsheets/uniformacts-fs-ufta.asp>. In Morrison, *Bargaining Around Bankruptcy*, *supra* note 1, at 60-61, I identify the subset of states that have adopted section 5(b).

²⁷ See Morrison, *Small Business Bankruptcy*, *supra* note 1, at 36-37.

²⁸ Morrison, *Bargaining around Bankruptcy*, *supra* note 1, at 31-36.

vency procedures. Otherwise, creditors may refuse to cooperate unless the firm files a federal bankruptcy petition.

I test this hypothesis in a separate paper, which uses annual data on (i) business bankruptcy filings by state and chapter (Chapter 11 versus Chapter 7) and (ii) total business failures by state.²⁹ These data are published by the U.S. federal government. I find that Federal Chapter 11 filings (generally used for reorganization) are less common in states with broad laws regulating payments to insiders.³⁰ Filings under Chapter 7 (used for liquidation) are uncorrelated with state law. This suggests that state laws do matter when a firm is reorganizing, but not when it is liquidating.

E. Other Factors: Remaining Uncertainty

Other factors may affect a firm's choice between federal bankruptcy law and state alternatives. Gender, race, and ethnicity, for example, appear to matter, as Figure 7 shows. Among proprietorships and partnerships, female-owned firms are more likely to avoid federal bankruptcy law than male-owned firms. The same effect is observed among minority-owned firms, although the difference between minority-owned and non-minority-owned firms is not statistically significant. Just the opposite pattern is observed among corporations. Female-owned and minority-owned businesses are *more* likely to use federal law than their male-owned and non-minority-owned counterparts.

<Figure 7 about here.>

These patterns could reflect discrimination in credit markets. Discrimination against minority entrepreneurs is well-documented³¹ and could make federal bankruptcy law more attractive than state-law alternatives, because it offers a court-supervised opportunity to bargain with discriminatory creditors. This may explain why minority-owned corporations are *more* likely to invoke federal law than non-minority-owned businesses. On the other hand, minority- or woman-owned firms may be relatively small, due to credit-market discrimination that prevents these firms from exploiting

²⁹ Morrison, *Small Business Bankruptcy*, *supra* note 1, at 44-49.

³⁰ All states regulate fraudulent payments to insiders, but only some regulate non-fraudulent payments to insiders on account of antecedent debt (i.e., the insider previously loaned money to the debtor business). The latter states have adopted Uniform Fraudulent Transfer Act §5(b), which permits a creditor or trustee to recover these payments, if they were made while the debtor was insolvent. This provision is discussed in Morrison, *Bargaining Around Bankruptcy*, *supra* note 1, at 20.

³¹ David G. Blanchflower, Phillip B. Levine, & David J. Zimmerman, *Discrimination in the Small-Business Credit Market*, 85 *Rev. Econ. & Stat.* 930 (2003).

growth opportunities. Due to their small size and limited resources, these firms may be deterred by the relatively high cost of a federal bankruptcy case. This might explain why minority-owned proprietorships and partnerships—which are much smaller than corporations, as Figure 2 shows—are *less* likely to use federal law than their non-minority-owned counterparts.³²

But it seems premature to view the patterns in Figure 7 as evidence of discrimination. Recent empirical work finds no evidence of credit market discrimination against female entrepreneurs,³³ yet Figure 7 shows that the same patterns characterize both minority-owned and female-owned firms. These patterns may only highlight the remaining uncertainty surrounding the reasons why some businesses find federal bankruptcy law attractive, but most do not.

Additional evidence of this uncertainty comes from regression models in which I predict the likelihood that a business will file a federal bankruptcy petition.³⁴ I account for all of the factors listed in this essay, and many more. The models, unfortunately, do a fairly mediocre job in predicting whether a given firm will file for bankruptcy. Among firms that actually *did* file a federal bankruptcy petition, the models estimate a probability of filing equal to only twenty-six percent. This tells us that, despite the importance of the various factors discussed above, there are many other factors that affect a firm's choice between the U.S. Bankruptcy Code and state alternatives.

III. Conclusion

This sobering observation should not detract from the valuable information contained in Figures 1 through 7. They point to an important balance in the design of bankruptcy law. In any legal system, there will be multiple ways to resolve distress, ranging from a collective “workout” among creditors to a formal bankruptcy

³² Dawsey and Ausubel find a similar pattern in their study of distressed consumers, who can discharge debt by filing a federal bankruptcy filing or by forcing creditors to pursue collection under state law. See Amanda E. Dawsey & Lawrence M. Ausubel, “Informal Bankruptcy,” SSRN working paper (Feb. 2002). Because many creditors will “charge off” a debt instead of pursuing collection, Dawsey and Ausubel argue that distressed consumers face a choice between “formal bankruptcy” (a federal filing) and “informal bankruptcy” (placing the burden on creditors to assert state law remedies). The authors find that members of minority groups are more likely than other borrowers to choose “informal bankruptcy.” The authors do not, however, offer a theory that might explain this pattern.

³³ Arne L. Kalleberg & Kevin T. Leicht, *Gender and Organization Performance: Determinants of Small Business Survival and Success*, 34 Acad. Mgmt. J. 136 (1991).

³⁴ Morrison, *Small Business Bankruptcy*, *supra* note 1, at 44-49

proceeding. Distressed firms will choose the procedure that offers the greatest return (to the owner and creditors) at lowest cost. This choice will be driven by internal factors, such as the firm's capital structure, as well as external ones, such as formal differences between bankruptcy law and non-bankruptcy alternatives. As governments vary the design of bankruptcy laws, they should be sensitive to the decision-making of distressed businesses. Any reform in bankruptcy law will have two effects. It will alter outcomes among businesses that invoke the bankruptcy process. It will also alter the attractiveness of the bankruptcy process relative to its alternatives. For example, bankruptcy-law reforms that expand protections for unsecured creditors, such as suppliers of raw materials, may only increase the incentive of debtors and secured creditors to pursue non-bankruptcy alternatives.

Of course, a firm's decision-making process—its choice between bankruptcy law and alternatives—will depend on the range of available alternatives. In the United States, the range is fairly broad. In other countries, it may be narrower. The findings in this paper point to an important benefit from a broad range of bankruptcy alternatives: the broader the range, the better the fit between (i) the financial problems facing a particular firm and (ii) the legal mechanism for resolving those problems. In the United States, we see firms sort themselves across legal mechanisms. Firms with simple capital structures use relatively simple state-law devices; larger, more complex firms invoke the relatively complex Bankruptcy Code.

A tough question remains, however. It is one thing to say that a broad range of legal options is a good idea, but it is quite another thing to say that a national insolvency code needs to be one of those options. Although we do see larger, more complicated firms choosing federal law in the United States, we do not know whether these firms actually need federal law to solve their problems. State-law alternatives may be perfectly adequate.³⁵ Federal law may be chosen only when the debtor or its owners behaved badly or were overly aggressive in bargaining with creditors. The bankruptcy filing may only reflect an effort to delay creditor collection efforts. Federal law, in other words, may give the owners of firms too much bargaining power in times of distress.³⁶

³⁵ We could, therefore, consider reforms that give the states greater authority to regulate the bankruptcy of small businesses in the United States. Such reforms are explored in *id.*, at 59-60, and David A. Skeel, Jr., *Rethinking the Line Between Corporate Law and Corporate Bankruptcy*, 72 *Tex. L. Rev.* 471, 545-52 (1994).

³⁶ Among small businesses, this may be the primary effect of Chapter 11. See Douglas G. Baird & Edward R. Morrison, *Serial Entrepreneurs and Small Business Bankruptcies*, 105 *Colum. L. Rev.* 2310 (2005).

Then again, non-bankruptcy procedures may be incapable of dealing with particular kinds of problems facing distressed firms, such as fraud committed by insiders or the difficulty of reorganizing a business with operations in many different states and countries. It is undoubtedly true that large, publicly-traded corporations need a formal insolvency code for just these reasons. But it is less clear that a code is needed for smaller businesses. If anything, this discussion points to the value of additional empirical research that can identify the kinds of firms that need a formal bankruptcy code.

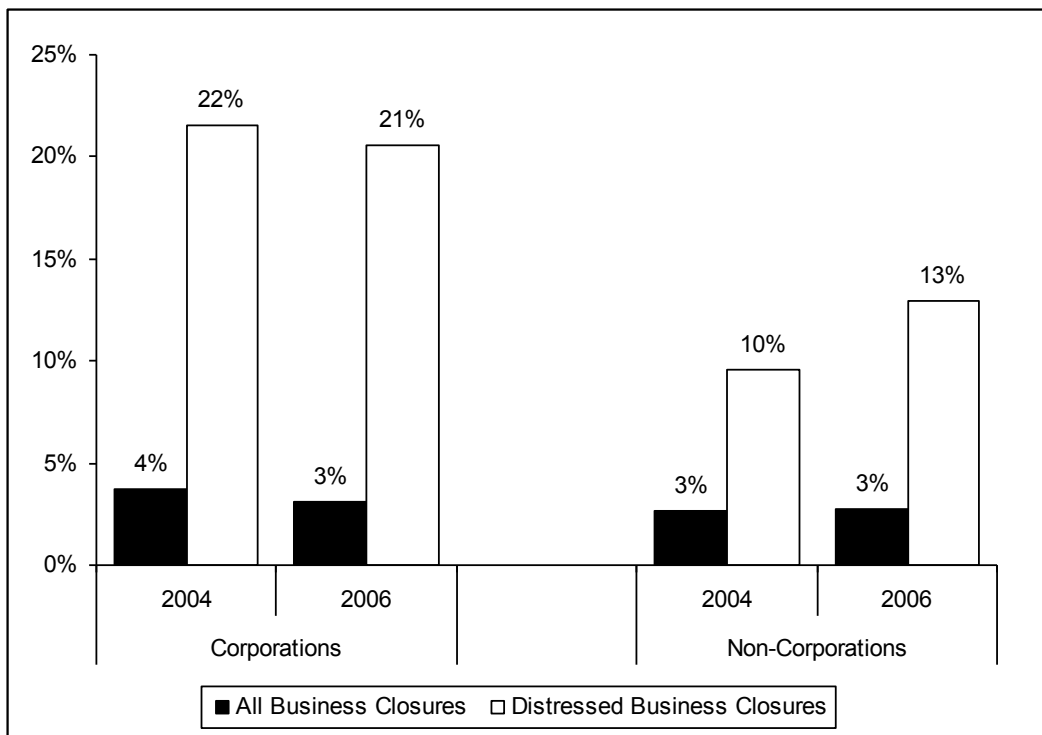


Figure 1. Federal Bankruptcy Filings Expressed as a Percentage of Business Closures During 2004 and 2006

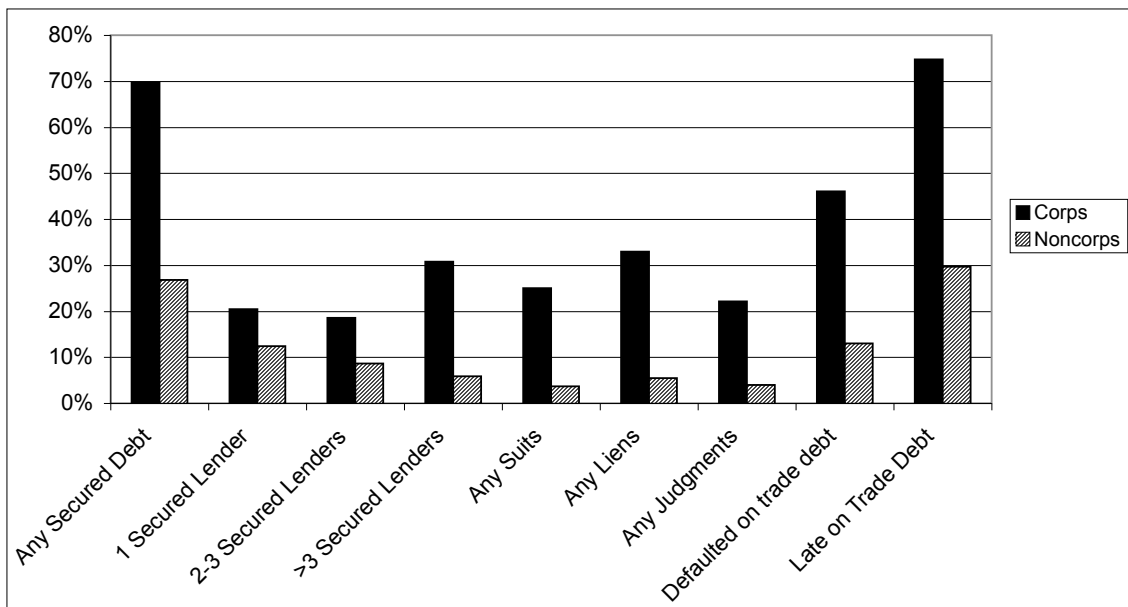


Figure 2: Capital Structure of Corporations and Non-Corporate Entities that Closed or Filed for Bankruptcy during 2004, 2006. Each bar indicates the percentage of firms with a particular characteristic.

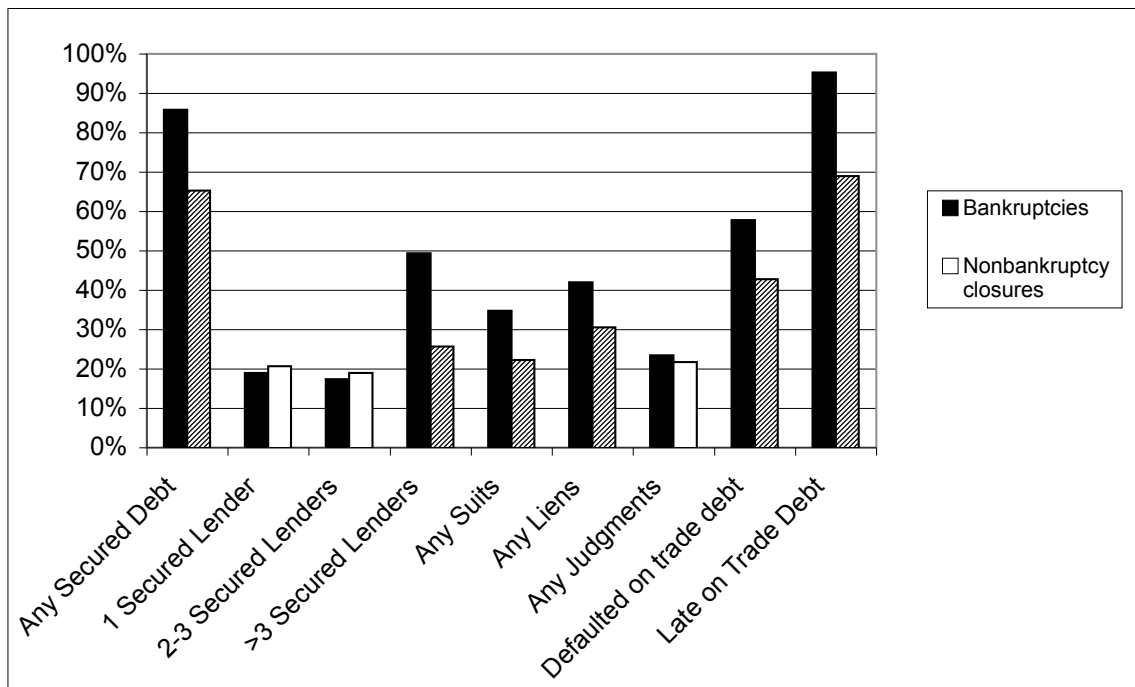


Figure 3. Capital Structure of Corporations that Closed or Filed a Bankruptcy Petition during 2004, 2006. Each bar indicates the percentage of firms with a particular characteristic.

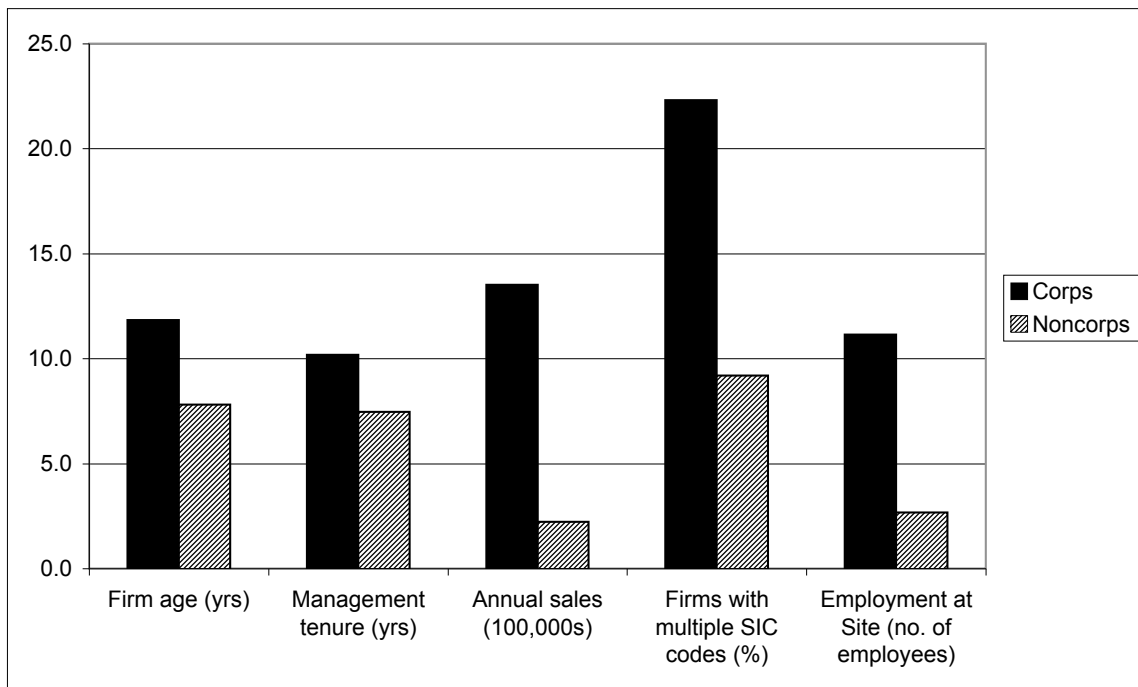


Figure 4. Proxies for Firm Size among Corporations and Non-Corporate Entities that Closed or Filed a Bankruptcy Petition during 2004, 2006. Each bar indicates the percentage of firms with a particular characteristic.

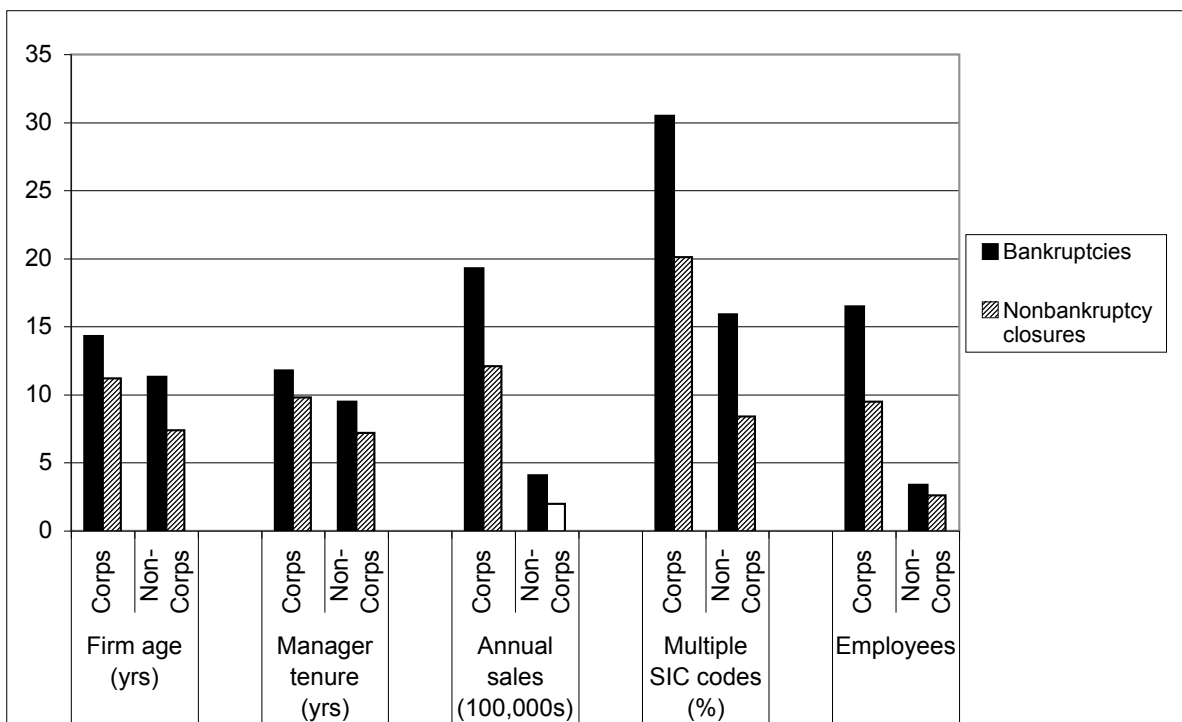


Figure 5. Proxies for Firm Size among Corporations that Closed or Filed a Bankruptcy Petition during 2004, 2006. Each bar indicates the percentage of firms with a particular characteristic.

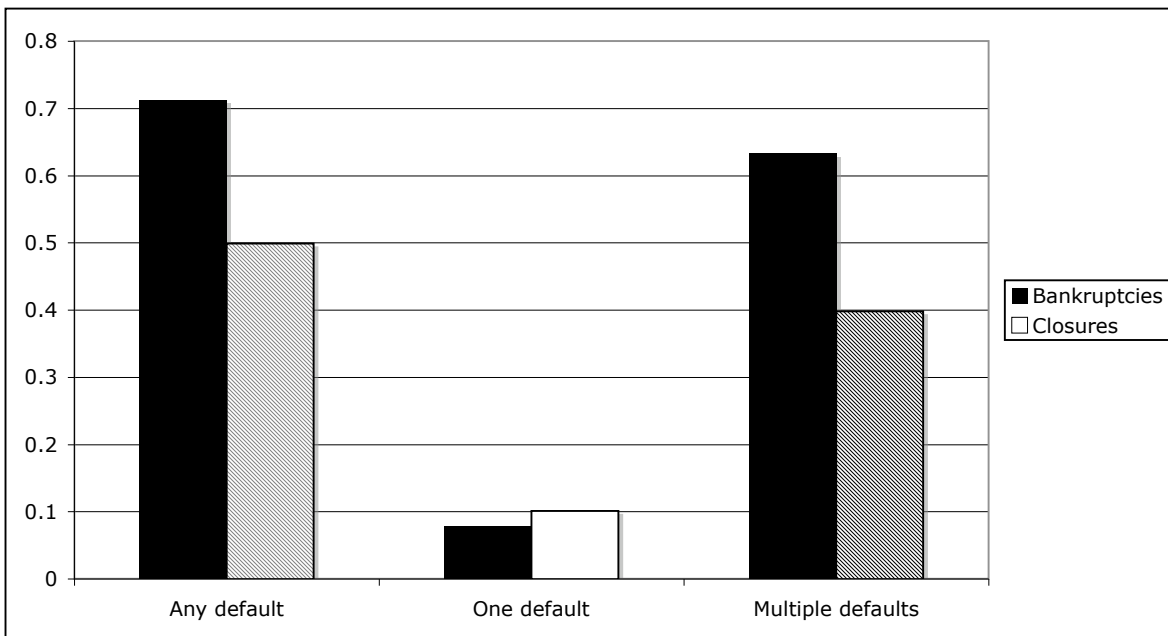


Figure 6. Proxies for the Quality of Lender-Borrow Relations among Chicago-Area Corporations that Closed or Filed a Bankruptcy Petition between 1998 and 2005. Each bar indicates the percentage of corporations with a particular characteristic.

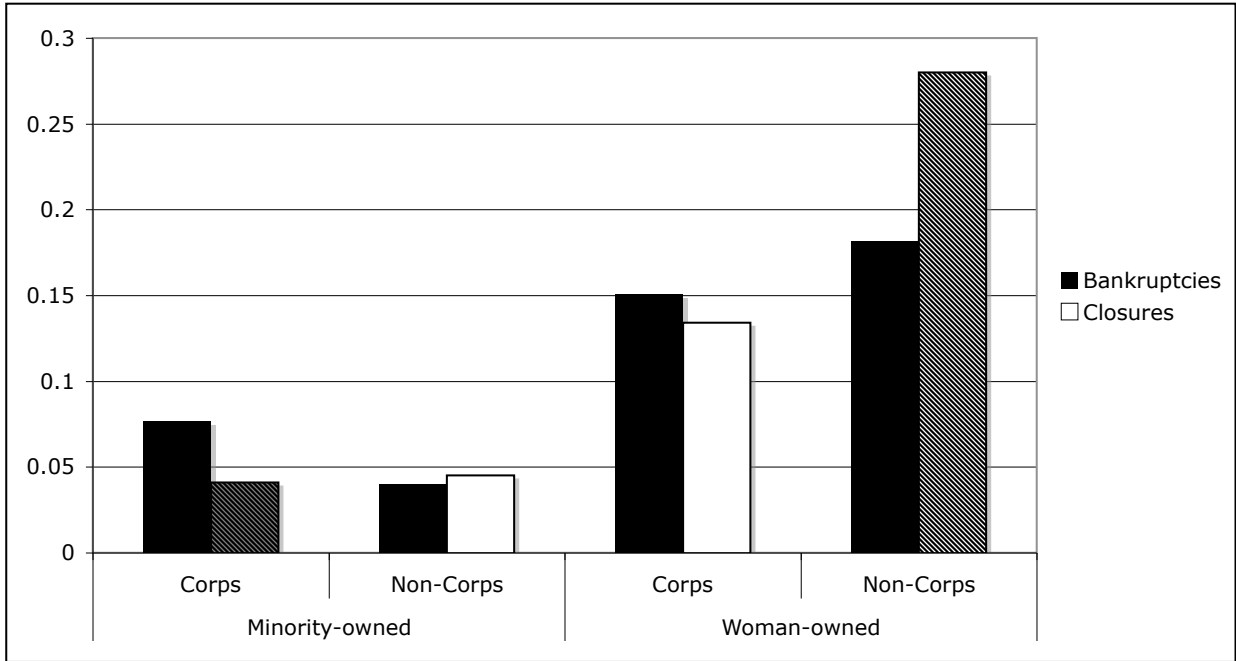


Figure 7. Other Characteristics of Corporations and Non-Corporate Entities. Each bar indicates the percentage of firms with a particular characteristic.

