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Citation: 51 Vand. L. Rev. 1679 1998



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Behavioral Economics, the Economic Analysis of Bankruptcy Law and the Pricing of Credit

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I. INTRODUCTION

Bankruptcy has been a fertile ground for the economic analysis of law. A significant portion of bankruptcy scholarship during the past fifteen years applies the basic assumptions of standard economic theory to the problems caused by financial distress. This scholarship begins with the premise that people make choices in a rational manner in order to maximize their individual utility. It applies this axiom to questions ranging from when do individuals file for bankruptcy to how bankruptcy laws affect firms' investment decisions. As it has in most other areas of law (especially private law), law and economics has both reshaped our understanding of extant bankruptcy law and generated numerous proposals for reform.

As illustrated by this symposium, scholars studying the way people make decisions have demonstrated that decision making routinely departs from the ideal posited by standard economic analysis. In various and systematic ways, people make choices which depart from the rational actor model that is the basis of much economic analysis of law. They dislike losses more than they like gains of the same amount, prefer the status quo, do not update beliefs in a rational manner, and otherwise fail to fit the model of *Homo economus*.

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These insights could be used to enrich the study of bankruptcy law in various ways. One such way would be to examine the workings of current law. For example, the extant reorganization process of Chapter 11 is predicated on bargaining among the affected parties, and the literature on behavioral economics suggests that people at times bargain in ways that are more "fair" than they are rational.¹ Similarly, Congress is currently considering major reform to bankruptcy law as it applies to individuals, based largely on a perception that some individuals use these laws opportunistically. In this Essay, however, I begin the project of re-examining the strand of bankruptcy scholarship that attempts to specify optimal bankruptcy rules for firms in financial distress.

This Essay first identifies the ways in which the normative prescriptions of the economic analysis of bankruptcy law rely on assumptions of individual rationality, and then examines one of these assumptions—namely, the assumption that creditors pass on the cost of an inefficient bankruptcy regime to the debtors to whom they extend credit. This is not to say that the other ways in which the economic analysis of bankruptcy law is driven by the rational actor model are uninteresting or unimportant. Rather, I only hope to show that behavioral economics can enrich the economic analysis of bankruptcy law.

II. THE RATIONAL ACTOR IN BANKRUPTCY THEORY

Thomas Jackson and Douglas Baird articulated the first law and economics model of corporate bankruptcy law.² They argued that bankruptcy law responds to a common pool problem that individual creditors would face under state debt collection law.³ Outside of bankruptcy, general unsecured creditors of a debtor are in a race amongst themselves for the debtor's unencumbered assets. Each creditor will

1. See Richard H. Thaler, *The Ultimatum Game*, in *THE WINNER'S CURSE: PARADOXES AND ANOMALIES OF ECONOMIC LIFE* 264, 278-79 (1992); Werner Guth et al., *An Experimental Analysis of Ultimatum Bargaining*, 3 *J. ECON. BEHAV. & ORG.* 367, 384 (1982).

2. Economists had earlier used the rational actor in the bankruptcy context. The focus of the economists, however, was quite different from that of Baird and Jackson. The economists were concerned about when firms file for bankruptcy, whereas Baird and Jackson used the rational actor model to explain the contours of bankruptcy law itself.

3. Baird and Jackson set forth their theory in a series of articles, some written individually, some co-authored. These articles culminated in THOMAS JACKSON, *THE LOGIC AND LIMITS OF BANKRUPTCY LAW* (1986). The general contours of their theory can be found in the first chapter of that book, and the following description in the text is taken largely from that source.

be paid only when it can induce the debtor to voluntarily pay, or when it litigates its claim to judgment, and thus can call on the aid of the state in obtaining the debtor's assets. This system works well when a firm has sufficient assets to pay off all of its creditors. Creditors are able to watch after their own interests, and take appropriate action to ensure that they are paid. Debtors, on the other hand, have various incentives to voluntarily pay all legitimate claims. Debtors who do not pay legitimate debts face not only the threat of lawsuits, but also the possibility that they will not be able to find credit in the future.

Problems arise, however, when the firm's debts exceed its assets. In this situation, Baird and Jackson argued that unsecured creditors face a common pool problem. There are simply not enough assets to pay all creditors in full. The general nonbankruptcy rule is that creditors have no legal obligation to other creditors. Creditors who are paid keep the funds that they receive. Creditors who are not paid can only look to their debtor, and when the debtor has paid out all of its assets, the unpaid creditors have nowhere to turn. In this situation, each creditor recognizes that if it is the first to collect on its debt, it will be paid in full, whereas slower creditors will receive nothing. Traditional law and economics, however, generally does not worry about differences in distribution. Rather, it is concerned with maximizing overall welfare.⁴ The welfare loss that Baird and Jackson identified in this situation was that unsecured creditors in a first-come, first-served debt-collection system would engage in actions that lessened the overall value of the firm. Most obviously, each unsecured creditor has an incentive to seize sufficient assets to pay off its debt. Repeated seizures of assets could lead to suboptimal deployment of the debtor's assets. Each creditor is concerned only with being paid in full; it has no rational interest in ensuring that the debtor's assets remain in their most-valued configuration. Most dramatically, pursuit of individual remedies could lead to piecemeal liquidation of the firm. While unsecured creditors as a group would benefit from the optimal deployment of the firm's assets, the incentives of each individual unsecured creditor run counter to the group interest.

Baird and Jackson argued that this common pool problem creates other costs beyond suboptimal deployment of the firm's assets. First, since each rational creditor can anticipate that there will be a race to the debtor's assets once the firm becomes insolvent, each

4. See Richard A. Posner, *Wealth Maximization Revisited*, 2 NOTRE DAME J.L. ETHICS & PUB. POL'Y 8, 103-55 (1985) (suggesting that judicial action should be guided by wealth maximization).

creditor has an incentive to monitor the affairs of the debtor. To the extent that much of this monitoring is repetitive, this represents an excess cost. Second, once the race to the assets begins, each creditor will spend money to collect on its debt. These multiple expenditures are again a cost that, all things being equal, should be avoided. Moreover, to the extent that the debtor has to defend itself in multiple forums against these various collection efforts, the cost of these multiple defenses will also reduce the total amount available to creditors as a group.

According to Baird and Jackson, bankruptcy law is the answer to this common-pool problem. They posit that if the unsecured creditors could negotiate amongst themselves, they would agree to forego their individual debt collection remedies, and instead opt for a collective system. This system would require all creditors to participate in a single forum. In that forum, the unsecured creditors, who are the residual claimants of an insolvent firm, would decide on the optimal deployment of the debtor's assets. Bankruptcy law had to be mandated by the government because creditors could never reach an actual agreement among themselves. Baird and Jackson therefore characterized bankruptcy law as a hypothetical agreement among creditors, and called their view the "creditors' bargain" model of bankruptcy.

Behavioral economics has little to add to this account of bankruptcy law. The "bargain" that the creditors reach is a purely hypothetical one. There is no actual meeting and no actual negotiation between parties. Rather, it is the "agreement" that creditors would reach if they were fully informed and fully rational. In other words, it is the efficient result, not the result of any actual consent.⁵ The only prediction of human behavior on which this view of bankruptcy law relies is that, absent a mandatory collective regime, creditors would engage in a destructive race to the assets. To be sure, some of the results from behavioral economics suggest that contrary to the assumptions of traditional microeconomics, people may not be willing to pursue their own ends relentlessly at the expense of others.⁶ This may suggest that not all creditors, when they perceive that a limited fund exists, would immediately rush to collect at the expense of

5. On the importance of distinguishing between actual consent and hypothetical consent, see Ronald M. Dworkin, *Why Efficiency?*, 8 HOFSTRA L. REV. 563, 573-79 (1980) (noting that actual consent carries the imprimatur of individual autonomy, but hypothetical consent carries no such normative implication).

6. A dramatic example of this is the "ultimatum game," discussed in the sources cited *supra* note 1.

everyone else. Yet this hardly suggests that all creditors would voluntarily forego their collection remedies.⁷ Indeed, once it becomes apparent that some creditors would not voluntarily forego their collection efforts other creditors who might otherwise be willing to restrain their efforts, may feel compelled to join in the race to the debtor's assets. Thus, nothing in behavioral economics calls for a re-examination of the Baird and Jackson model of bankruptcy law.

The creditors' bargain model, however, is no longer the only economic account of bankruptcy law. Law and economics scholars following Baird and Jackson have attacked the creditors' bargain explanation of bankruptcy law not because of its use of the rational actor model, but rather because of its failure to apply the model fully. Baird and Jackson treated creditors as rational actors; debtors, however, can also be treated as rational actors. When debtors are so conceived, the Baird and Jackson justification for a governmentally imposed bankruptcy law evaporates.⁸ Rational debtors have the incentive to borrow money and purchase goods at the lowest possible cost. They force creditors to compete for the opportunity to supply credit. To the extent that creditors are thus in a competitive market, they will only receive the competitive rate of return on their loans. This competitive market for credit implies, contrary to Baird and Jackson, that it is the debtors, not the creditors, that are harmed by inefficient debt collection law. To the extent that debt collection law creates a common pool problem which decreases the value of a debtor's assets and increases creditor costs, these costs will lower the expected return that a creditor will receive from a financially distressed debtor. Because creditors are operating in a competitive market, they have to be promised, on an *ex ante* basis, a competitive rate of return. To ensure they receive such a return, they will pass the costs of an inefficient debt collection law on to their debtors in the form of higher interest rates. In other words, even if bankruptcy law were in fact more efficient than state debt collection law, *creditors* would not bargain for such a regime; creditors in a competitive

7. Cf. Robyn Dawes & Richard H. Thaler, *Cooperation*, in *THE WINNER'S CURSE*, *supra* note 1, at 20 (describing situation in which farmers in Ithaca put fruit and a cashbox on a table; while the farmers trust that most people will voluntarily put money in the cashbox in exchange for the fruit, the cashbox is secured because the farmers fear that someone will take the box).

8. At least as a normative matter. The creditors' bargain model may still be used to explain existing law. When it enacted the Bankruptcy Code, Congress was worried that state law remedies, unchecked by federal law, would lead to a race to the courthouse that could lower the value of the debtor's assets. Thus, to the extent that Congress perceived a common pool problem existed, the Baird and Jackson model remains a powerful explanation of how bankruptcy law should and does respond to this problem.

market receive a competitive return regardless of the governing legal regime. Rather, if bankruptcy law were more efficient, it would be the regime that debtors would offer to their creditors in order to hold down their cost of credit.⁹

The change in perspective from rational creditors to rational creditors *and* rational debtors translates into a markedly different normative prescription for federal bankruptcy law. When the focus was on rational creditors alone, federal law was necessary to ensure that the optimal bankruptcy regime was in place, because creditors were never in a position to bargain or reach actual agreement among themselves. Creditors are generally unaware of the identity of other creditors of their common debtor, and, even if they had such knowledge, creditors become creditors at different times, thereby precluding negotiations among all creditors. Thus, any "agreement," even if optimal, could not be reached privately but would have to be imposed on creditors by the state.

The argument for mandatory bankruptcy law was also supported by a strategic impediment: Each individual creditor would have an incentive to opt out of bankruptcy's collective proceeding. If all other creditors would agree to such a proceeding, the creditor who did not agree to the collective proceeding would retain the freedom to collect its debt in full. To prevent such opportunistic behavior, the conclusion was that bankruptcy law had to be mandated by the government to ensure that all creditors were relegated to the single bankruptcy form.

Once debtors are treated as rational actors as well, however, the case for a mandated bankruptcy law collapses. Debtors bear the cost of any suboptimal debt-collection regime. Thus, they have the incentive to offer their creditors an insolvency regime that maximizes the debtor firm's value. Whereas practical constraints preclude creditors from bargaining with each other, the debtor contracts with each of its individual creditors.¹⁰ It thus has the opportunity to select

9. See Robert K. Rasmussen, *Debtor's Choice: A Menu Approach to Corporate Bankruptcy*, 71 TEX. L. REV. 51, 62 (1992) (discussing default rules and efficiency); Alan Schwartz, *A Contract Theory Approach to Business Bankruptcy*, 107 YALE L.J. 1807, 1812 (1998) (stating that parties could solve their problems at the credit extension stage if they were free to do so).

10. This observation of course does not apply to nonconsensual creditors. All agree that the state should continue the current practice of mandating the treatment that such creditors receive. Most law and economics scholars argue, however, that the current treatment of such creditors as unsecured creditors is inefficient, and that such creditors should be accorded more favorable treatment than they currently receive. See, e.g., Barry E. Adler, *Financial and Political Theories of American Corporate Bankruptcy*, 45 STAN. L. REV. 311, 340 (1993) (arguing that giving higher priority to nonconsensual claimants minimizes external risk); Lucian Arye

a governing bankruptcy regime, which it can then offer to all of its creditors. While there have been various proposals as to the mechanism by which debtors could make this offer—charter provisions selected from a menu of options,¹¹ individual contracts selected from a menu of options,¹² individual contracts created solely by private parties¹³—the intellectual underpinning of all of these proposals is the basic argument that underlies the economic case for freedom of contract. This argument posits that the parties are in the best position to reach an agreement that maximizes their joint welfare. In this context, the argument is that both debtors and creditors are rational actors who are fully able to judge the expected consequences of the various options open to them. Creditors, through the market, are limited to a competitive rate of return, and the debtor can offer the option that maximizes its own utility.

Once the bankruptcy literature expanded to include rational debtors, the scholarship broadened to encompass not only actions that creditors will take when a debtor becomes insolvent, but also actions that debtors will take prior to financial distress. Earlier work had focused on two discrete sets of issues: the cost of running bankruptcy's collective proceeding and the future deployment of the firm's assets. Lower costs and optimal deployment were the goals of an efficient bankruptcy regime. The new scholarship additionally looks at the effects that bankruptcy law has on a firm's investment decisions prior to the initiation of the applicable insolvency regime.

Debtors have a variety of ways in which they can invest the firm's assets. They can continue with current operations, switch to new lines of business, or shut down entirely and convert all assets to cash. Debtors, of course, are run by managers. These managers, in selecting which investments to pursue, will act in their own self-interest. Thus managers will make investment decisions based on how management will fare both when the decisions turn out to be successes (and there is little role for bankruptcy in that state of the world) and when they turn out to be failures. To the extent that

Bebchuk & Jesse M. Fried, *The Uneasy Case for the Priority of Secured Claims in Bankruptcy*, 105 YALE L.J. 857, 859 (1996) (arguing that secured creditors should get only partial priority); David W. Leeborn, *Limited Liability, Tort Victims, and Creditors*, 91 COLUM. L. REV. 1565, 1643-49 (1991) (arguing that nonconsensual creditors should be classified differently than general unsecured creditors).

11. See Rasmussen, *supra* note 9, at 100-07 (describing a menu of bankruptcy options that balances the optimal rule for each type of firm and the associated costs).

12. See Schwartz, *supra* note 9, at 1850 (arguing that bankruptcy law should supply parties with default rules that they may then contract around to create a system they prefer).

13. See Adler, *supra* note 10, at 323-24 (proposing a hypothetical contract arrangement).

bankruptcy law shields managers from the consequences of investment decisions which turn out poorly, managers will be more inclined to pursue risky investments.

The most recent work in the economic analysis of business bankruptcy attempts to specify the optimal bankruptcy regime—in other words, which set of promises by the debtor ensures that the firm's assets will be placed to their highest valued use after insolvency, minimizes the costs of making that decision, and creates incentives for managers to invest in all projects with a positive net present value while foregoing all projects with a negative net present value.¹⁴ While the details of the competing arguments on this score range beyond the scope of this Essay, it is important to emphasize that this literature fully embraces the standard rational actor model of microeconomics. It assumes that managers regard potential returns from projects in an unbiased fashion, and that they select projects according to which ones further their own interests.¹⁵

In sum, the current economic account of bankruptcy law invokes the traditional rational actor model in three different ways. First, it assumes that creditors are rational actors lending in a competitive market, and thus only receive a competitive rate of return.¹⁶ Second, it assumes that the residual owners of the firm are rational in that they perceive the cost of inefficient bankruptcy laws both in the credit market and in the actions of the managers they hire to run the firm. Finally, it assumes that managers act rationally in their self-interest both when they make investment decisions and when they decide to put the firm into bankruptcy.

14. See Schwartz, *supra* note 9, at 1826-27 (describing the contractual choices presented to a firm and its creditors).

15. See Barry E. Adler, *A Re-Examination of Near-Bankruptcy Incentives*, 62 U. CHI. L. REV. 575, 576-77 (1995) (stating that gambles by managers often profit the managers rather than the investors); Robert K. Rasmussen, *The Ex Ante Effects of Bankruptcy Reform on Investment Incentives*, 72 WASH. U. L.Q. 1159, 1166 (1994) (stating that managers are often focused on prolonging their tenure); Susan Rose-Ackerman, *Risk Taking and Ruin: Bankruptcy and Investment Choice*, 20 J. LEGAL STUD. 277, 279 (1991) (stating that managers' investment choices are affected by how they are treated in bankruptcy); Alan Schwartz, *The Absolute Priority Rule and the Firm's Investment Policy*, 72 WASH. U. L.Q. 1213, 1216 (1994) (stating that managers take less profitable projects if it will ensure their retention); Schwartz, *supra* note 9, at 1821 (stating that managers will prefer the bankruptcy system that enables them to remain in control longer).

16. This same assumption drives much of the economic analysis of secured credit. For example, see Bebchuk & Fried, *supra* note 10, at 864-65 (stating that many creditors with small claims are "rationally uninformed"); Alan Schwartz, *Priority Contracts and Priority in Bankruptcy*, 82 CORNELL L. REV. 1396, 1399 (1997) (assuming that all parties are risk-neutral).

III. INCORPORATING BEHAVIORAL ECONOMICS INTO CORPORATE BANKRUPTCY LAW

The normative claims of the economic analysis of corporate bankruptcy law thus rest heavily on the assumption of individual rationality. Behavioral economics, however, has documented numerous examples of ways in which individuals systematically deviate from the rational actor model. To name but a few, people tend to exhibit a status quo bias,¹⁷ they tend to value fairness over pure self-interest,¹⁸ they tend to have a greater preference for avoiding losses than for achieving an equal-sized gain,¹⁹ and they tend to overestimate their own abilities.²⁰ Few scholars continue to assert that the rational actor model accurately captures reality.

The crucial question is what implications these systematic departures from pure rationality should have for law and legal reform. I doubt that one can make global statements regarding the conclusions that flow from the insights of behavioral economics. Law touches most, if not all, human activity. It may well be the case that most or all of us exhibit to some extent the various tendencies identified in the behavioral economics literature.²¹ But we make different decisions in different settings. Some decisions occur in well-organized markets, others do not. Some decisions occur in an institutional setting such as work, others do not. The cognitive failures documented in the laboratory may disappear when people are

17. See William Samuelson & Richard Zeckhauser, *Status Quo Bias in Decision Making*, 1 J. RISK & UNCERTAINTY 7, 47 (1988). One notable manifestation of the status quo bias is the endowment effect, which is the tendency of people to value a good more when they possess it as opposed to when they do not. For a review of the literature on the endowment effect, see Elizabeth Hoffman & Matthew L. Spitzer, *Willingness to Pay vs. Willingness to Accept: Legal and Economic Implications*, 71 WASH. U. L.Q. 59 (1993).

18. See Ernst Fehr et al., *Does Fairness Prevent Market Clearing? An Experimental Investigation*, 108 Q.J. ECON. 437, 438 (1993) (examining the impact of fairness on market prices).

19. See Amos Tversky & Daniel Kahneman, *Loss Aversion in Riskless Choice: A Reference-Dependent Model*, 106 Q.J. ECON. 1039, 1039 (1991).

20. See MAX H. BAZERMAN, JUDGMENT IN MANAGERIAL DECISIONMAKING 37-39 (3d ed. 1994); Daniel Kahneman & Amos Tversky, *Conflict Resolution: A Cognitive Perspective*, in BARRIERS TO CONFLICT RESOLUTION 44, 46-50 (Kenneth J. Arrow et al. eds., 1995).

21. One of the oft-repeated findings in the behavioral economics literature is that there are some people who do not suffer from over-optimism—the clinically depressed. See SHELLEY E. TAYLOR, POSITIVE ILLUSIONS: CREATIVE SELF-DECEPTION AND THE HEALTHY MIND 212-15 (1989). Also, in running experiments like the prisoner's dilemma, economic students are more likely to act rationally and defect than are students who have not majored in economics. See John R. Carter & Michael D. Irons, *Are Economists Different, and If So, Why?*, 5 J. ECON. PERSP., Spring 1991, at 171, 177 (researching how economics students behave differently); Robert H. Frank et al., *Does Studying Economics Inhibit Cooperation?*, 7 J. ECON. PERSP., Spring 1993, at 159, 163-67 (studying economics students and the prisoner's dilemma).

placed in organizational settings.²² Furthermore, the tendencies identified in the behavioral literature exist in varying degrees across the population. There is thus no easy translation between findings in the decision-making literature and prescriptions for law. When applying the findings of behavioral economics to law, it is necessary to examine the context in which the law in question operates.

The actors that bankruptcy theory focuses on are faced with real-world constraints. Creditors are generally not individuals. Rather, they are institutions such as banks and suppliers that have to compete in the marketplace in order to survive. To be sure, these institutions are themselves comprised of individuals, and these individuals undoubtedly possess the same traits identified by those who study decision making. Yet the structure of the institution in which these individuals operate may be such as to counteract at least some of the biases that would otherwise affect their own individual decision making. Indeed, some have suggested that one function of organizations is to "repair" cognitive defects through organizational practices.²³ But while an institution may dampen some individual biases, it may exacerbate others. Put differently, some biases may be adaptive mechanisms that actually aid the operation of the firm.²⁴

It is easy to articulate why there might be institutional constraints that reduce the impact of behavioral biases in the transactions that are the subject of bankruptcy scholarship. Firms ultimately have to compete in the market, and firms that continually make inefficient choices will not stay in business.²⁵ The imperative of competition gives firms an incentive to develop internal structures which may be effective at reducing or even eliminating at least some

22. For example, see J.R. Anderson, *Is Human Cognition Adaptive?*, 14 BEHAV. & BRAIN SCI. 471 (1991); Gerd Gigerenzer, *On Narrow Norms and Vague Heuristics: A Reply to Kahneman and Tversky*, 103 PSYCHOL. REV. 592, 594-95 (1996); Norbert Schwarz, *Judgement in a Social Context: Biases, Shortcomings, and the Logic of Conversation*, in 26 ADVANCES IN EXPERIMENTAL SOCIAL PSYCHOLOGY 123, 124 (Mark P. Zanna ed., 1994).

23. See Chip Heath et al., *Cognitive Repairs: How Organizational Practices Can Compensate for Individual Shortcomings*, in 20 RESEARCH IN ORGANIZATIONAL BEHAVIOR 1 (1998).

24. See Donald C. Langevoort, *Organized Illusions: A Behavioral Theory of Why Corporations Mislend Stock Market Investors (and Cause Other Social Harms)*, 146 U. PA. L. REV. 101, 108 (1997) ("My most provocative hypothesis is that corporate cultural biases, particularly optimistic ones, can be adaptive mechanisms for encouraging trust and cooperation, and for deflecting the selfishness-inducing last-period problem that arises in times of stress and threat.").

25. It may well be the case that firms that file for bankruptcy under current law are those firms that have not been able to deal successfully with the tendencies identified by behavioral economics. Part of the project of integrating behavioral economics into the economic analysis of bankruptcy law should be to reconsider the operation of current bankruptcy law as a means for disposing of firms that fail to "repair" cognitive defects.

of the types of biases in decision making discovered by behavioral economics. The firms that develop the better internal practices may well be the firms that have a better chance of surviving in the market. Indeed, some law and economic scholars have been cautious about embracing behavioral economics precisely because of the possibility that either the market or another institution such as a firm may provide mechanisms to counteract the deviations from pure rationality detected in controlled laboratory experiments.²⁶

Until recently, little could be said about whether firms responding to market constraints do in fact find ways to “debias” their employees. There was little research exploring how firms actually make decisions. The firm itself was a “black box.” Researchers, however, have begun to look inside the firm. There is a growing literature which examines how people function in organizational settings. As with behavioral economics, this is a broad and interesting literature which cannot be summarized completely in a sentence or two.²⁷ The promise of this literature is that it has the potential for ascertaining which, if any, of the findings from behavioral economics carry over into behavior within firms. Some biases may be filtered out; others may survive; still others may be exacerbated. For example, one of the interesting findings of this literature is that optimism tends to thrive in institutional settings. Those who successfully move up the corporate hierarchy tend to be the more optimistic.²⁸ Indeed, the promotion process in many firms actually overweighs optimism as a positive factor when making decisions. A related finding is that individuals in firms have an inflated sense of their ability to control situations. They are willing to attribute good outcomes to their superior decision-making capacities. This optimism and illusion of control can contribute to another phenomenon that researchers have observed: firms, like individuals, often have a tendency to stay with prior commitments despite information that calls the wisdom of the commitment into question.²⁹ Indeed, individuals in a hierarchical setting will often seek out information which bolsters

26. See Roberta Romano, *A Comment on Information Overload, Cognitive Illusions, and Their Implications for Public Policy*, 59 S. CAL. L. REV. 313, 324-27 (1986) (stating that firm reputation may mitigate end-period problems); see also Matthew Rabin, *Psychology and Economics*, 36 J. ECON. LITERATURE 11, 31 (1998) (“The conjecture that experience helps overcome biases often leads economists to doubt the relevance of laboratory evidence from inexperienced subjects.”).

27. For an introduction to this literature, see Langevoort, *supra* note 24.

28. See *id.* at 139-43 (discussing the egocentric bias in decision making).

29. For reviews of this literature, see *id.* at 142-43; Rabin, *supra* note 26, at 26-29.

the choices they previously made and avoid information which would suggest that things are not going as well as planned.

To integrate the scholarship on decision making—both in the individual and the organizational contexts—into the normative discussion over bankruptcy policy requires applying these insights to the three situations in which the economic analysis of bankruptcy law relies on the rational actor model: rational pricing by creditors, rational decisions by shareholders, and rational action by managers. Here, I want to begin this re-examination by taking a tentative look at the assumption that the costs of an inefficient bankruptcy term are priced in the credit market. Much of the economic analysis of bankruptcy law rests on this assumption.

In looking at the question of whether lenders price bankruptcy law, I want to focus on the behavior of financial intermediaries, rather than on all who supply credit to a firm. It may well be the case that if the law allowed debtors to select the operative bankruptcy rules, small creditors would not adjust their lending rates based on the choice that the debtor made.³⁰ The potential failure to adjust by small creditors would not eliminate the benefits that accrue from having the debtor choose the governing bankruptcy rules. To the extent that debtors select more efficient rules than the government provides, this may lower the interest rate that small creditors charge all of their debtors. Also, even if small creditors do not change their behavior at all, debtors would still benefit from rate adjustments by large creditors. The reason for this focus is that financial intermediaries play a dominant role in firm financing. Many firms depend on a single financing creditor.³¹ This creditor may be a bank, a finance company, an insurance company or other source of credit.

If any creditors accurately price bankruptcy terms, one would expect it to be such institutional lenders. The standard argument for the efficiency of loan pricing in these markets runs as follows: These creditors have market incentives to accurately price their loans.

30. See Bebchuk & Fried, *supra* note 10, at 885-87 (arguing that small creditors do not adjust their interest rates based on their priority status); Lucian Arye Bebchuk & Jesse M. Fried, *The Uneasy Case for the Priority of Secured Claims in Bankruptcy: Further Thoughts and a Reply to Critics*, 82 CORNELL L. REV. 1279, 1299-1300 (1997) (same); Lynn M. LoPucki, *The Unsecured Creditor's Bargain*, 80 VA. L. REV. 1887, 1928 n.159 (1994) (noting how large companies will switch from negative covenants to secured financing when at risk); Ronald J. Mann, *The First Shall Be Last: A Contextual Argument for Abandoning Temporal Rules of Lien Priority*, 75 TEX. L. REV. 11, 31-37 (1996) (stating that small contractors respond less to risk than do banks).

31. See Mitchell A. Petersen & Raghuram G. Rajan, *The Benefits of Lending Relationships: Evidence from Small Business Data*, 49 J. FIN. 3, 10 (1994) (stating that firms tend to concentrate their borrowing from one source).

Those that charge too high an interest rate lose business to financiers that offer more attractive terms; those that charge too low an interest rate (which includes making improvident loans) lose money. Given that the measure of success in lending money is simply getting the best rate of return, it is easy to separate out the winners and the losers.³² Market discipline, the argument goes, requires financial intermediaries to price loans accurately.³³

One can easily confirm that these lenders price at least some legal rules. A bond with an event risk covenant, which protects the bondholder against a leveraged acquisition or similar event, costs more than similar bonds without such protection.³⁴ Lenders also clearly worry about (and price accordingly) their legal treatment following financial distress. Secured creditors, who are promised specific collateral if their debtor defaults, charge lower interest rates and do in fact receive higher payouts than unsecured creditors if the firm ends up in bankruptcy.³⁵ These pricing differences suggest that,

32. Bankruptcy law plays little role in disposing of financial intermediaries who encounter financial distress. See David A. Skeel, Jr., *The Law and Finance of Bank and Insurance Insolvency Regulation*, 76 TEX. L. REV. 723, 764 (1998).

33. This argument seems to conflict with the extensive interest that banks have recently shown towards the reform of the Bankruptcy Code's treatment of individual debtors. The credit industry has undertaken an extensive campaign to amend the Code to make it harder to discharge credit card debts through a Chapter 7 liquidation. If banks only receive a competitive rate of return, why are they spending significant resources trying to affect how their loans are treated in bankruptcy? The answer may be that they seek a one-time windfall: They would recover more from existing loans under their proposed legislation than they expected when they first priced the loan.

34. See Leland Crabbe, *Event Risk: An Analysis of Losses to Bondholders and "Super Poison Put" Bond Covenants*, 46 J. FIN. 689, 702 (1991) (noting that the value of event risk covenants ranged from 23 to 54 basis points). For an analysis of these covenants, see Marcol Kahan & Michael Klausner, *Antitakeover Provisions in Bonds: Bondholder Protection or Management Entrenchment?*, 40 UCLA L. REV. 931 (1993).

35. Chapter 11 promises secured creditors the present value of their collateral. See 11 U.S.C. § 1129(b) (1994). Unsecured creditors rarely are paid in full on their claims. See Allan C. Eberhart et al., *Security Pricing and Deviations from the Absolute Priority Rule in Bankruptcy*, 45 J. FIN. 1457, 1458 (1990) (examining cases in which shareholders received payment in violation of the absolute priority rule); Julian R. Franks & Walter N. Torous, *An Empirical Investigation of U.S. Firms in Reorganization*, 44 J. FIN. 747, 749 (1989) (analyzing a sample of bankruptcies to determine the extent of deviation from the absolute priority rule); Lynn M. LePucki & William C. Whitford, *Bargaining over Equity's Share in the Bankruptcy Reorganization of Large, Publicly Held Companies*, 139 U. PA. L. REV. 125, 141-42 (1990) (providing a table of percentages paid on various unsecured claims); Lawrence A. Weiss, *Bankruptcy Resolution: Direct Costs and Violation of Priority of Claims*, 27 J. FIN. ECON. 285, 292, 299 (1990). In most Chapter 7 cases, general creditors do not receive any distribution. See Douglas G. Baird, *The Initiation Problem in Bankruptcy*, 11 INT'L REV. L. & ECON. 223, 226 (1991) (stating that the purpose is not to give creditors assets but to assure them that there are no assets available); Lynn M. LoPucki, *Should the Secured Credit Carve Out Apply Only in Bankruptcy? A Systems/Strategic Analysis*, 82 CORNELL L. REV. 1483, 1494-95 n.70 (1997) (stating that only five percent of bankruptcies in 1991-92 provided a distribution to general unsecured creditors).

to some extent, a lender's pricing is rational in that it takes at least some legal rules into account.

At the same time, the fact that lenders price some legal rules does not prove that they price all legal rules. In *Barnhill v. Johnson*, the Supreme Court resolved a split among the courts of appeals and held that, when determining whether a payment to a lender is made within the ninety-day preference period preceding the filing of a bankruptcy petition, the lender is deemed to have received the payment when the check given to the lender is honored by the debtor's bank.³⁶ This holding is adverse to lenders in that it subjects more transfers to preference attack than would the competing rule, which would have held that the transfer is made when the lender receives the check. There is no doubt that the rule the Court adopted will lower the return to a few lenders on a few loans. It strikes me as fanciful to maintain, however, that the Court's ruling affected the price of credit. Indeed, empirical analysis of lending markets has failed to find statistically significant differences based on differences in mortgage protection laws³⁷ and on the denial of self-help in automobile repossessions.³⁸

While perfect lending markets are a familiar assumption in the economic literature, the extent to which the lending markets accurately price a loan is an empirical question. Many have expressed doubts about the strong assumption found in the economic literature,³⁹ but it is safe to say that this is a question to which we do not have a definite empirical answer.⁴⁰ I have no data to offer on this debate. What I am interested in is whether the organizational biases which researchers have uncovered suggest any reason to think that the credit market does or does not reflect the costs of the governing bankruptcy regime.

36. 503 U.S. 393, 393 (1992).

37. See Michael H. Schill, *An Economic Analysis of Mortgagor Protection Laws*, 77 VA. L. REV. 489, 500-15 (1991) (conducting an empirical examination of the cost of mortgagor protection laws).

38. See William C. Whitford & Harold Laufer, *The Impact of Denying Self-Help Repossession of Automobiles: A Case Study of the Wisconsin Consumer Act*, 1975 WIS. L. REV. 607, 654-57 (stating that the impact of the Act is unclear).

39. See LoPucki, *supra* note 30, at 1920 (stating that the assumption is not generally true for unsecured markets); Ronald J. Mann, *Strategy and Force in the Liquidation of Secured Debt*, 96 MICH. L. REV. 159, 240-41 (1997) (stating that because of the relative infrequency of bankruptcy and liquidation, lenders' willingness to issue new debt is not affected).

40. See Elizabeth Warren, *Making Policy with Imperfect Information: The Article 9 Full Priority Debates*, 82 CORNELL L. REV. 1373, 1395 (1997) (suggesting that until all the empirical evidence is in, the reach of commercial lenders should not be extended).

In answering this question, we have to first determine the extent to which the biases that generally exist in organizations flourish in lenders. It is far from certain that the findings from the organizational literature can be translated directly to financial institutions.⁴¹ Financial intermediaries sell a different product—money—than do other firms. There is no a priori reason to suspect that financial intermediaries lending money necessarily suffer from the same decision-making biases as product manufacturers. Whereas the typical entrepreneur hopes to discover the next MS-DOS, financial intermediaries cannot expect to develop a new product which will generate exorbitant profits. Rather, they tend to make investments that have a capped upper limit on the potential return they will receive.⁴² This is certainly the case for the standard loan made by a bank, which is the transaction that funds most firms.

Given these differing markets, it is reasonable to inquire as to whether financial firms differ from product firms in their organizational culture. Indeed, there is some evidence that bankers view transactions differently than those in charge of other firms. For example, one interesting study shows that entrepreneurs and bankers perceive and manage business risks differently.⁴³ Entrepreneurs tend to accept risk as a given and focus on strategies that maximize returns. Bankers, in contrast, begin by identifying the return they seek, and then attempt to secure that return with as little risk as possible.

Of the findings in the organizational literature, perhaps the most threatening to the long-term health of a financial institution would be excessive optimism.⁴⁴ The primary transaction for lenders is

41. It is also the case that financial institutions may differ among themselves. See Mann, *supra* note 39, at 217 (noting that bankers told him about differing cultures in loan departments). Along these lines, it is interesting to note that the empirical literature finds wide variation in bank efficiency, much of which remains unexplained. See Allen N. Berger & Loretta J. Mester, *Inside the Black Box: What Explains Differences in the Efficiencies of Financial Institutions?*, 21 J. BANKING & FIN. 895, 943-45 (1997) (examining the sources of the differences in the efficiency of financial institutions). It would be an interesting research project to ascertain whether the observed differences in bank efficiencies are correlated with differences in bank culture.

42. To be sure, financial institutions are always trying to develop new financial products. The recent expansion of derivatives is an example of such a product. While these products may bring large returns for the financial institutions that develop them, the possibility of such returns does not affect the lender's decision on which this Essay focuses.

43. See D.K. Sarasvathy et al., *Perceiving and Managing Business Risks: Differences Between Entrepreneurs and Bankers*, 33 J. ECON. BEHAV. & ORG. 207 (1998).

44. For a study showing that organizational factors tend to dominate cognitive factors when bankers assess risk, see Gary McNamara & Philip Bromiley, *Decision Making in an Organizational Setting: Cognitive and Organizational Influences on Risk Assessment in Commercial Lending*, 40 ACAD. OF MGMT. J. 1063 (1997).

lending money. This transaction tends to cap the lender's possible upside gain. The most that the lender can hope for in a lending transaction is the repayment of principal and the contractual rate of interest. Taking an unjustified risk on a loan cannot result in an extremely large return to the bank. To the extent that excessive optimism could lead to such loans, one would expect banks to have developed mechanisms to combat such tendencies.

One would not, however, expect banks to combat the bias toward optimism by attempting to hire the overly pessimistic. Banks only make money by making loans, and a naysayer is going to be at a disadvantage compared to someone who is able to close transactions. Moreover, to the extent that a bank is overly pessimistic, it runs the risk of not making any loans. Few banks eschew safe loans; one would imagine that the overly pessimistic bank would not only avoid "risky" loans, but may either charge higher interest rates on loans that it was willing to make or add additional constraints in the lending documents that would be objectionable to borrowers. In making loans, a little optimism may actually put a bank at a competitive advantage.⁴⁵ It is thus no surprise that one researcher reported having a banking officer tell him that it is the responsibility of loan officers to "get money out the door."⁴⁶

Were excessive optimism pervasive in lenders, this might lead to the conclusion that bankruptcy reforms would not affect lending practices. If no one believes that this debtor to whom you are lending will go bankrupt, why worry about bankruptcy law? Yet given that firms do fail, unchecked optimism would endanger the long-term financial health of the lender. Given this risk, it is not surprising that many banks have internal structures which guard against such optimism. For example, one major recent development in the small business lending context—credit scoring—is designed to decrease the discretion of the lending officer.⁴⁷ Credit scoring takes a small number of objective facts, feeds them into a program, and comes up with a result—reject the application, make the loan, or, in some cases, leave the matter to the discretion of the lending officer. The program is based on a statistical comparison with past loans, and is updated as more information about past loans becomes available.

45. See Heath et al., *supra* note 23, at 19 (reporting that lender increased loan approval by asking loan officers to consider whether loan application should be approved rather than asking whether it should be denied).

46. Mann, *supra* note 39, at 242.

47. See Ronald J. Mann, *The Role of Secured Credit in Small-Business Lending*, 86 GEO. L.J. 1, 30-34 (1997) (providing an in-depth discussion of credit scoring).

Credit scoring reduces the potential for improvident lending in two ways. Most obviously, it reduces the discretion of the lending officer. Many applications are rejected by the system and thus cannot be granted by even the most optimistic loan officer. Credit scoring potentially affects the actions of loan officers in a second, more subtle, way as well. Credit scoring reduces the amount of time that an officer invests in examining the loan application. This makes it less likely that an officer will become invested in the project under consideration. One finding of behavioral economics is that once a belief forms, it is difficult to induce the person to change it.⁴⁸ This suggests that once a loan officer invests much of her time in deciding to grant a loan application, she may ignore later evidence that the loan is in trouble. By reducing the scrutiny that a loan officer gives a loan, credit scoring may make it less likely that the officer will form a belief to which she is wedded.

Credit scoring thus checks the tendency that loan officers may have toward excessive optimism. It may also provide an indirect mechanism for pricing bankruptcy regimes. Unfortunately, much of the information surrounding the actual workings of credit scoring systems is proprietary. One thing that is known, however, is that the systems are based on the performance of past loans. All agree that bankruptcy law affects this performance. To the extent that bankruptcy law dissipates assets or transfers them away from creditors, creditors will receive a lower return. Indeed, the credit industry's recent lobbying efforts for bankruptcy reform legislation on the consumer side demonstrate a belief on the part of lenders that bankruptcy law does affect loan performance, at least for consumer debtors. It is thus conceivable that credit scoring is sensitive to the effect of the applicable bankruptcy regime. Moreover, to the extent that choice of a bankruptcy regime would affect future loan performance, this choice may ultimately be picked up by credit scoring programs.

The risk of a loan officer becoming too committed to a client's loan request exists in situations where credit scoring may not be feasible. To date, credit scoring has been used in individual and small-business loan areas, but not in the general commercial loan context. In this context, some large banks have taken other actions that have the effect of reducing biases in the lending decision. In these banks, the loan officer who solicits the loan application has no

48. See sources cited *supra* note 29.

responsibility for deciding whether or not the loan is made. Rather, the loan application and the company's financial statements are sent to another office that decides whether or not to make the loan. The loan officer exercises no independent judgment on whether or not to make the loan. Rather, the officer is in the nature of a salesperson. Her compensation is based on how many products—loans, deposits, treasury management services—she is able to sell each year. The office that actually makes the lending decision is evaluated on the performance of the loans that it makes. This office, however, has little or no actual relationship with the customer, and is not responsible for servicing the loan or deciding when the loan is in danger of not being repaid.

This decoupling of loan application solicitation from the loan approval process both reduces the risk of bias and provides appropriate economic incentives for those who solicit loans and those who approve them. The risk of cognitive bias is reduced by ensuring that the bank officer who makes the lending decision does not have a prior relationship with the client.⁴⁹ The compensation structure provides economic incentives for those who solicit loan applications to be as aggressive as possible—the more loans “sold,” the more compensation the officer receives. As for the officer who actually approves the loan, she is evaluated on the performance of the loans that she approves. The loan officer who solicits loans has the incentive to procure as many loan applications as possible, whereas the officer who approves the loan has the incentive to only approve loans that she expects to be profitable. Here, as is often the case, behavioral economic analysis and traditional economic analysis offer compatible explanations for the same practice.⁵⁰

A second common feature in financial institutions which may negate the bias to remain committed to a course of action is the division between the bank employee who is responsible for originating and servicing the loan and the bank employee who is responsible for handling the loan once the borrower encounters financial distress. Most banks transfer a loan from the operating division to a workout division once the loan becomes distressed.⁵¹ One obvious effect of this

49. The loan approval officer may of course face other risks of bias. See McNamara & Bromiley, *supra* note 44, at 1079-80 (reporting that loan officers are more likely to approve loans for an “exciting” industry).

50. See Donald C. Langevoort & Robert K. Rasmussen, *Skewing the Results: The Role of Lawyers in Transmitting Legal Rules*, 5 S. CAL. INTERDISC. L.J. 375 (1997) (telling compatible economic and psychological stories as to why transactional lawyers overstate legal risks).

51. See Mann, *supra* note 39, at 185-86 (describing a system of transferring troubled loans).

transfer is that it removes responsibility for the loan from the person who made the original decision to solicit the loan and transfers that responsibility to a person who has not made any prior judgment on the merits of the project. This transfer counteracts any bias that the lending officer may have in favor of continuation. One option always open to a lender is simply to keep monitoring the loan but let the debtor attempt to turn the project around. If in fact people in organizational settings are hesitant to question prior commitments that they have made, this tendency would suggest that loan originators would have a continuation bias. Thus, one would expect that loan officers who made the original loan would be more likely to opt for continuation than an objective assessment of the facts would suggest. By transferring the loan to a new person, such bias may be counteracted.⁵²

Moreover, the structure of relations between the originating division and the workout division suggests an attempt at debiasing. Most institutions transfer a loan to a "special assets" division once the loan is identified as a problem loan.⁵³ The decision to transfer can be based either on objective or subjective factors. It reflects poorly on loan officers if they delay in transferring a problem loan to the special assets division.⁵⁴ The knowledge of such possible negative imprecation may temper undue optimism on the part of the lending officer when making the loan in the first instance.

The price at which the loan is transferred to the special assets division may lead to debiasing of both the lending division and the special assets division. As to the lending division, when the loan is transferred to the special assets division, the lender values its expected recovery on the loan at that time. To the extent that the expected recovery is less than 100 percent, this loss is assigned to the originating division. In other words, officers who initially approve a loan know that their performance on loans are judged not on the ultimate outcome, but on how things stand when they transfer the loan. By quantifying the loss at the time of transfer, the bank may be using the phenomenon of loss aversion to counteract the potential commitment bias. The loan officer knows that, to the extent losses increase, she will be held responsible. Behavioral economics has shown that

52. In banks where lending officers both solicit and approve loan applications, the continuation bias would be even stronger than it is in banks that have segregated the solicitation and approval functions.

53. See Mann, *supra* note 39, at 187-90 (describing a bank's process for selecting debtors for termination).

54. See *id.* at 187.

people attach higher values to avoiding a loss than they do to procuring a gain of the same magnitude. To the extent that the loan officer knows that inaction on her part may increase the loss, she may be more willing to transfer the asset than she otherwise would be.

The special assets division to which the loan is transferred gets the loan at the price set at the time of transfer. To the extent that it ultimately recovers more than the expected amount, it is credited with the profit; to the extent that it recovers less, it is charged with the loss. Thus, the special assets division has the correct economic incentives to make the efficient decision as to how to proceed with the loan (at least from the bank's perspective). Moreover, since this is the first contact that the special assets division employee has with the loan, there is no a priori reason to believe that the officers in this division have any decisional bias toward either continuation or termination of the loan.

Of course, the fact that the special assets division has the appropriate incentive to take the action which maximizes the lender's recovery does not mean that the division will maximize the value of the debtor firm. Much depends on the relationship between the amount owed on the loan and the value of the debtor firm. If the bank's loan has priority over other loans, and if there is little chance that under any scenario the debtor will repay the loan in full, then the bank will have the incentive to maximize firm value. In the situation just described, the lender receives all of the benefits of the correct allocation of the firm's assets as well as all of the costs of an incorrect allocation. In other words, the lender is the marginal claimant.

In other situations, there may be an incentive on the part of the bank to terminate the loan even if this does not maximize the value of the firm. First, there is the economic incentive. Termination may limit the bank's losses to where they stand at the present time. If the loan is continued, the bank may bear all of the potential future losses if the value of the firm decreases further, but may not reap all of the gains if the firm's value increases. Since the lender's claim is capped by its contract, such gains may go either to other creditors of the firm or to the shareholders. Second, there may be a cultural bias in the special assets division towards termination. Ronald Mann reports that often when a loan is transferred to the special assets division, it is refinanced by a loan from another institution. The behavior of this second institution seems odd; why would a bank that knows nothing about the firm lend money when the lender that presumably has better information is terminating its relationship with the firm? Mann argues that different lenders have different

tolerances for risk.⁵⁵ Thus, to the extent that a loan is, almost by definition, too risky for the lender by the time it has gotten to special assets, those in special assets may have a bias toward terminating the relationship. If a firm is not able to get new financing, this may lead to a liquidation of the firm.

The transfer of the loan from the operating division to the special assets division suggests a mechanism by which bankruptcy law may be priced inside the lender. One of the arguments as to why bankruptcy law may not be priced in credit terms is that the potential bankruptcy of a borrower is too remote and too unlikely an event.⁵⁶ At the time the loan is transferred inside the bank to the distressed loan department, however, the lender knows that bankruptcy is a definite possibility.⁵⁷ As an internal matter, the cost of bankruptcy is visible to the lender. To the extent that the loss for the loan is assigned to the lending division, that part of the loss attributable to bankruptcy law is priced to that division. The lending division has to cover these costs through its operations. If in fact current bankruptcy law is inefficient and these costs are borne by the lending division, then these costs may lead the lending division to alter its lending practices. Thus, while behavioral economics suggests that loan officers may not be cognizant of bankruptcy law when they make their loans, the internal pricing in the lenders may force these costs to be recouped. Crucial to this analysis, of course, is the magnitude of the costs of bankruptcy law. This is an empirical question on which we have little data.⁵⁸

Note that the internal structure of banks would make it relatively easy for lenders to price various bankruptcy regimes were we to move to a system that allowed firms to commit to differing sets of insolvency rules. To the extent that a bankruptcy regime based on private choice would generate differing bankruptcy rules, lenders may ultimately get information about the effects of these different rules through this internal pricing mechanism. If these differences turn out to be significant, it may be the case that these differentials would ultimately be reflected in the actions of the originators.

55. See Mann, *supra* note 39, at 215-19.

56. See *id.* at 240-41 (stating that the infrequency of bankruptcy does not lead to significant effects on the issuance of new debt).

57. In Mann's study of distressed secured loans, approximately 10 percent of those loans ended up in bankruptcy. See *id.* at 240. This may understate the number of distressed loans that end up in bankruptcy, however, given that some of these loans were refinanced, and these new loans may end up in bankruptcy.

58. See Elizabeth Warren, *The Untenable Case for Repeal of Chapter 11*, 102 YALE L.J. 437, 476 (1992) (noting the lack of evidence about the direct costs of the Chapter 11 system).

The above argument posits that, despite biases in decision making, the costs of inefficient bankruptcy laws are passed on to debtors. The literature on behavioral economics suggests a different, more interesting, hypothesis: shifting to a contract regime may increase the efficiency of the lending market. It is easy to articulate a theory that lenders under the current regime often fail to price bankruptcy rules accurately. It is probably true that most lenders fail to focus on bankruptcy rules when they make loans. Most loans are repaid without encountering financial distress.⁵⁹ Of those loans that do become distressed, only a small portion of these end up in bankruptcy.⁶⁰ If bankruptcy costs are relatively small—again, an issue about which we do not have good information—they may not have an impact on the market for credit. Moreover, firms cannot legally bind themselves at the time they borrow money not to file for bankruptcy. If in fact bankers focus on minimizing risks when they make loans, they may not focus on the costs of bankruptcy because a bankruptcy filing will be an option available to the debtor regardless of the terms of the contract.

Yet it may be the case that moving to a regime of free contracting over bankruptcy would result in lenders pricing differing bankruptcy rules. Recall the study that finds that bankers tend to view the problem as minimizing risk rather than maximizing return. To the extent that this finding is robust, it suggests that banks would be cognizant of differences in bankruptcy terms when making lending decisions. As noted above, bankruptcy law currently is a mandatory rule which neither the lenders nor the debtors can alter at the time of contracting. Given this, it would not be surprising if lenders currently did not pay much attention to bankruptcy law. For this reason, I do not find it surprising that when bankers who make loans were asked whether reserving twenty percent of the value of collateral for unsecured creditors would reduce the availability of secured credit, they said it would not.⁶¹ Even with this significant change in the law, it still may be the case that those making the loans

59. See Mann, *supra* note 39, at 239 n.327 (estimating that "well over 95% of loans will be repaid as agreed without incident").

60. See *id.* at 240 (stating that of 72 distressed loans studied, only seven ended up in bankruptcy).

61. See *id.* at 241-43 (reflecting the view that loan origination officers do not consider bankruptcy scenarios). For similar reasons, I am not surprised by Steve Schwarcz's report that bankruptcy attorneys believe that this proposal would have a deleterious effect on lending practices. See Steven L. Schwarcz, *The Easy Case for the Priority of Secured Claims in Bankruptcy*, 47 DUKE L.J. 425, 427 (1997). Attorneys have a variety of reasons for exaggerating the risks posed by legal rules. See generally Langevoort & Rasmussen, *supra* note 50.

would not consider the effect of bankruptcy law in their decision-making process, because they have no control over this aspect of the loan.

This inattention to bankruptcy law in the origination market may change if the proposals to switch bankruptcy law to the realm of contract are adopted. Then bankers could have a say in which legal avenues would be available if the debtor firm were to encounter financial distress. Whereas Chapter 11 is an immutable feature of the landscape to those making loans, a bankruptcy regime built on debtor choice may make the governing bankruptcy rules a salient feature when loan officers decide to make loans.

At a general level, the basic choice among possible bankruptcy regimes is between court-supervised reorganization and the sale of the firm, either piecemeal or as a whole. The sale option presents less risk to the bank than does the reorganization option. As things stand in current practice, it is usually the case that most reorganization attempts end up as sales anyway, after funds have been spent on the reorganization effort.⁶² Even in successful reorganization, lenders routinely see violations of contractual priority.⁶³ Finally, even if the lender believes that it can receive a higher return through a restructuring of the firm, it may be in a position to orchestrate such a restructuring outside of bankruptcy. Indeed, many reorganizations take place outside of bankruptcy.⁶⁴ To the extent that lenders are concerned about lowering risks, they may have a preference for sales over reorganization. In other words, lenders may offer lower interest rates or larger loans to debtors who commit to not filing for a court-supervised reorganization.

Such increased attention to the costs of bankruptcy rules would be in line with the general trend that appears to be emerging in the banking industry today. With the growing emphasis on national and regional banks, there is an increasing specialization in bank functions. Each employee now has fewer tasks to perform, and is evaluated on her performance of those tasks. To the extent that an em-

62. See James W. Bowers, *Rehabilitation, Redistribution or Dissipation: The Evidence for Choosing Among Bankruptcy Hypotheses*, 72 WASH. U. L.Q. 955, 963-64 (1994) (discussing the small percentage of successful reorganizations); Robert K. Rasmussen, *The Efficiency of Chapter 11*, 8 BANKR. DEV. L.J. 319, 322 (1991) (stating that in most reorganization bankruptcies, creditors would have received more if the debtor would have originally filed for Chapter 7 liquidation).

63. See sources cited *supra* note 35.

64. See Alan Schwartz, *Bankruptcy Workouts and Debt Contracts*, 36 J.L. & ECON. 595, 595-96 n.1 (1993) (summarizing studies that suggest that approximately 45.5% of firms in financial distress restructure without entering bankruptcy).

ployee's task is influenced by the effect of bankruptcy law, one would expect that the market for credit will be more likely to price the cost of such laws.

As with much of behavioral economics, it is still too early to draw definite conclusions. However, to the extent that normative bankruptcy scholarship turns on the assumption that lenders would take account of bankruptcy terms when making loans, it may be that behavioral economics, far from invalidating this hypothesis, may give it added credence.

IV. CONCLUSION

Behavioral economics calls into question some of the basic assumptions of the rational actor model. But it does not replace it with an irrational actor model in which people make choices in a random fashion. What is needed is a careful reexamination of arguments premised on the rational actor model to ascertain the extent to which behavioral economics suggests modifications. The economic analysis of bankruptcy law invokes the rational-actor assumption at many turns. Thus, it is a prime candidate for the insights that behavioral economics has to offer, both to the extent that it analyzes the effects of extant law and to the extent that it proposes sweeping changes in that law.

As to the normative branch of bankruptcy scholarship, one of the crucial assumptions on which it rests is that creditors would price the effect of differing bankruptcy regimes. At first blush, behavioral economics suggests reasons why this assumption may not be true. Lenders may suffer from excessive optimism and not worry about bankruptcy; they may not price the effects of bankruptcy law because, at the time of the initial transaction, bankruptcy is too remote an event; and they may be too committed to the lending decision to act promptly when the debtor becomes financially distressed. Yet the internal mechanisms of banks may provide effective guards against these biases. Moreover, by making the governing bankruptcy procedures a choice rather than a mandatory regime, it may well be the case that this would create even greater attention on the part of lenders to the effect of bankruptcy rules. Thus, the assumption that bankruptcy law affects the price and supply of credit seems to remain a reasonable possibility. Yet it may well be the case that other assumptions in the economic analysis of bankruptcy law may have to

be altered in light of our new understanding of the ways in which people make decisions.

