Bankruptcy and Risk Allocation

Barry E. Adler

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BANKRUPTCY AND RISK ALLOCATION

Barry E. Adler †

TABLE OF CONTENTS

INTRODUCTION	440
I. THEORY AND PRACTICE OF THE BASIC CREDITORS'	
BARGAIN	444
A. The Basic Creditors' Bargain Heuristic	444
B. Bankruptcy's Reallocative Provisions	446
1. <i>Bankruptcy Reorganization</i>	446
2. <i>Direct Denial of Priority</i>	454
II. RISK-SHARING THEORY	456
A. Common-Disaster Insurance	457
B. Eve-of-Bankruptcy Conflict	461
III. A CRITIQUE OF RISK-SHARING THEORY	463
A. Bankruptcy Reallocation Costs	464
1. <i>Reorganization Costs</i>	464
a. <i>Direct and Indirect Costs</i>	465
b. <i>Attribution to Bankruptcy Reallocation</i>	467
2. <i>Forum Shopping Costs</i>	471
3. <i>Perverse Investment Incentives</i>	473
a. <i>Risk Incentives</i>	473
b. <i>Diligence Incentives</i>	475
4. <i>Compulsory Contract Term Inefficiencies</i>	476
a. <i>In Expectation of Bankruptcy</i>	476
b. <i>In Avoidance of Bankruptcy</i>	479
B. Bankruptcy Reallocation's Illusory Benefits	479
1. <i>Limited Benefits</i>	480
a. <i>Firm-Specific Risk</i>	480
b. <i>Interdependent Risk</i>	483
2. <i>Contractual Risk-Sharing</i>	484
3. <i>Proceeds Reallocation</i>	488
CONCLUSION AND IMPLICATIONS	489

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INTRODUCTION

Bankrupt business firms distribute property to low-priority investors even though the firms do not fully repay high-priority investors.¹ That bankruptcy in this way alters contractual priorities effectively reallocates among investors the risk of business insolvency.² Commentators have roundly criticized such reallocation as an impediment to efficient business practice.³ Recently, however, a "risk-sharing" defense of bankruptcy reallocation has appeared in both the law⁴ and finance⁵ literature. Risk-sharing theorists argue that all investors in a business debtor—equity investors and creditors alike—would choose to share the risk of loss from the debtor's insolvency.⁶ These theorists surmise that investors cannot agree to share such risk, because a risk-sharing agreement is prohibitively expensive to negotiate. Therefore, the theorists conclude, bankruptcy reallocation furnishes a mutually beneficial hypothetical bargain to which investors would expressly agree but for transaction difficulties.

¹ For evidence or discussion, see, e.g., John D. Ayer, *Rethinking Absolute Priority After Ahlers*, 87 MICH. L. REV. 963 (1989); Douglas G. Baird & Thomas H. Jackson, *Bargaining After the Fall and the Contours of the Absolute Priority Rule*, 55 U. CHI. L. REV. 738 (1988); Allan C. Eberhart et al., *Security Pricing and Deviations from the Absolute Priority Rule in Bankruptcy Proceedings*, 45 J. FIN. 1457 (1990); Lynn M. Lopucki & William C. Whitford, *Bargaining over Equity's Share in the Bankruptcy Reorganization of Large, Publicly Held Companies*, 139 U. PA. L. REV. 125 (1990); Raymond T. Nimmer, *Negotiated Bankruptcy Reorganization Plans: Absolute Priority and New Value Contributions*, 36 EMORY L.J. 1009 (1987); Jerold B. Warner, *Bankruptcy, Absolute Priority, and the Pricing of Risky Debt Claims*, 4 J. FIN. ECON. 239 (1977); Lawrence A. Weiss, *Bankruptcy Resolution: Direct Costs and Violation of Priority of Claims*, 27 J. FIN. ECON. 285 (1990).

² Generally a business entity is insolvent when "the sum of such entity's debts is greater than all of such entity's property, at a fair valuation. . . ." 11 U.S.C. § 101(31)(A) (1988).

³ See, e.g., Nimmer, *supra* note 1, at 1084 ("In the context of the corporation's bankruptcy, the public investor in a troubled corporation has no particular equitable or legal right superior to the creditor whose debt may go unpaid. Protecting the shareholder at a cost of injury to the creditor is often unjustifiable."); Kham & Nate's Shoes No. 2 v. First Bank of Whiting, 908 F.2d 1351, 1357 (7th Cir. 1990) (Easterbrook, J.) ("Unless pacts are enforced according to their terms, the institution of contract, with all the advantages private negotiation and agreement brings, is jeopardized.").

⁴ See Thomas H. Jackson & Robert E. Scott, *On the Nature of Bankruptcy: An Essay on Bankruptcy Sharing and the Creditors' Bargain*, 75 VA. L. REV. 155 (1989); Mark J. Roe, *Commentary on "On the Nature of Bankruptcy": Bankruptcy, Priority, and Economics*, 75 VA. L. REV. 219 (1989); Robert E. Scott, *Sharing the Risks of Bankruptcy: Timbers, Ahlers, and Beyond*, 1 COLUM. BUS. L. REV. 183 (1989). Cf. Lopucki & Whitford, *supra* note 1, at 182 (risk-sharing theory can "make one more comfortable" with breaches of contractual priority).

⁵ See Katherine H. Daigle & Michael T. Maloney, *Residual Claims in Bankruptcy: An Agency Theory Explanation* (1991) (unpublished manuscript, on file with the *Cornell Law Review*); Michael Frierman & P.V. Viswanath, *Absolute Priority and Bankruptcy* (1990) (unpublished manuscript, on file with the *Cornell Law Review*).

⁶ See, e.g., Jackson & Scott, *supra* note 4, at 158.

Though ostensibly plausible, risk-sharing theory must overcome a formidable obstacle: the *actual* bargain among investors is not silent on how to allocate insolvency risk. That bargain, in the form of equity and creditor contracts, expressly allocates insolvency risk to the low-priority, or "junior" investors, i.e., to equity investors and general unsecured creditors. Thus bankruptcy reallocation appears to conflict with the parties' express intent.

Moreover, one cannot properly attribute contractual priority to transaction costs. Contractual priority reflects a bargain struck within the network of contracts that comprises every firm.⁷ As part of the investors' contractual network, equity investors purchase residual claims subordinate to those of creditors. In return, these equity investors gain both control of the firm and the right to any value in excess of the amount the firm owes creditors.⁸ Among the firm's creditors, general creditors invest in rights to repayment that are subordinate to rights of high-priority, usually secured "senior" creditors. As a result, the firm, if able, pays interest to general creditors at a risk-enhanced rate greater than that the firm pays the more senior creditors. In sum, this collective scheme provides each investor with compensation for the insolvency risk it bears. The firm compensates equity, its riskiest investment, with a boundless residual claim. And it compensates each creditor with a claim limited inversely to the risk the creditor bears.

Risk-sharing theory, to succeed, must explain how bankruptcy reallocation offers investors a better bargain than the carefully inte-

⁷ The seminal work that describes a firm as a network of contracts among investors is R.H. Coase, *The Nature of the Firm*, 4 *ECONOMICA* 386 (1937). The firm itself is the nexus of this network. Michael C. Jensen & William H. Meckling, *Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure*, 3 *J. FIN. ECON.* 305, 310-11 (1976). Although some view a firm as a creature of regulation as well as of contract, see William W. Bratton, Jr., *The New Economic Theory of the Firm: Critical Perspectives from History*, 41 *STAN. L. REV.* 1471 (1989), no one argues that the firm is not at least in large part a product of its constituent contracts. This Article addresses bankruptcy's treatment of these contracts as the components of a corporation, a standard business firm. For a comparison of the corporation to other business associations, see Larry E. Ribstein, *An Applied Theory of Limited Partnership*, 37 *EMORY L.J.* 835 (1988). The bankruptcy of an individual raises concerns that are beyond this paper's scope. For a description of these concerns, see Theodore Eisenberg, *Bankruptcy Law in Perspective*, 28 *UCLA L. REV.* 953, 976-91 (1981) (questioning benefits of Bankruptcy Act to consumer debtors).

⁸ A typical equity investor is one who owns shares of common stock. Common stock represents the residual claim to a corporation's earnings and assets after the corporation satisfies its obligations to creditors and any "preferred" stockholder with a superior claim. Each share of common stock represents a portion of the residual claim determined by the total number of shares. The common stock also ultimately controls the firm's affairs. Each share typically carries one vote to be cast for the appointment of the corporation's directors or for the resolution of other matters. See generally RICHARD A. BREALEY & STEWART C. MYERS, *PRINCIPLES OF CORPORATE FINANCE* 303-05 (3d ed. 1988).

grated actual bargain that reallocation alters. This paper refutes the possibility that risk-sharing theory can offer a successful explanation under any set of reasonable assumptions. Because risk-sharing theory has been the only outstanding defense of bankruptcy's supplantation of contractual priority,⁹ this refutation leaves much of current bankruptcy law without theoretical justification.

Part I of this Article first describes the basic creditors' bargain heuristic. This model is the standard justification for bankruptcy's general supplantation of private contract rights, most notably the right to collect unilaterally on a debt obligation in default. The creditors' bargain model suggests that creditors of an insolvent debtor prefer bankruptcy's collective proceeding to individual collection actions because a collective proceeding preserves a more valuable debtor to divide among the claimants. Bankruptcy is necessary, the heuristic reveals, because creditors would find it difficult collectively to reach this efficient outcome. Part I next explains how bankruptcy law reallocates contractual priorities among claimants, and argues that the basic creditors' bargain model cannot extend to justify this reallocation. Principal among bankruptcy's reallocative provisions are compulsory reorganization rules that grant junior claimants practical control over the bankruptcy process and allow such claimants to coerce concessions from senior claimants.¹⁰ Moreover, court bias in favor of junior claimants exacerbates this strategic advantage, and other provisions directly deny a senior claimant's priority in whole or in part.

Part II describes how risk-sharing theory attempts to justify bankruptcy's reallocative provisions in a way that the basic creditors' bargain model cannot. In theory, one source of reallocation's benefit is insurance against a firm's failure from a "common disaster."

⁹ Risk-sharing theory is not the only defense of bankruptcy reallocation. A more amorphous defense is based on what some perceive to be general principles of equity and fairness. For example, Elizabeth Warren argues that bankruptcy's equal treatment of claimants, regardless of contractual priority, may be justified inasmuch as it provides a fair resolution for all claimants and softens the blow for those least able to bear the loss from the firm's failure. See Elizabeth Warren, *Bankruptcy Policy*, 54 U. CHI. L. REV. 775 (1987). This justification is problematic because junior and senior claimants are not similarly situated and therefore need not be treated equally. These claimants have explicitly bargained for precisely the unequal treatment that bankruptcy equates. And there is no reason to think that junior claimants are any less able to bear loss than senior claimants. In fact, senior claimants may have become senior because they are less able to bear loss. See *infra* Part III. Thus bankruptcy's reallocative effect is fair only if such reallocation would be proper between creditors who have bargained for unequal treatment. See generally Douglas G. Baird, *Loss Distribution, Forum Shopping, and Bankruptcy: A Reply to Warren*, 54 U. CHI. L. REV. 815 (1987). See *infra* note 167 for a critique of a related defense.

¹⁰ In this Article the phrase "claimant" includes an individual or entity to whom a firm owes an obligation. This includes equity investors even though bankruptcy jargon often limits "claimants" to creditors.

This insurance guarantees that no claimant bears too large a share of the losses from such a disaster. Risk-sharing theory adds an additional hypothesis, that reallocation produces benefits by reducing investors' conflict on or after the "eve" of bankruptcy. On the eve of an insolvent debtor's bankruptcy, junior claimants have little to lose and much to gain if they invest the debtor's assets in a risky venture. Thus the junior claimants have an incentive to take untoward risks with the troubled firm's assets. Senior claimants, in contrast, bear the risk that such an investment will fail and do not share the junior claimants' incentive. Risk-sharing theory presumes that bankruptcy reallocation reduces the junior claimants' perverse incentive, because reallocation grants junior claimants a stake in the insolvent debtor.

Part III begins a critique of risk-sharing theory by discussing the potentially enormous costs that bankruptcy reallocation can impose. Because all investors bargain with full knowledge of bankruptcy's reallocative provisions, reallocation does not force a wealth transfer from or to any investor. Bankruptcy reallocation, however, does impose efficiency costs that are commonly underestimated. First, researchers have traditionally focused too narrowly on direct bankruptcy costs such as attorneys' and accountants' fees, while they ignore costs from delay and uncertainty, which may dwarf the direct costs. Second, commentators underestimate total bankruptcy costs when they myopically attribute to reallocation positive insolvency incentives, while failing to recognize that reallocation creates perverse incentives that precede, and can cause, financial distress. These perverse incentives exist when the debtor is solvent, because bankruptcy reallocation makes the prospect of insolvency less onerous to junior claimants. Third, descriptions of bankruptcy costs exclude costs incurred by firms that adopt inefficient capital structures in response to bankruptcy's reallocative provisions.

In its conclusion, Part III identifies two reasons why the collective benefits from bankruptcy reallocation cannot outweigh its collective costs. First, the benefits from bankruptcy reallocation accrue only to junior investors that are undiversified or relatively more sensitive to insolvency risk than are a debtor's senior investors. Risk-sharing theory overstates this class of beneficiaries because it misapplies risk-aversion analysis. Second, contractual and less pervasive compulsory alternatives to bankruptcy's actual reallocative provisions can produce all plausible risk-sharing benefits at lower cost.

Thus the Article concludes that bankruptcy's reallocative provisions, including bankruptcy reorganization, its most pernicious reallocation vehicle, lack justification and that Congress should abolish them. The abolition of bankruptcy reorganization and kindred pro-

visions would greatly simplify and reduce the price of the insolvency process. Alternatively, courts properly sympathetic to contractual priorities should interpret extant law to remove bankruptcy's reallocative bias.

I

THEORY AND PRACTICE OF THE BASIC CREDITORS' BARGAIN

Bankruptcy law alters contracts between creditors and their debtor. Basic creditors' bargain theory defends bankruptcy's interference with actual contracts on the ground that a "hypothetical contract" among all creditors prohibits enforcement of individual collection remedies that would work to the creditors' collective disadvantage. However, even if one accepts this hypothetical contract theory, in practice bankruptcy law interferes with contractual priorities as well as collection rights, and thus exceeds whatever justification the basic theory can provide.

A. The Basic Creditors' Bargain Heuristic

At its core, bankruptcy supplants debt collection remedies of individual creditors with a "collectivized debt collection device."¹¹ In theory, bankruptcy's collective proceeding is superior to individual creditor actions, because individual creditors have perverse incentives to act in their own interests, even if such action would disserve creditors' collective interest. Thus bankruptcy is beneficial to the extent it protects creditors from their own worst instincts.¹²

To illustrate, assume a debtor firm operates a business with assets worth \$500,000 as a going concern, but only \$440,000 if sold piecemeal. That is, the assets are more valuable as parts of the debtor's business than if separately distributed to other businesses. Assume further that the debtor owes a total of \$800,000 to general creditors—\$80,000 to each of ten such creditors—and that the debtor is in default on its obligations. Because the debtor lacks sufficient assets to pay all creditors in full, each creditor has an incentive to collect its debt before the other creditors. This race to the assets will likely divide the assets piecemeal, with each race winner taking a piece of the debtor large enough to satisfy its own claim. As a result, the creditors collectively will take assets worth only \$440,000 from the debtor. The creditors would prefer to sell the debtor's assets intact for \$500,000, but each creditor knows that it may not obtain any of the debtor's assets if it waits for every creditor

¹¹ THOMAS H. JACKSON, *THE LOGIC AND LIMITS OF BANKRUPTCY LAW* 7 (1986).

¹² See generally *id.* at 1-19.

to find every other and agree to act collectively. This dilemma of coordination and game theory is known as the common-pool problem.¹³

Bankruptcy disallows individual creditor action¹⁴ and cures the common-pool problem. A bankruptcy court supervises the use and disposition of the debtor's assets and holds the assets together if together the assets are most valuable.¹⁵ The court will then divide the value of the assets among creditors in an orderly fashion, either through the sale of the assets to a third party and distribution of the sale proceeds,¹⁶ or through distribution of interests in a debtor freed from prebankruptcy obligations.¹⁷ An individual creditor never has an opportunity to withdraw vital assets. In the illustration above, for example, the bankruptcy court would prohibit individual creditor action and could sell the debtor's business as a going concern for \$500,000. This would preserve the debtor's going-concern surplus. Such bankruptcy intervention is thought to reflect the "hypothetical creditors' bargain," or the solution the creditors would reach could they solve their coordination and strategy problems.¹⁸ As such, bankruptcy's solution to the common-pool problem is the chief justification for compulsory supplantation of individual creditor remedies.¹⁹

¹³ *Id.* at 10-12.

¹⁴ A bankruptcy petition automatically stays any individual creditor action against a debtor with respect to pre-petition claims. 11 U.S.C. § 362(a) (1988).

¹⁵ The Bankruptcy Code contains a number of provisions designed to maximize the value of the debtor as a going concern. *See, e.g.*, 11 U.S.C. § 363 (1988) (the court supervises transactions outside the ordinary course of business); *id.* § 721 (court may authorize the bankruptcy trustee to operate the business of the debtor if such operation is in the best interest of the estate); *id.* § 1108 (in a reorganization proceeding the trustee or the debtor may operate the business of the debtor unless the court orders otherwise).

¹⁶ *See id.* §§ 725, 726.

¹⁷ *See id.* §§ 1101-1174. *See infra* part I.B. for a further explanation of these bankruptcy reorganization provisions.

¹⁸ This illustration is simplistic. In an actual case, bankruptcy's solution to the common-pool problem may yield subsidiary benefits. These include the elimination of costs of the avoided race to the debtor's assets, and the provision of a common forum for disputes over those assets. These cost savings must be compared to the cost of the bankruptcy process, which in this illustration is assumed to be less than the creditors' collection costs. For a comprehensive description of the basic hypothetical bargain model, *see* JACKSON, *supra* note 11, at 1-19.

¹⁹ This view, though widely accepted, is not necessarily correct. A neutral legal environment that permits firms meaningfully to opt out of bankruptcy could prompt virtually all firms to solve the collective action problem with contracts prior to any investor's contribution of capital. Thus bankruptcy would be unnecessary. This discussion is left for another day. *See* Barry E. Adler, *The Uneasy Case for Corporate Bankruptcy* (1991) (unpublished manuscript, on file with the *Cornell Law Review*) (multi-priority contractual hierarchy could replace bankruptcy). In any case, even if one accepts that general benefits accrue from bankruptcy's collective proceeding, such a proceeding is not necessarily ideal for all issues in all bankruptcies. *See* Robert K. Rasmussen, *Bankruptcy*

B. Bankruptcy's Reallocative Provisions

Although nothing in the basic creditors' bargain heuristic suggests that bankruptcy should affect contractual priorities among claimants to the debtor's assets, bankruptcy has myriad ways to effect such reallocation. These include provisions for reorganization and provisions that directly deny priority.

1. *Bankruptcy Reorganization*

Bankruptcy reorganization²⁰ provides a potent vehicle for the reallocation of contractual priorities. In principle, reorganization is benign and merely skips a step in bankruptcy's resolution of an insolvency. In the previous illustration, for example, the court could have the debtor issue 500,000 shares of common stock²¹ ratably to the creditors in partial satisfaction of the creditors' aggregate \$800,000 in claims, which the court would then discharge.²² Prebankruptcy equity investors, contractually last in line,²³ would receive nothing. Each share would be worth \$1, less the related share of bankruptcy expenses, and if bankruptcy reorganization and auction expenses are the same, each creditor would own an interest in the reorganized debtor equal in value to the cash the creditor would have received had the court auctioned the firm on the open market and distributed the sale proceeds.²⁴ Reorganization avoids the auction step and accomplishes essentially a sale of the debtor to its creditors.²⁵ The situation would change little if the creditors did not share the same priority level. For example, if one creditor held a perfected security interest in collateral worth \$80,000, the amount of its claim, it would hold a contractual entitlement to priority over unsecured creditors in that amount.²⁶ The secured creditor, there-

and the Administrative State, 42 HASTINGS L.J. 1567 (1991) (bankruptcy forum inappropriate for administrative law issue resolution).

²⁰ See 11 U.S.C. §§ 1101-1174 (1988).

²¹ See *supra* note 8.

²² See 11 U.S.C. § 1141 (1988).

²³ See *supra* note 8 and accompanying text.

²⁴ The text's illustration may be generalized. In the absence of exceptional circumstances, the creditors must be indifferent to a cash sale or share distribution, because the creditors can achieve whatever combination of stock ownership and cash they prefer simply through the sale or purchase of shares on the market. Cf. Franco Modigliani & Merton H. Miller, *The Cost of Capital, Corporation Finance and the Theory of Investment*, 48 AM. ECON. REV. 261 (1958) (noting investors' ability to leverage their interests in an all equity firm).

²⁵ As Baird describes this conception: "The difference between a liquidation and a reorganization is that the first involves an actual sale of all the assets of a business to a third-party buyer and the second involves a hypothetical one." Douglas G. Baird, *The Uneasy Case for Corporate Reorganizations*, 15 J. LEGAL STUD. 127, 139 (1986).

²⁶ All states except Louisiana have adopted Article 9 of the Uniform Commercial Code (UCC), which allows a secured creditor to establish a priority property interest in

fore, could receive 80,000 shares and the other creditors 420,000 shares collectively. Thus, in fundamental conception, reorganization would not upset contractual priority.²⁷

In practice, however, reorganization does not easily follow this pattern. Because reorganization does not involve a public auction, a bankruptcy court does not know the value of the firm in which it must distribute interests. Consequently, if the claimants to the debtor possess different priorities, the court must oversee and, if necessary, resolve a negotiation among claimants who have different opinions about the debtor's value. Assume, for example, that a debtor owes a fully secured creditor \$100 and owes a number of unsecured creditors a total of \$200. In a reorganization negotiation, the secured creditor might argue that the debtor is worth \$200 and that it should receive half of the interest in the reorganized debtor. The unsecured creditors might argue that the debtor is worth \$300 and that they should receive two-thirds of the interest in the reorganized debtor. This debate, moreover, is not limited to creditors. Prebankruptcy equity investors might argue that, despite the bankruptcy, the debtor is solvent, worth \$400, and thus equity should receive one-fourth of the interest in the reorganized debtor. These positions are mutually inconsistent, and the court would have to set a value as part of a reorganization plan.²⁸ If the court errs and overvalues the debtor, the process reallocates contractual priority in favor of the low-priority, or "junior," claimants. If the court errs and undervalues the debtor, the bias works in favor of the high-priority, or "senior," claimants.

The prospect of erroneous valuation does not necessitate a reallocative system. If the reorganization process yields as much overvaluation as undervaluation, the system provides unbiased, though not error free, enforcement of contractual priority. And if the reorganization process is less expensive than an auction, this might be desirable.²⁹ However, bankruptcy reorganization bears little resemblance to this balanced model of valuation dispute resolution. It is instead a valuation system that, in practice if not by design, favors junior claimants at the expense of both senior claim-

collateral, provided that the secured creditor explicitly contracts for that interest and perfects it through public notice. See U.C.C. §§ 9-203, 9-401 (1989); see also Douglas G. Baird, *Notice Filing and the Problem of Ostensible Ownership*, 12 J. LEGAL STUD. 53 (1983) (discussing benefits of notice filing).

²⁷ See 11 U.S.C. §§ 1129(a)(7), (b)(2) (1988) (establishing presumptive priority of secured over unsecured creditors, and of creditors over equity, in a reorganization).

²⁸ See generally *id.* § 1129.

²⁹ Judge Easterbrook suggests that this is possible. See Frank H. Easterbrook, *Is Corporate Bankruptcy Efficient?*, 27 J. FIN. ECON. 411, 416 (1990). But see *infra* notes 123-28 and accompanying text.

ants and all investors collectively. This bias results from a negotiation framework that allows junior claimants to wage a war of attrition, a dispute resolution system that fails to adequately safeguard senior claimants' rights and the duration of bankruptcy proceedings (a consideration ignored in the simple illustrations above).

The war of attrition between junior and senior claimants is waged, and won, primarily by prebankruptcy equity investors. The concept is simple. If a reorganization concludes while a debtor is insolvent—that is, debt obligations exceed total asset value—equity's residual claim has no contractual right to an interest in the reorganized firm.³⁰ Faced with the prospect of no payout, equity favors delay for two reasons. First, delay allows the firm to operate longer while the firm is insolvent but prior to final resolution of the bankruptcy, and thus prolongs the opportunity for a reversal of fortune large enough to return the firm to solvency and return equity investors to a stake in the firm. If equity can control the firm, moreover, it can increase the risk of the debtor's investments and thereby enhance this opportunity. However unlikely the reversal of fortune, and whatever the cost to creditors of the protraction—directly or from investment risk unjustified by expected return³¹—equity gains

³⁰ See generally 11 U.S.C. §§ 726(a)(6), 1129(a)(7), (b)(1), (b)(2) (1988).

³¹ To illustrate, suppose a firm has \$90 in assets and \$100 in debt obligations. Assume management owns all of the firm's equity and has an opportunity to invest \$20 of the firm's assets in a project with a negative expected return, but with a small chance to earn \$20 in profit—a chance that by hypothesis is more than offset by the probability of a loss. If distribution of the firm's value to its creditors and discharge of management are imminent, management will have the debtor invest in the project. Any chance of the \$20 profit, which would return the firm to solvency, is an alternative superior to the status quo for the managers, who have no chance of a return if they forego the investment. The creditors, of course, would prefer that the firm not invest the assets in this unwise venture. Moreover, the venture is ill-advised not only from the creditors' perspective but from the claimants' collective perspective. From this perspective, the project has a negative expected return. For a more involved discussion of claimants' divergent incentives within a firm, see Coase, *supra* note 7; Eugene F. Fama, *Agency Problems and the Theory of the Firm*, 88 J. POL. ECON. 288 (1980); Jensen & Meckling, *supra* note 7, at 329-30; Oliver E. Williamson, *Managerial Discretion and Business Behavior*, 53 AM. ECON. REV. 1032 (1963). See also Roe, *supra* note 4, at 234 (noting that if junior claimants need not compensate senior claimants for pendency use of the firm's assets, the "assets might not be deployed effectively because the equity holder or a junior creditor will have an incentive to delay the proceedings").

Compare the argument of Jackson and Scott that creditors have an incentive to liquidate an insolvent debtor's profitable investments because the creditors' benefits from any investment are limited by the amount the debtor owes them, while the creditors' costs are limited only by the assets invested. Jackson and Scott reason that creditors would prefer to liquidate even a positive value investment, distribute the debtor's value, and reinvest the assets on their own so that the creditors would garner full benefits as well as suffer any losses from the investment. See Jackson & Scott, *supra* note 4, at 169 n.27. Although Jackson and Scott are correct about these incentives, their observation does not constitute an efficiency argument to prolong prebankruptcy management's control of the debtor after bankruptcy. When a quick resolution of an insolvent debtor's

from prolongation of its option on the firm's value.³² Second, the costs of the protracted procedure itself provide equity with an advantage. Even without a realistic hope that the debtor will become solvent, equity can impose the costs of delay until it wrests an extra-contractual settlement from senior claimants. Equity, if able, may hold the debtor hostage and allow it to deteriorate in order to extract ransom from the debtor's contractual owners, the creditors.

Equity's desire for delay is meaningful, of course, only if it has an agent to serve its interests. The debtor's management may act as that agent. The tie between equity and management has two sources. First, as entrepreneurs, or in order to bond themselves to serve the interests of nonmanagement equity investors, managers often own equity interests in their firms.³³ Second, whether or not they own equity interests, managers owe equity investors legally enforceable fiduciary duties.³⁴ Management, therefore, has an incentive to serve equity.

That incentive is not absolute. Nonmanagement equity investors prefer riskier debtor investment than do managers who fear that insolvency could cause dissolution or a shift of ultimate control to creditors. Either event could cost the managers their jobs,³⁵ and these jobs almost always include a firm-specific human capital in-

bankruptcy places the debtor's assets in the hands of the creditors, the incentive to liquidate a profitable investment vanishes with prebankruptcy equity's ability to capture the upside of such investment.

³² See Fischer Black & Myron Scholes, *The Pricing of Options and Corporate Liabilities*, 81 J. POL. ECON. 637 (1973).

³³ In a seminal article on firm organization, Alchian and Demsetz explain that managers—the monitors of other firm participants and directors of firm production—will have the greatest possible incentive to maximize firm income if the managers are the sole residual claimants. See Armen A. Alchian & Harold Demsetz, *Production, Information Costs, and Economic Organization*, 62 AM. ECON. REV. 777 (1972). It follows that if managers are not the sole residual claimants, a second-best solution is to compensate managers with equity interests so that a significant portion of their wealth is tied to the fortunes of the firm and their incentives are aligned with those of equity. Such compensation exists in fact. See Michael C. Jensen & Kevin J. Murphy, *Performance Pay and Top Management Incentives*, 98 J. POL. ECON. 225 (1990) (decries managers' equity investment as insufficient, but notes its existence). To the extent that equity interest compensation to managers is only second-best, firms, even large firms, which are ordinarily widely held, can attempt to place the entire residual claim in the hands of management. See Michael C. Jensen, *Eclipse of the Public Corporation*, HARV. BUS. REV., Sept.-Oct. 1989, at 61, 68.

³⁴ See LARRY E. RIBSTEIN, *BUSINESS ASSOCIATIONS* 411-561 (2d ed. 1990).

³⁵ See Stuart C. Gilson, *Bankruptcy, Boards, Banks, and Blockholders: Evidence on Changes in Corporate Ownership and Control When Firms Default*, 27 J. FIN. ECON. 355 (1990) (study shows firms that reorganize after insolvency replace their chief executive officers 56% of the time).

vestment independent of equity value.³⁶ Some managers, therefore, may occasionally share creditors' interests.³⁷

Nevertheless, even prior to insolvency and outside bankruptcy, in many firms the managers' equity investments are large enough and their fiduciary duties are strong enough to align management and equity interests.³⁸ After insolvency, and once inside bankruptcy, that incentive not only persists but is enhanced, because when bankruptcy's potential effect on the managers' jobs becomes real, managers' interests in the debtor are pored to their equity investments and abilities to use the reorganization process to prolong their employment or to exact other personal benefits.³⁹ Bankruptcy, moreover, does not extinguish management's fiduciary duty to equity, despite insolvency and the creditors' displacement of equity as the claimants that bear the debtor's marginal costs. This fiduciary duty limits the extent to which managers can use bankruptcy to benefit themselves but not equity.⁴⁰ Thus the management of a bankrupt debtor has a desire to serve equity,⁴¹ a desire mitigated only by the perhaps tenuous scrutiny of other firms that may be in the market for the managers' future services.

The reorganization process is fertile ground for management's desire to serve equity. In most instances, management retains con-

³⁶ See RIBSTEIN, *supra* note 34, at 529 (suggesting that firms benefit from human capital investment); Jensen & Murphy, *supra* note 33, at 228-32 (salaries invariably include fixed salary component). See generally Edmund W. Kitch, *The Law and Economics of Rights in Valuable Information*, 9 J. LEGAL STUD. 683 (1980).

³⁷ Cf. LoPucki & Whitford, *supra* note 1, at 150 (managers often act to benefit themselves directly, rather than to benefit equity generally and themselves only diffusely).

³⁸ It is a small step to conclude that management's incentive to serve a firm's equity, inside or outside bankruptcy, is directly related to the portion of the managers' wealth from equity interests in the firm. Thus some commentators are surprised that firms do not compensate senior managers so that they become more heavily invested in the firms they manage. See Michael C. Jensen & Kevin J. Murphy, *CEO Incentives—It's Not How Much You Pay, But How*, HARV. BUS. REV., May-June 1990, at 138. Even Jensen and Murphy, however, do not argue that managers' investments are a trivial portion of the managers' wealth. They focus instead on the trivial nature of the total outstanding equity in the hands of managers. The focus of their concern, then, is not relevant to whether managers can help themselves if they help equity.

³⁹ The text assumes that managers hold equity interests to the exclusion of, or at least disproportionately to, any ordinary credit investment they might hold. This assumption appears to underlie the empirical work on management compensation. See, e.g., Jensen & Murphy, *supra* note 33, at 225 (catalogs executive compensation packages and does not list debt securities as a component).

⁴⁰ See *Saxon Indus. v. NKF Partners*, 488 A.2d 1298, 1299 (Del. 1984). This case is discussed in LoPucki & Whitford, *supra* note 1, at 161-62.

⁴¹ LoPucki and Whitford studied a number of bankruptcy proceedings that reorganized widely-held debtors and concluded that "in many of the reorganization plan negotiations studied, management did propose that equity share in the distribution, and creditors acquiesced." LoPucki & Whitford, *supra* note 1, at 151.

trol of the debtor throughout the reorganization.⁴² With control, management has a right to exclude creditor plans of reorganization for 180 days.⁴³ Thus, for half a year, management, with its valuation and distribution proposals, can deprive each creditor of any meaningful opportunity to present other creditors to the court. During reorganization, management can attempt to risk the debtor's assets though its discretion is somewhat limited by court supervision.⁴⁴ Even after the exclusive period expires, management can object to the valuation and distribution set forth in any creditor plan and thereby slow the process through litigation that presses the creditors to offer satisfactory concessions.⁴⁵

Though most prominent, equity's strategic alignment with management is not reorganization's only bias in favor of junior claimants. Equity can participate directly in valuation contention, for example, through an equity committee.⁴⁶ The committee can complicate the valuation process with a proffer of new property for an interest in the reorganized debtor. That the court must assess

⁴² Bankruptcy law presumes that management will stay on as the "debtor in possession" during reorganization. See 11 U.S.C. § 1104(a) (1988) (providing that the court appoint trustee to manage the debtor, only after a request and only after notice and hearing). Indeed, Warren and Westbrook note that one of the profound changes in the current Bankruptcy Code, adopted in 1978, is the establishment of the presumption "that the debtor (i.e., existing management) should remain in possession absent strong reasons for appointment of a [trustee]." ELIZABETH WARREN & JAY L. WESTBROOK, *THE LAW OF DEBTORS AND CREDITORS* 397 (1986).

⁴³ See 11 U.S.C. § 1121(b), (c) (1988). The Code grants this exclusive period to the "debtor." When the debtor is a corporation, the Code's reference to "debtor" is a reference to management. See *Commodity Futures Trading Comm'n v. Weintraub*, 471 U.S. 343 (1985). The Code, 11 U.S.C. § 1121(d) (1988), provides an exception that allows others to propose a reorganization plan within management's "exclusive" period, but only if the court gives permission after notice and hearing. The same notice and hearing, moreover, can yield an extension of the exclusive period.

⁴⁴ See 11 U.S.C. § 363 (1988) (court must approve any transaction outside the ordinary course of business). But legal limitations are amorphous and difficult to police at best.

⁴⁵ For an early explanation of why senior claimants accept breaches in absolute priority, see William H. Meckling, *Financial Markets, Default, and Bankruptcy: The Role of the State*, 41 LAW & CONTEMP. PROBS. 13, 37 (1977). For a formal model of the phenomenon, see Yaacov Z. Bergman & Jeffrey L. Callen, *Opportunistic Underinvestment in Debt Renegotiations and Capital Structure*, 29 J. FIN. ECON. 137 (1991). For an anecdotal account of creditors who accept concessions to equity outside bankruptcy, consider the plight of the troubled financier Donald Trump. Trump, who owns the equity in his debtor enterprises, threatened creditors with bankruptcy if they did not agree to reduce the debtors' obligations. In turn, the Trump debtors' junior creditors used the same bankruptcy threat to pry concessions from Trump's senior creditors so that they all could share in the concessions to Trump. One creditor's agent explained why his principal conceded to Trump's request: "This country is totally pro-debtor. So it's better for us to give him a little more money now with the chance of getting a lot more back later." Milo Geyelin & Neil Barsky, *Single, 10-Letter Word Pressured All to Set Trump's Bailout: Bankruptcy*, WALL ST. J., June 27, 1990, at A2.

⁴⁶ See 11 U.S.C. § 1102 (1988).

any such equity proffer⁴⁷ exacerbates delay and increases the chance for valuation error.⁴⁸ Moreover, junior creditors can use their own committee⁴⁹ to delay the valuation and distribution process and to gain concessions from senior creditors. Thus, reorganization's negotiation framework offers many opportunities for the reallocation of contractual priorities.⁵⁰

Even if junior claimants are unsuccessful in their attempts to return the debtor to solvency or to gain voluntary concessions from all senior claimants, access to judicial dispute resolution offers the junior claimants alternative strategies. The court, for example, can confirm a reorganization plan that distributes property to equity, even over the objection of a creditor who will not be repaid in full, if a majority of creditors by number, and two-thirds by claim value, similarly situated to the dissenter, approve the plan.⁵¹ A dissenter is protected only to the extent that the plan provides the dissenter with at least as much as it would have received had the court liquidated the debtor piecemeal.⁵² Despite their contractual priority, then, creditors are not entitled to a debtor's going-concern surplus, and under the rules of reorganization, equity need not gain voluntary concessions from all senior claimants that equity seeks to impair.

The process also offers other strategic advantages if the junior claimant convinces a court to overvalue a debtor. For example, a

⁴⁷ See *Case v. Los Angeles Lumber Prods., Co.*, 308 U.S. 106, 115-19 (1939). As a right of equity this contribution rule may be contrary to the Bankruptcy Code. 11 U.S.C. § 1129(b) (1988). See *Kham & Nate's Shoes No. 2, Inc. v. First Bank of Whiting*, 908 F.2d 1351 (7th Cir. 1990).

⁴⁸ If equity proffers a contribution of new value, it hopes that the court will undervalue the debtor, an unusual position for a junior claimant.

⁴⁹ See 11 U.S.C. § 1102 (1988).

⁵⁰ There is some evidence to support the conclusion that management's and equity's power to alter priorities derives from the reorganization process and not from bankruptcy generally. In a recent study by Lawrence Weiss, a majority of firms that liquidated but only a small percentage of firms that reorganized distributed assets in full compliance with nonbankruptcy contractual priorities. Weiss, *supra* note 1, at 300-312. This suggests that when management or equity is unable to propose a credible plan of reorganization—when the firm has no going-concern surplus—it often must accept the fate of its contractual priority. Cf. 11 U.S.C. § 1129(a)(11) (1988) (court may not confirm a reorganization plan of a nonviable debtor).

⁵¹ See 11 U.S.C. §§ 1122, 1126, 1129(a)(7)-(8) (1988).

⁵² Generally, piecemeal value limits the dissenter's entitlement. Liquidation value, however, the Bankruptcy Code's referent, 11 U.S.C. § 1129(a)(7) (1988), could as easily be value from the sale or liquidation of the debtor as a going concern. See Thomas H. Jackson, *Bankruptcy, Non-Bankruptcy Entitlements, and the Creditors' Bargain*, 91 YALE L.J. 857, 893 (1982). But see Douglas G. Baird & Randal C. Picker, *A Simple Noncooperative Bargaining Model of Corporate Reorganizations*, 20 J. LEGAL STUD. 311 (1991) (noting that outside bankruptcy the actual outcome of a strategic contest between equity and creditors would not necessarily provide creditors with full going-concern value because management equity could force concessions).

court could confirm a reorganization plan that distributes property to equity over the objection of an entire class of similarly situated creditors who do not receive full cash repayment. This can occur if another class of creditors that are to receive property other than full cash repayment under the plan approves the plan, and if the court finds that the plan provides the dissenting class with an interest in the debtor equivalent in value to full cash repayment.⁵³ In theory, such confirmation is not part of junior claimant strategy, but is a safeguard against senior claimant strategy. That is, the court is permitted to conclude that the dissenting class's objection is a pernicious attempt to hold out for a cash payment—which may be expensive for the debtor to raise, given the demands for information made by potential outside investors—or for additional noncash property to which the dissenters are not entitled.⁵⁴ This scenario of senior claimant skullduggery, however, is implausible because the threat to the debtor—the cost the debtor must bear in a sale of assets or interests in the debtor to raise the cash repayment—is probably insufficient to extort much value.⁵⁵ It is far more likely that a class dissents because a reorganization plan gives it an interest in an overvalued debtor. Given evidence that courts systematically overvalue debtors,⁵⁶ confirmation over class dissent provides reallocation that favors junior claimants.

Reorganization offers yet another, more subtle, opportunity for reallocation. A court can confirm a reorganization plan that distributes property to equity over the dissent of a creditor whose claim the plan reinstates against the reorganized debtor notwithstanding

⁵³ The text generalizes the statutory test. For details as they relate to secured and unsecured creditors, see 11 U.S.C. §§ 506(a), 1124, 1129(a)(10), 1129(b)(2) (1988).

⁵⁴ See HOUSE JUDICIARY COMM., BANKRUPTCY REFORM ACT OF 1978, H. REP. NO. 595, 95th Cong., 1st Sess. 414 (1978) ("One requirement applies generally to all classes before the court may confirm under this subsection. No class may be paid more than in full.").

⁵⁵ Brealey and Myers observe that the price that underwriters charge to sell a firm's securities varies directly with the riskiness of those securities. BREALEY & MYERS, *supra* note 8, at 334 (comparing results in Clifford W. Smith, *Alternative Methods for Raising Capital: Rights Versus Underwritten Offerings*, 5 J. FIN. ECON. 273 (1977), with results in 1960-1969: A DECADE OF CORPORATE AND INTERNATIONAL FINANCE 18 (Roger Hillstrom & Robert King, eds. 1972). Because those fees are modest to begin with (as low as 3% of sale proceeds), if a debtor is truly solvent, equity should bear little expense in the sale of relatively low-risk securities that are senior to those which management or equity proposes that equity retain.

⁵⁶ See, e.g., J. Ronald Trost, *Corporate Bankruptcy Reorganizations: For the Benefit of Creditors or Stockholders?*, 21 UCLA L. REV. 540 (1973); Walter J. Blum, *The Law and Language of Corporate Reorganizations*, 17 U. CHI. L. REV. 565, 577-78 (1950). See also *In re Nite Lite Inns*, 17 B.R. 367, 373 (Bankr. S.D. Cal. 1982) (court does not rely on market value despite creditor dissent). Cf. *In re Sound Radio, Inc.*, 93 B.R. 849, 855 (Bankr. D. N.J. 1988) ("The real value or market value is determined by the bids, but it must be noted that Section 1129(a)(7) does not address market value.").

the debtor's default on that claim.⁵⁷ The plan must cure default on a scheduled payment, but need not honor the creditor's right to accelerate repayment of the principal.⁵⁸ Once again, one could tell a story of creditor dissent as opportunistic behavior. But it is more likely that the creditor dissents because continuation of its original loan terms puts the creditor in a worse position than if the court honored its right to accelerated payment. This would occur if the reorganized debtor was a poorer credit risk than the debtor at the time the creditor made the loan.⁵⁹

2. *Direct Denial of Priority*

Reorganization may be the most important, but is not the only means through which bankruptcy reallocates contractual priorities. Another means of reallocation might be called reallocation by fiat. One example of this is the denial of pendency investment income to secured creditors. A secured creditor contracts for the right to foreclose on its collateral in satisfaction of default on a secured loan. By contract and in nonbankruptcy law, the secured creditor is free to reinvest the collateral value immediately after a foreclosure.⁶⁰ Bankruptcy's collective nature necessarily stays the secured creditor's foreclosure right, which is a unilateral action.⁶¹ But no feature of the collective process requires a secured creditor to sacrifice the *value* of its foreclosure right. In theory, the secured creditor's priority claim should include any foregone reinvestment income that would have accrued between the time the secured creditor could have foreclosed, but for bankruptcy, and the time the bankruptcy process actually concludes. In fact, junior claimants need not reimburse a secured creditor for such income.⁶² General creditors or equity investors gain the value from the debtor's use of the secured creditor's property.

Another example of direct reallocation arises from the principle of equitable subordination.⁶³ In original design, equitable subordination demotes claims of a debtor's insiders who illicitly manipulate

⁵⁷ See 11 U.S.C. §§ 1124, 1126(f) (1988).

⁵⁸ See *id.* § 1124(2)(A).

⁵⁹ See Walter J. Blum, *Treatment of Interest on Debtor Obligations Under the Bankruptcy Code*, 50 U. CHI. L. REV. 430 (1985).

⁶⁰ See generally U.C.C. §§ 9-501 to 9-504 (1989).

⁶¹ See 11 U.S.C. § 362 (1988).

⁶² This is the Supreme Court's interpretation of the Bankruptcy Code, 11 U.S.C. § 502 (1988). See *United Savings Ass'n of Texas v. Timbers of Inwood Forest Ass'n*, 484 U.S. 365 (1988).

⁶³ See Bankruptcy Code, 11 U.S.C. § 510(c) (1988).

the debtor for personal gain.⁶⁴ In practice, however, at least some courts subordinate claims of arms-length creditors whose failure to extend or continue credit to the troubled debtor constitutes the "in-equitable conduct." This failure may be actionable even though the creditor has no contractual obligation to extend or continue credit.⁶⁵ Therefore, subordination, or its threat, reallocates to equity or other creditors some of the creditors' contractual rights to withhold or withdraw capital.

Related to equitable subordination is the bankruptcy court's power to reinstate or assign an executory contract. The court retains this power whether or not the contract excuses performance in the event the debtor's financial condition weakens and, ordinarily, regardless of any clause that excuses performance if the debtor attempts to assign its rights under the contract.⁶⁶ If the debtor's only default under the contract is its own troubled financial condition, the debtor may assume the contract without any assurance of future performance.⁶⁷ The debtor's equity investors or creditors then capture the nonbreaching party's contractual right to terminate and avoid the risk of the debtor's future breach. If the debtor chooses to assign the contract, the assignee must give the party adequate assurance of future performance.⁶⁸ But the debtor's equity investors or creditors capture the party's contractual right to reject such assurances as inadequate and to terminate the contract. Thus bankruptcy's reallocative features can be both subtle and pervasive.⁶⁹

⁶⁴ For a seminal case on the principles of equitable subordination, see *Pepper v. Litton*, 308 U.S. 295 (1939); see also *In re CTS Truss Inc.*, 868 F.2d 146, 148-49 (5th Cir. 1989) (collecting cases).

⁶⁵ See, e.g., *K.M.C. Co., Inc. v. Irving Trust Co.*, 757 F.2d 752 (6th Cir. 1985); *In re American Lumber Co.*, 5 B.R. 470 (Bankr. D. Minn. 1980). But see *Kham & Nate's Shoes No. 2, Inc. v. First Bank of Whiting*, 908 F.2d 1351 (7th Cir. 1990), in which the court, through Judge Easterbrook, held that equitable subordination is inappropriate when a creditor is not in breach of contract. See also *In re Clark Pipe & Supply Co., Inc.*, 893 F.2d 693 (5th Cir. 1990) (holding that equitable subordination is an inappropriate remedy when the creditor has not engaged in improper conduct). Unfortunately, cases such as *K.M.C.* and *American Lumber* require attention to the contrary outcome described in the text. For a more detailed discussion of how courts use equitable subordination against arms-length creditors, see Andrew D. Natale & Prudence B. Abram, *The Doctrine of Equitable Subordination as Applied to Nonmanagement Creditors*, 40 BUS. LAW. 417 (1985).

⁶⁶ See generally 11 U.S.C. § 365 (1988).

⁶⁷ See *id.* § 365(a), (b).

⁶⁸ See *id.* § 365(f).

⁶⁹ To the text's list of reallocative bankruptcy features, Jackson and Scott would add the bankruptcy trustee's extensive collection powers. They point out, for example, that 11 U.S.C. § 544(a) (1988) allows the trustee, on behalf of the general creditors, to appropriate an unperfected security interest even if no other creditor has a lien on the secured creditor's collateral. Jackson & Scott, *supra* note 4, at 179. They view this as a reallocation of contractual priority from the unperfected secured creditor to the general creditors. This analysis, however, is in some respects inaccurate. As between the unperfected secured creditor—who is unperfected because it did not serve public notice of

II RISK-SHARING THEORY

The basic creditors' bargain heuristic rests on the conclusion that investors, if able, would bargain collectively for bankruptcy's presumably efficient provisions.⁷⁰ No part of the basic heuristic, however, explains why creditors would bargain for bankruptcy provisions that alter pre-existing, nonbankruptcy contractual priorities. Indeed, the contracts, the only observable indication of creditor intent, suggest that creditors would not have bargained for bankruptcy's reallocative provisions. Creditors, for example, do not agree to grant prebankruptcy equity investors a stake in an insolvent debtor. Instead, creditors contract explicitly for a noncontingent right to payment.⁷¹ Similarly, secured creditors do not agree to forfeit their foreclosure rights without compensation. Rather, secured creditors explicitly contract for those rights.⁷² There is a logical gap in a theory that presumes creditors would agree to an arrangement that they seem explicitly to have rejected.

its security interest—and the general creditors, there is no contractual relationship. Moreover, *state* law, not merely bankruptcy law, regulates the contract between the debtor and the secured creditor. State law informs the secured creditor that unless it files public notice, its security interest will be subordinate to the bankruptcy trustee's interest. See U.C.C. § 9-301(1), (3) (1989). Jackson and Scott recognize the U.C.C.'s special empowerment of the bankruptcy trustee, but treat the power as a creature of bankruptcy law nevertheless. Jackson & Scott, *supra* note 4, at 179. This misassignment of source is significant, given the role of public notice in a priority credit system. Public notice enables a debtor to treat its contractual priority arrangements, in effect, as mutual arrangements *among* creditors. Thus the rule that requires public notice allows efficient priority contracts and in no sense abrogates or alters priorities. See generally Baird, *supra* note 26, at 53 (describing mechanism of notice system).

Bankruptcy *does* interfere with nonbankruptcy law in another of the trustee's collection powers. Under 11 U.S.C. § 544(b) (1988), and an old (and incomprehensible) Supreme Court case, *Moore v. Bay*, 284 U.S. 4 (1931), the trustee may capture for creditors the full amount of any fraudulent conveyance from the debtor to any party even if nonbankruptcy fraudulent conveyance law would limit the amount of the fraudulent transfer that the creditors could recover. See, e.g., UNIF. FRAUDULENT CONVEYANCE ACT § 9, 7A U.L.A. 577 (1985); UNIF. FRAUDULENT TRANSFER ACT § 7, 7A U.L.A. 509 (1985). This extension of the trustee's reach places Jackson and Scott on firmer ground when they argue that the trustee's collection powers operate to alter nonbankruptcy priorities. See Jackson & Scott, *supra* note 4, at 181. However, the recipient of a fraudulent conveyance is unlikely to have any contractual expectation that it will be able to keep *any* part of a fraudulent transfer. Thus dishonoring the state law "entitlement" would do little to interfere with contractual expectation. See also 11 U.S.C. § 544(a)(3) (1988) (similarly allowing trustee to appropriate windfall from unrecorded mortgagee). And although a more subtle extension of a bankruptcy trustee's powers permits appropriation of appreciated property to an extent that exceeds any defrauded creditor's nonbankruptcy entitlement, see 11 U.S.C. § 548(c) (1988); UNIF. FRAUDULENT CONVEYANCE ACT § 9, 7A U.L.A. 427 (1985), this extension is sufficiently limited that it does not warrant significant consideration.

⁷⁰ See *supra* notes 11-19 and accompanying text.

⁷¹ See *supra* note 8 and accompanying text.

⁷² See *supra* note 26 and accompanying text.

Recently, proponents of risk-sharing theory have published in both law⁷³ and finance⁷⁴ literature in an attempt to fill the breach. These risk-sharing theorists contend that a distributional principle underlies a richer version of the creditors' bargain, a principle that requires "all participants [to] share (at least in part) the risks of business failure."⁷⁵ This hypothetical bargain redux has two fundamental parts: common-disaster insurance and eve-of-bankruptcy conflict resolution. In theory, bankruptcy reallocation serves as insurance because it reduces junior claimants' preinsolvency risk and resolves conflict by enhancing junior claimants' postinsolvency risk.

A. Common-Disaster Insurance

The first part of the risk-sharing hypothesis characterizes the hypothetical creditors' bargain as one in which investors would mutually benefit if they could share, rather than individually bear, the risks of a debtor's failure. This follows from the observation that a debtor's investors, equity and creditors, are risk averse.⁷⁶ Risk-averse investors, it follows, would garner some benefit if they could share, rather than assign to a subgroup, the risk of loss from a decline in a firm's affairs. This is especially true when an investor has a large portion of her wealth, both pecuniary and human capital, invested in the debtor. In such a case, the undiversified investor would be extraordinarily sensitive to the debtor's plight.⁷⁷

⁷³ See Jackson & Scott, *supra* note 4, at 160; Roe, *supra* note 4, at 222; Scott, *supra* note 4, at 185. Cf. LoPucki & Whitford, *supra* note 1, at 192 (risk-sharing theory can "make one more comfortable" with breaches of contractual priority). Risk-sharing theory is not a monolith. Ideas in the text that are described generally as part of risk-sharing theory are attributed specifically in the related notes.

⁷⁴ See Daigle & Maloney, *supra* note 5; Frierman & Viswanath, *supra* note 5.

⁷⁵ Jackson & Scott, *supra* note 4, at 157.

⁷⁶ A person is risk averse if she prefers a certain return on an investment to an uncertain return with an expected value equal to the certain return. For further examples, see RIBSTEIN, *supra* note 34, at A-2. A canon of finance theory states that individuals are risk averse by nature. Cf. RICHARD POSNER, *ECONOMIC ANALYSIS OF THE LAW* 75 (2d ed. 1977); CAMPBELL R. MCCONNELL, *ECONOMICS: PRINCIPLES, PROBLEMS & POLICIES* 680-81 (10th ed. 1987). This is easy to accept. Consider a worker on whom her family relies for its sustenance. Although there are exceptions, the worker is unlikely to gamble her entire wealth on an investment that has an equal chance of doubling her investment or dissipating it entirely. Moreover, any business association that includes debt in its capital structure should also be risk averse because a fixed return avoids the risk of insolvency, which entails real costs regardless of whether bankruptcy ensues. Cf. BREALEY & MYERS, *supra* note 8, at 421 (describing a firm's aversion to costs of financial distress).

⁷⁷ An investor whose wealth is diversified in independent investments does not bear significant risk that his investment portfolio will fail: given independence in expected return among the investments, about as many unexpected individual successes as unexpected individual failures are likely to occur. See BREALEY & MYERS, *supra* note 8, 149-66; cf. Franco Modigliani & Gerald A. Pogue, *An Introduction to Risk and Return*, 30 FIN. ANALYSTS J. 69 (1974).

To illustrate, assume that an individual is a newspaper publisher's founder, manager, and sole owner. Suppose further that this founder asks a potential creditor to make a loan to the publisher. The creditor might propose a loan at a favorable rate, but on the condition that the founder invest a large portion of her personal wealth in the firm's equity. A creditor might impose this condition if it believed the founder could not increase the risk of the debtor's projects,⁷⁸ because the founder cannot earn a return on her equity investment unless the debtor earns enough to repay its creditors. The larger her equity investment, the larger her incentive to enrich equity and, necessarily, to satisfy the creditor's claim. But the founder's large equity investments would also carry costs. If a major portion of her wealth were tied up in the debtor's equity, subordinate to and riskier than debt, the founder would be overwhelmingly sensitive to the risk of the debtor's failure.⁷⁹ She might, therefore, balk at the creditor's condition for the favorable loan.⁸⁰

This conflict between incentive and risk-aversion is not insoluble, however. The founder and the creditor may agree that the creditor will sacrifice to the founder some portion of its priority claim in exchange for a slightly higher interest rate on the loan. In essence, the creditor's sacrifice is an insurance policy, and the interest rate increase is an insurance premium. As a result of such insurance, the higher interest rate would grant the creditor a somewhat larger stake in any debtor success, and the dilution of the creditor's priority claim would impose on the creditor a somewhat larger stake in any debtor loss. The outcome of the deal for the founder is the mirror image of the outcome for the creditor. The founder will benefit less from success but suffer less from failure. This arrangement will be mutually beneficial if the undiversified founder values the

⁷⁸ See *supra* part I.B.

⁷⁹ Jackson and Scott note that, in addition to an investment in equity and an investment in firm specific human capital, such an entrepreneur may possess "idiosyncratic" value in the debtor and may for that reason be additionally sensitive to the risk of its failure. Jackson & Scott, *supra* note 4, at 174. An illustration of idiosyncratic value is the statement "it's my life's work" or "my name is on the door." *Id.* An entrepreneur's idiosyncratic investment is not separate from an investment of her entire wealth. The idiosyncratic investment is simply a nonpecuniary portion of her wealth. The point is that entrepreneurs cannot diversify total commitment, whether that commitment is in property or soul.

⁸⁰ The conflict between incentive and risk aversion is at its peak when managers own a firm's entire equity interest, as they often do after a management leveraged buyout. See BREALEY & MYERS, *supra* note 8, at 816 ("When you concentrate a large equity investment in a few hands, you lose the benefits of risk-sharing. Thus the managers in such buyouts have all their eggs in one corporate basket. On the other hand, they are now working largely for themselves, which provides a wonderful incentive.").

reduction in risk more than the presumably diversified creditor suffers from assuming the additional risk.⁸¹

Risk-sharing theorists raise a problem with this simple description of a risk-sharing arrangement and suggest that the description obscures an important distinction between types of risks.⁸² According to these theorists, the founder and the creditor described above might decide to share the risk of loss from "exogenous" sources, sources beyond management's control (e.g., a decline in the newspaper industry) but probably would not find it mutually beneficial to share the risk of failure from "endogenous" sources, sources within management's control (e.g., managerial indolence, incompetence, or preference for risk with the debtor's assets).⁸³ The creditor cannot efficiently bear the burden of endogenous risk because the founder, as manager, controls the debtor, and would be directly responsible for any management misbehavior. A creditor would be unlikely to agree to share the loss from such behavior, at least not at a price the founder would be willing to pay.

This point may be generalized. Equity, even if it is not coextensive with management, because of its ability to control management,⁸⁴ is a lower cost avoider of endogenous risk than are creditors. As a consequence of the distinction between endogenous and exogenous risk, if the parties were to contractually shift risk from a manager-equity investor to a creditor, they would shift *only* exogenous risk. A basic tenet of risk-sharing theory is the difficulty or impossibility of separating these risks by contract. There is, for example, no objective way to distinguish precisely between incompetence and industry downturn as the source of failure.⁸⁵ So, if risk-sharing theory holds, it is unlikely that a manager-equity investor and a creditor will find it worth their efforts to negotiate a risk-sharing contract. They will, instead, enter the standard equity and debt contracts, which grant the creditor absolute priority over the equity

⁸¹ It is noteworthy that the text's illustration does not rest on an assumption of the creditor's risk neutrality. The lone observation that the creditor likely holds a diversified loan portfolio is sufficient to predict that the creditor will probably be more willing than the founder to accept some risk of failure risk that otherwise would rest with the founder as an undiversified equity investor. See *supra* note 77.

⁸² Jackson & Scott, *supra* note 4, at 163-64.

⁸³ Jackson and Scott define endogenous risks as those that "arise from contingencies whose probabilities or effects can be influenced by the actions of particular parties or groups." Jackson & Scott, *supra* note 4, at 164.

⁸⁴ See *supra* note 33-34 and accompanying text.

⁸⁵ See Jackson & Scott, *supra* note 4, at 168 ("There are formidable operational difficulties in distinguishing common risks from those that have been assigned to individual claimants.").

interest, even though both would benefit from a risk-sharing arrangement.⁸⁶

Risk-sharing theory offers a similar explanation of a secured creditor's relationship with the debtor's equity and unsecured creditors. A secured creditor's collateral insulates it from the risk of a debtor's failure. That insulation, the theory predicts, makes a secured creditor the insurer of the debtor's other claimants. As insurer, the secured creditor would sacrifice a portion of its priority claim if the debtor suffered losses and became insolvent for reasons beyond management's control. Thus, the secured creditor would charge the debtor a higher interest rate, with the increase an insurance premium for its prospective sacrifice. The debtor's management, on behalf of equity investors or the investors collectively, would have the debtor pay the higher rate if the debtor's equity investors or unsecured creditors (e.g., trade creditors) were unable to diversify their investments, and, therefore, were more sensitive than the secured creditor to the debtor's plight.⁸⁷ Risk-sharing theory presumes that this arrangement is mutually beneficial because equity investors or unsecured creditors value the reduction in risk more than the secured creditor suffers from risk assumption.⁸⁸ Risk-sharing theorists hypothesize that secured creditors and debtors do not contract for these insurance arrangements, despite the potential benefit, because of the difficult distinction between endogenous and exogenous risk. Indeed, the secured creditor may have taken collateral precisely to obviate its need to monitor the debtor against the endogenous risk of management misbehavior.⁸⁹ Once again, the risk-sharing theorists' problem emerges that the parties find it difficult or impossible to separate risks in which they can beneficially share from risks in which they cannot.

⁸⁶ *Id.* at 166.

⁸⁷ A trade creditor might be undiversified if, because of its size, for example, it has only a few debtors. If any of these debtors defaults, the impact on the trade creditor might be significant. A trade creditor might, in any case, lack diversification across industries if, for example, its product is useful in only one industry. As for the undiversified trade creditor's sensitivity to the debtor's plight, see *infra* notes 173-76 and accompanying text, which explain the importance of the distinction between diversification and risk neutrality.

⁸⁸ Jackson and Scott state this presumption boldly: "Secured creditors would agree that whenever insolvency is triggered by common risks (interrelated technological events with unpredictable effects) they would share with unsecured creditors and equity some of the asset pool otherwise reserved to them." Jackson & Scott, *supra* note 4, at 167-68. As part III.B. explains, this presumption is not justified.

⁸⁹ As discussed *infra* note 163, the true reason for secured finance, if any, is the subject of much debate. The monitoring hypothesis, described in the text, is merely one explanation. See Thomas H. Jackson & Anthony T. Kronman, *Secured Financing and Priorities Among Creditors*, 88 YALE L.J. 1143 (1979).

In an attempt to overcome transactional impediments to contract, risk-sharing theory provides the hypothetical agreement among investors. In theory, bankruptcy's reallocative provisions fulfill senior and junior investors' unrealized desires to partially share risk. Risk-sharing theorists conclude that bankruptcy reorganization's tendency to favor equity⁹⁰ may be a proxy for the bargain the parties would have struck had such a bargain been practical. The same may be said for bankruptcy's denial of reimbursement to a secured creditor for the costs of its foregone foreclosure opportunity, and bankruptcy's permissive application of equitable subordination.⁹¹ As Jackson and Scott state: "[G]iven the costs of deciding whether insolvency resulted from a risk that had been individually allocated or from a risk that was to be shared equally, some partial blurring of entitlements may be a crude but effective response to the general problem."⁹²

B. Eve-of-Bankruptcy Conflict

Risk-sharing theory addresses another problem to which "some partial blurring of entitlements may be a crude but effective response." This problem is eve-of-bankruptcy conflict. Recall equity's, and often management's, incentive to take excessive risks with the debtors' assets.⁹³ This incentive always conflicts with that of the creditors and is not tied to bankruptcy. Equity's and management's incentive is acute for a debtor that is insolvent or is on the verge of insolvency, because insolvency leaves residual claimants little to lose if the debtor's risky investment fails. It follows, then, that if bankruptcy strictly obeyed contractual priority, a firm's insolvency together with an impending bankruptcy would heighten management's incentive to take risks. Insolvency usually accompanies the eve of bankruptcy, so the eve portends a settlement of the insolvent debtor's accounts without any guarantee that management will retain control of the debtor and without any payment to equity.⁹⁴ Risk-sharing theorists posit that bankruptcy's reallocative provisions mitigate eve-of-bankruptcy incentives.⁹⁵ The purported reason is quite simple. If equity shares in the debtor's assets despite insolvency, when management gambles with those assets, it gambles to some extent with equity's investment and, consequently, often with the managers' own investments. As a result, management is likely to

⁹⁰ See *supra* part I.B.

⁹¹ See *supra* notes 60-65 and accompanying text.

⁹² Jackson & Scott, *supra* note 4, at 196.

⁹³ See *supra* notes 30-45 and accompanying text.

⁹⁴ See *supra* notes 39-45 and accompanying text.

⁹⁵ See Jackson & Scott, *supra* note 4, at 169-74; Daigle & Maloney, *supra* note 5; Frierman & Viswanath, *supra* note 5.

be more prudent.⁹⁶ The argument concludes that bankruptcy reallocation helps persuade management to leave creditors a slightly smaller share of a substantially more valuable debtor.⁹⁷

In addition to the conflict between incentives to assume risk, a similar conflict exists between equity and creditors with respect to management's diligence incentive. Without bankruptcy reallocation, managers of a hopelessly insolvent debtor may have only a worthless equity investment to lose should they be indolent or consume perquisites.⁹⁸ Reallocation partially restores the managers'

⁹⁶ The benefits of risk-sharing might also provide a reason for leaving management in control of the debtor throughout the bankruptcy process. See *supra* note 42 and accompanying text. But, as part III explains, bankruptcy is not a solution to any problem of risk sensitivity, even if risk-sharing is a solution.

⁹⁷ Actually, Jackson and Scott focus their version of risk-sharing theory not on management's or equity's likely eve-of-bankruptcy imprudence, but on that of secured creditors. They discuss, for example, the phenomenon of "lien feeding." A secured creditor "feeds" its lien when it convinces management to convert assets that are not subject to the creditor's security interest into assets that are so subject. This improves the relative position of the secured creditor at the expense of other claimants and at the expense of the debtor as a whole if the conversion detracts from the debtor's business. One can imagine, for example, an inventory financier who coerces the conversion of needed office equipment into excess inventory. Claimants collectively would seek to avoid such behavior:

[T]o the extent that the creditors in the ex ante bargain determine to collectivize in order to solve a central problem of noncooperation, they would necessarily agree to a contribution arrangement in order to restrain eve of bankruptcy conflicts. In the absence of bankruptcy contribution, the parties would anticipate inefficient [business maneuvers such as "lien feeding"] by secured creditors' exercising de facto control over the debtor's business decisionmaking. Because such inefficiencies reduce total creditor wealth, contribution would be a predictable prophylactic to any collectivization process.

Jackson & Scott, *supra* note 4, at 174.

This argument proves too much, however. First, bankruptcy preference rules exist to combat lien feeding. 11 U.S.C. §§ 547(c)(5), 550(a) (1988). Preference rules void and reverse certain preferential transfers, and do so without reallocative effect other than the reallocation inherent in the collective proceeding that is necessary to prevent destructive "grabs." See *supra* part I.A. Second, to the extent lien feeding and similar destructive behavior exists despite preference rules, risk-sharing *exacerbates* the problem. If bankruptcy reduces the effectiveness of strategic behavior such as lien feeding, more such behavior is necessary to accomplish repayment in full. To achieve a truly secure position, for example, a secured creditor in inventory might have to convert all of the debtor's office equipment to inventory. Therefore, unlike the positive effect of bankruptcy reallocation on management's eve-of-bankruptcy incentive, which effect is real but overcome by its costs, see *infra* part III, bankruptcy reallocation may have no positive effect on secured creditors' incentives to control the firm efficiently. Risk-sharing theorists could propose to eliminate a secured creditor's priority status. Enactment of such a proposal would eliminate bankruptcy reallocation's tendency to heighten the secured creditor's incentive to behave strategically because there would be no lien to feed. This "solution," however, would carry its own costs. See *infra* notes 101-48 and accompanying text. Risk-sharing theory does not go so far.

⁹⁸ See Baird & Picker, *supra* note 52.

stake, which, in theory, the managers will act to protect with competent management that benefits all.

As for the investors' inability to contract for a beneficial incentive structure, risk-sharing theorists supplement the endogenous risk explanation. A reason managers do not simply purchase and hold the debtor's debt obligations, and thus reduce their exposure to the debtor's insolvency, is that management and equity covet the perverse incentives to risk other people's money. As a result, even if the managers initially purchased debt, they would later sell it, replace it with more equity and, consequently, reinstate the perverse investment incentives.⁹⁹ Thus, the theory predicts that even managers who wish to bond themselves against misbehavior cannot do so through the purchase of debt, because other investors understand the managers' incentive to trade the debt for equity. Bankruptcy reallocation, which is not contract-bound, prevents such strategic maneuvers, theoretically to the advantage of all investors.

III

A CRITIQUE OF RISK-SHARING THEORY

Risk-sharing theorists argue that bankruptcy's reallocative provisions may truly reflect an efficient bargain among investors, a bargain investors would reach but for difficulties of negotiation. If this is correct, then risk-sharing theory may justify bankruptcy's reallocation of contractual priorities. Whether bankruptcy reallocation is justified, in turn, depends on whether "the costs of implementation . . . outweigh the benefits in enhancing the creditors' wealth."¹⁰⁰

The benefits of bankruptcy reallocation, however, *cannot* outweigh its costs, risk-sharing arguments to the contrary notwithstanding. The reasons fall into two classes. First, the costs of bankruptcy's reallocative provisions are potentially far greater than traditionally understood. Second, the benefits from those provisions are illusory, both because the class of beneficiaries is small,

⁹⁹ Frierman and Viswanath make this point by reference to managers' ability to "undo" the issuance of convertible debt, which requires equity to share the upside of any risky project. Frierman & Viswanath, *supra* note 5, at 2. Their reference to convertible debt, however, is inapposite. Although convertible debt reduces equity's zeal for risk in a solvent firm, if equity is in control of an *insolvent* debtor, as the Frierman and Viswanath risk-sharing model assumes, convertible debt does little to dampen management's desire for risk. Management prefers *any* share of a favorable outcome to the zero return it will receive if it does nothing. The text, *infra*, offers a more straightforward solution to the managers' zeal, or "moral hazard." The Frierman-Viswanath presumption of contractual ineffectiveness, however, would not change. As they state: "[W]hen investors issue securities on their own account, they are able to 'undo' the effect of any changes in the firm's capital structure." *Id.* at 14.

¹⁰⁰ Jackson & Scott, *supra* note 4, at 157.

and because alternatives provide any risk-sharing benefit at lower cost.

A. Bankruptcy Reallocation Costs

In the analysis of bankruptcy reallocation's costs one must distinguish real costs from those that are merely apparent. Reallocation is properly viewed from a baseline of investors' preferences as revealed in their contracts. That baseline does not coincide with investors' expectations of performance pursuant to those contracts. Investors bargain with full knowledge of bankruptcy's reallocative provisions. As a result, those provisions do not produce a wealth transfer. Instead, a senior claim will bear a higher rate of interest in light of bankruptcy reallocation than it would in a world that fully honored contractual priority. Conversely, a junior claim will bear a lower rate of return.¹⁰¹ These observations do not negate bankruptcy reallocation's costs to investors. Rather, the central theme of the discussion that follows is that these costs are large and indefensible. The criticism of reallocation, however, is one of costs due to inefficiency, not of inappropriate transfer. Those latter "costs" are merely apparent.

Further distinctions exist among bankruptcy reallocation's real costs. Bankruptcy reallocation from reorganization is distinct from bankruptcy reallocation from denial of senior status. The costs that these provisions impose are, for the most part, also distinct, although one may characterize the costs from forum shopping and perverse investor incentives as costs of more than one component of bankruptcy's reallocation scheme. Some of these costs are alternatives from which investors in a firm can choose at the time they structure their investments. One or more of the costs, however, are inevitable for a firm that issues debt, because the presence of debt makes insolvency possible and the risk of bankruptcy inevitable.¹⁰²

1. *Reorganization Costs*

Reorganizations are expensive because claimants suffer from a lack of perfect information and from incentives for strategic behavior.¹⁰³ A reorganized debtor would emerge quickly and cheaply from bankruptcy if every creditor and equity claimant knew the true

¹⁰¹ See LoPucki & Whitford, *supra* note 1, at 180.

¹⁰² It is generally assumed that a debtor's management ordinarily cannot enforceably commit itself to refrain from bankruptcy. See, e.g., *United States v. Royal Business Funds Corp.*, 724 F.2d 12, 15 (2d Cir. 1983) (dictum).

¹⁰³ For more discussion of how uncertainty in the outcome of legal rules affects costs, see ROBERT SUGDEN, *THE ECONOMICS OF RIGHTS, CO-OPERATION & WELFARE* 55-86 (1986); David C. Webb, *The Importance of Incomplete Information in Explaining the Existence of Costly Bankruptcy*, 54 *ECONOMICA* 279 (1987).

value of the debtor's assets, the true amount of its own claim, the relative priority of its own claim, and accepted that relative priority. In practice, however, claimants often battle over these factors,¹⁰⁴ and have incentives to bargain strategically even if they clearly understand their legal entitlements.¹⁰⁵ These reorganization battles and bargains impose both direct and indirect costs on a debtor. And while not all these costs are properly attributable to bankruptcy reallocation, most probably are.

a. *Direct and Indirect Costs*

Estimates of reorganization's direct costs, in the form of legal fees and administrative expenses,¹⁰⁶ range from 3% to 25% of a debtor's value.¹⁰⁷ These costs are necessary to reorder the complex network of contracts that comprises a firm. Estimates of direct costs, however, do not represent total costs. In addition to direct costs, reorganization costs include opportunity and uncertainty costs. The opportunity costs stem from the distraction of management. With its energies devoted to reorganization, management may have few resources to expend on the debtor's business operations. The uncertainty costs emerge from the doubts reorganization raises about the firm's ultimate survival. Reorganization often creates uncertainty about whether or to what extent the debtor will continue as a going concern. This uncertainty may cause employees and trade partners to curtail investments in activities that are worthwhile only if the debtor survives in its pre-reorganization form. Thus, opportunity and uncertainty costs both flow from reorganization's "disruption" of the debtor's affairs.¹⁰⁸

¹⁰⁴ See, e.g., *Bittner v. Borne Chem. Co.*, 691 F.2d 134 (3d Cir. 1982) (dispute over bankruptcy court's estimate of a contingent claim); *In re Copy Crafters Quicksprint, Inc.*, 92 B.R. 973 (Bankr. N.D.N.Y. 1988) (discussing difficulties in asset valuation and priority determination).

¹⁰⁵ See Bergman & Callen, *supra* note 45. See generally *supra* part I.B.

¹⁰⁶ See 11 U.S.C. § 503(b) (1988) (allowing payment of administrative expenses).

¹⁰⁷ See, e.g., DAVID T. STANLEY & MARJORIE GIRTH, *BANKRUPTCY: PROBLEM, PROCESS, REFORM* 263 (1971) (about 25%); Warner, *supra* note 1, at 271 (about 5%) (legal costs); Weiss, *supra* note 1, at 285 (about 3%, under the Bankruptcy Reform Act of 1978). It appears that firm size is inversely related to the proportion of firm value lost. See *id.* The studies in STANLEY & GIRTH and Warner, *supra*, observe bankruptcies prior to the Bankruptcy Reform Act of 1978, but the process of court-supervised negotiation among claimants was fundamentally the same. See DOUGLAS G. BAIRD & THOMAS H. JACKSON, *CASES, PROBLEMS, AND MATERIALS ON BANKRUPTCY* 31-37 (2d ed. 1990).

¹⁰⁸ In a recent paper, Mnookin and Wilson summarize reorganization costs:

When liabilities exceed assets and a reorganization is necessary, a vast number of contractual relationships must be changed. The scope of this task is enormous; indeed, the entire firm can be viewed as nothing more than a cluster of implicit and explicit contracts, each of which may be affected. The interests of different claimants often conflict, and within each class of claimants there are often multiple parties. A reorganization

Disruption costs can be more than important; they can be enormous. For example, in the Texaco-Pennzoil dispute, Pennzoil won a multibillion dollar judgment against Texaco,¹⁰⁹ which entered bankruptcy reorganization to seek protection from its judgment creditor.¹¹⁰ Soon after, the parties settled the claim and terminated the bankruptcy action.¹¹¹ Almost immediately after the settlement announcements, the combined value of Texaco and Pennzoil stock rose \$2.3 billion.¹¹² The market price of a firm's publicly traded securities provides an unbiased estimate of the firm's value.¹¹³ One can estimate, therefore, that the news of settlement coincided with a \$2.3 billion increase in the combined values of Pennzoil and Texaco. Any unanticipated wealth transfer to Pennzoil from the settlement, though, ought to have been exactly offset by an unanticipated wealth transfer from Texaco, and vice versa. The explanation for the combined gain must be nondistributional. A sound explanation is that the settlement avoided what investors anticipated would be a protracted and costly bankruptcy reorganization process, one with an expected cost of an additional \$2.3 billion.¹¹⁴ That amount is well in excess of any potential administrative fees or expenses,¹¹⁵ and is, therefore, most easily attributed to bankruptcy's disruption of the firm's business activities and opportunities.¹¹⁶

An earlier event study by Jerold Warner of the values of railroad company securities during corporate reorganizations also sup-

(whether accomplished in a bankruptcy proceeding or as a "workout" outside of bankruptcy) involves a very complicated bargaining game in which many claimants try to maximize their own self-interest. The fear that a firm is or may soon become insolvent causes various claimants of the firm to engage in behavior that is not joint wealth maximizing. The inability of all involved to work together collectively often leads to protracted negotiations that have enormous transaction costs in terms of professional fees. *Even more importantly*, during this period, the current operations of a company can be severely hampered. Relations with customers, suppliers, and bankers can all be disrupted. Attention may be diverted and the quality of service may decline. Key employees may leave, and a vast amount of firm-specific capital may be lost because of uncertainty about the structure or needs of the reorganized firm.

Robert H. Mnookin & Robert B. Wilson, *Rational Bargaining and Market Efficiency: Understanding Pennzoil v. Texaco*, 75 VA. L. REV. 295, 313 (1989) (emphasis added).

¹⁰⁹ David M. Cutler & Lawrence H. Summers, *The Costs of Conflict Resolution and Financial Distress: Evidence from Texaco-Pennzoil Litigation*, 19 RAND J. ECON. 157, 157 (1988).

¹¹⁰ *Id.* at 159.

¹¹¹ *Id.*

¹¹² *See id.* at 160.

¹¹³ *See* Eugene F. Fama, *Efficient Capital Markets: A Review of Theory and Empirical Work*, 25 J. FIN. 383 (1970); BREALEY & MYERS, *supra* note 8, at 279-300.

¹¹⁴ Cutler & Summers, *supra* note 109, at 166-69.

¹¹⁵ *Id.*

¹¹⁶ *See* Mnookin & Wilson, *supra* note 108, at 299. These disruption costs may have included the potential loss of a profitable bid to purchase Texaco. *See* Cutler & Summers, *supra* note 109, at 168.

ports the possibility of considerably large disruption costs.¹¹⁷ In order to monitor security price changes, the study used three Supreme Court decisions that validated portions of reorganization plans. These decisions presumably avoided extensive renegotiation among claimants and thereby eliminated the associated delay.¹¹⁸ The announcements of the decisions corresponded with significant increases in the bond prices of the bankrupt railroads. Warner was tempted to conclude that the decisions:

may have conveyed new information that the length of the railroad bankruptcies would be shorter than the market had anticipated. To the extent that the bankruptcy process was costly to the railroad firms, such information would have lowered the market's assessment of the expected cost of bankruptcy, and resulted in an increase in the value of the firm's securities.¹¹⁹

Warner had reservations, however, and noted that bankruptcy costs are too small to explain the abnormal increase in bond prices.¹²⁰ But this misgiving apparently was based on consideration of only *direct* bankruptcy costs.¹²¹ Warner might well have come to a different conclusion had he considered that prolonged railroad bankruptcies impose additional disruption costs on the debtors. Warner's data, therefore, could support a conclusion that bankruptcy reorganization engenders disruption costs that far exceed the traditionally estimated direct costs of reorganization.

b. *Attribution to Bankruptcy Reallocation*

Not all costs of reorganization are necessarily attributable to bankruptcy reallocation. One could speculate that costs from reorganization are necessary to preserve an insolvent debtor's going-concern surplus over its piecemeal liquidation value. If this were so, it would be improper to attribute bankruptcy reorganization costs to bankruptcy's reallocation function, and to consider those costs as an offset to any risk-sharing benefit. Moreover, without bankruptcy, negotiation and holdout problems could impose even greater costs on a debtor than does negotiation within bankruptcy, which prevents destructive individual creditor action.¹²² Theoretically, however there is an alternative version of bankruptcy that would limit

¹¹⁷ Warner, *supra* note 1.

¹¹⁸ *Id.* at 268 nn.21 & 22. The cases analyzed are *Ecker v. Western Pac. R.R.*, 318 U.S. 448, *reh'g denied*, 318 U.S. 803 (1943); *Group of Inst. Investors v. Chicago, Milwaukee, St. Paul & Pac. R.R.*, 318 U.S. 523, *reh'g denied*, 318 U.S. 803 (1943); *Consolidated Rock Prod. v. DuBois*, 312 U.S. 510 (1941).

¹¹⁹ Warner, *supra* note 1, at 271.

¹²⁰ *Id.*

¹²¹ *Id.* See also Webb, *supra* note 103 (discussing this and other cost studies).

¹²² See *supra* notes 11-19 and accompanying text. But *cf.* note 19.

reorganization's costs, and sacrifice only bankruptcy reorganization's reallocative tendency. The difference in cost between current bankruptcy law and the alternative is properly attributable to bankruptcy reallocation and *does* offset any risk-sharing benefit.

This alternative and less costly version of bankruptcy can be found in a Douglas Baird proposal.¹²³ He asks why we should not simply do away with bankruptcy reorganization. If claimants to an insolvent debtor could not settle their claims through a consensual arrangement, then bankruptcy could intervene, but only as necessary to sell the firm at a public auction, free from all prebankruptcy claims. The bankruptcy court would sell the debtor either piecemeal or as a going concern, in the way that would bring the highest price, with current management at the helm should purchasers so desire. The court would then divide the sale proceeds among claimants strictly in accord with their legal priorities, priorities whose source would be entirely outside bankruptcy law. The simplicity of this proposal makes it the system of insolvency resolution that most directly arises from the basic creditors' bargain heuristic.¹²⁴ Not coincidentally, the proposal would eliminate one set of bankruptcy's most onerous costs: the costs of a protracted reorganization process. Baird's proposal would eliminate such costs, because the sale of the firm would eliminate management's and equity's ability to hold the debtor hostage under threat of reduction in debtor value during "ransom" negotiations.¹²⁵ While some direct and disruption costs are inherent in reorganization,¹²⁶ the protraction that compounds those costs is not, and a compulsory bankruptcy auction would eliminate strategic protraction.¹²⁷ Baird's proposal would require the expense of an auction, but investment bankers have become quite proficient in the auction of even huge firms.¹²⁸

¹²³ See Baird, *supra* note 25; Meckling, *supra* note 45, at 38. See also *In re Central Ice Cream Co.*, 836 F.2d 1068 (7th Cir. 1987) (suggesting that bankruptcy court "auction" debtor's claims against third parties).

¹²⁴ See *supra* notes 11-12 and accompanying text.

¹²⁵ Part I.B. describes how management or equity can take advantage of such negotiations.

¹²⁶ See *supra* notes 106-21 and accompanying text.

¹²⁷ Baird provides an illustration of the costs his proposal would eliminate:

If the shareholders have the right to insist on a valuation that would consume \$10,000 of the firm's assets, it is in the interests of the [creditors] as a group to offer the shareholders something less than \$10,000 to waive this right. But bargaining over the waiver of procedural rights is itself costly and brings with it holdout and free-rider problems.

Baird, *supra* note 25, at 144. For a formal model of these strategic difficulties, see Bergman & Callen, *supra* note 45.

¹²⁸ A large common stock offering, over \$100 million, may cost an average of 4% of total proceeds in underwriters' compensation and other expenses. This proportion may increase to as much as 15% in the case of extremely small offerings (less than \$2 million). See Clifford W. Smith, *Alternative Methods for Raising Capital: Rights versus Underwrit-*

All that is lost in Baird's proposal is bankruptcy's reallocation function. The proposal sacrifices that function because it fully honors nonbankruptcy priorities. Strategic behavior, moreover, would not easily upset these contractual priorities, because junior claimants would lose the control of the debtor, control they use as leverage over senior claimants. The proposal sacrifices no more than reallocation, because bankruptcy can abandon its reallocative function without abandoning its primary function of preserving going-concern value. The auction preserves going-concern value because bids for the debtor will reflect that value.¹²⁹ If risk-sharing theory is to defend bankruptcy reallocation, it must at a minimum justify that portion of bankruptcy reorganization costs that exceed the expense of a simple auction.¹³⁰ Although excess expense may not always attach to bankruptcy reorganization,¹³¹ given the potentially enormous disruption costs of a reorganization protracted by the

ten Offerings, 5 J. FIN. ECON. 273 (1977). These costs are within the range of bankruptcy's direct costs. See *supra* note 107. But a quick sale of a bankrupt debtor can save the enormous disruption expense of a purposefully prolonged bankruptcy reorganization process.

¹²⁹ See *supra* part I.A. Baird conceives of a potential benefit from reorganization other than preservation of going-concern value. He credits the possibility that a closely held debtor with multiple claimants may benefit from reorganization if the skill of those claimants is essential to the debtor's survival. Baird, *supra* note 25, at 142. An accounts receivable financier, for example, may be better equipped to continue in that role than some third-party financier. Even if claimants with special expertise could not coordinate a bid for the debtor, they should be able to sell their expertise to a third-party purchaser. The accounts receivable financier, for example, could offer the debtor a cheaper rate for financial services than could its competitors. Thus Baird may understate his own case. But for an additional concern about auctions, see Peter Cramton & Alan Schwartz, *Using Auction Theory to Inform Takeover Regulation*, 7 J.L. ECON. & ORG. 27 (1991).

¹³⁰ One could speculate that much of any excess cost is *not* attributable to bankruptcy, because creditors could bargain for the right to control the debtor in bankruptcy. With such control, creditors could avoid management's coercive influence. Such speculation is fruitless, however. If creditors do not in fact bargain for the right to replace management in bankruptcy, it may be because creditors expect a change in control to be destructive at such a critical time. Thus the prospect of bankruptcy reallocation places creditors on the horns of a dilemma that management or equity can exploit to its benefit and to the collective detriment of the claimants.

¹³¹ Judge Easterbrook argues that auctions may *often* be more expensive than reorganization. See Easterbrook, *supra* note 29, at 415. Judge Easterbrook, however, relies largely on evidence that parties seldom resort to auctions in private workouts. This observation may demonstrate that the costs of an auction exceed the costs of a reorganization, given unanimous agreement among claimants on how to distribute the debtor's property. But the observation says little about relative costs *absent* such unanimous agreement, because dissent may prompt management, acting on equity's behalf, or junior creditors to impose bankruptcy reorganization and its bias in favor of the junior claimants directly. See *supra* part I.B. See also 11 U.S.C. §§ 302, 303 (1988) (criteria for debtor and creditor bankruptcy petitions); *infra* note 139 (mechanics of and interests in bankruptcy petitions). Management, moreover, ordinarily cannot bond itself in advance to forswear bankruptcy reorganization, even if that is the more expensive method of insolvency resolution. See, e.g., *United States v. Royal Business Funds Corp.*, 724 F.2d 12, 15 (2d Cir. 1983) (dictum).

bankruptcy process,¹³² bankruptcy reallocation's burden is considerable.¹³³

This burden is not significantly smaller if creditors steadfastly attempt to thwart a strategy of delay by refusing concessions to management or equity. Creditor refusal to concede could induce a management or equity attempt to force through, or "cram-down," its plan sooner rather than later. In the alternative, creditors could refuse to concede and attempt to cram down their own plan over the objection of management or equity.¹³⁴ In the cram-down process, however, the debtor's true worth remains uncertain due to the imprecise valuation process.¹³⁵ And although the courts can end imbroglios over valuation through decision, their mandate to provide a fair hearing leaves them little practical opportunity to expedite matters.¹³⁶ Thus, with or without a cram-down, the stage is set for the indecision, delay, and loss that the claimants collectively could avoid were bankruptcy simply to auction the debtor and thus free it from management and equity exploitation.

The costs of protracted negotiation and litigation are not the only ones attributable to bankruptcy reallocation. Bankruptcy reorganization's reallocative tendencies also may perversely induce management or equity to impose on the claimants collectively the additional costs inherent in bankruptcy reorganization. This can oc-

¹³² See *supra* part III.A.1.a.

¹³³ In their formulation of risk-sharing theory, Jackson and Scott recognize the cost from strategic behavior. They note that the uncertainty of the reallocative process will lead "each claimant in bankruptcy [to] engage in costly efforts to minimize its individual contribution to the bankruptcy sharing." Jackson & Scott, *supra* note 4, at 201. But they do not elaborate, thus ignoring the potential magnitude of that cost, which is easily underestimated.

¹³⁴ Part I.B. describes cram-down over creditors' objections. Nothing in the Bankruptcy Code prevents the creditors' use of the cram-down process after the expiration of management's exclusive period to propose a reorganization plan. See 11 U.S.C. §§ 1121, 1129(b) (1988).

¹³⁵ *Id.* See also notes 11-19 and accompanying text (illustrating the costs Baird's proposal would eliminate). Bebchuk proposes an alternative to the bankruptcy court's valuation of a debtor. He would have the bankruptcy process grant options to claimants, such that each junior class of claimants would collectively possess the option to purchase the debtor for a price equal to the total amount of all senior claims. See Lucian A. Bebchuk, *A New Approach to Corporate Reorganizations*, 101 HARV. L. REV. 775 (1988). This approach would solve the debtor-valuation problem and would shorten the reorganization process. But the auction Baird proposes solves the valuation problem and shortens and simplifies the reorganization process. Bebchuk's approach offers no affirmative advantage of bankruptcy reorganization, and does not, therefore, serve as a defense of bankruptcy reorganization.

¹³⁶ For example, the average length of the bankruptcy process for a sample of 37 New York and American Stock Exchange firms that filed for bankruptcy under the Bankruptcy Reform Act of 1978 is 2.5 years. Weiss, *supra* note 1. Smaller debtors, those with about \$50 million in revenues, experience similar delays; their bankruptcy reorganizations take an average of 1.6 years. Karen Torrey, *Ch. 11 Alternative Often a Better Bet for Small Biz*, CRAIN'S CHI. BUS., Augst 29, 1988, at 12.

cur even when the efficient alternative is piecemeal liquidation of the debtor, thus avoiding *all* reorganization costs. This perverse incentive is apparent from the perspective of a junior claimant who would receive nothing in a piecemeal liquidation, but who, through negotiation or litigation, could obtain a share of any going concern that survived bankruptcy. From that claimant's perspective, a share of an inefficiently reorganized firm with poor chances of ultimate survival is superior to an efficient piecemeal liquidation.¹³⁷ In fact, many reorganized firms fail shortly after reorganization.¹³⁸ Bankruptcy reallocation may thus be responsible even for reorganization costs that are inherent to both bankruptcy and nonbankruptcy reorganization, because bankruptcy reallocation may often be responsible for the reorganization itself.¹³⁹

2. Forum Shopping Costs

Forum shopping imposes costs on any dispute resolution system that provides different entitlements within the system than those provided outside the system.¹⁴⁰ Accordingly, if a manager-equity investor has an advantage inside bankruptcy and creditors have an advantage outside, the manager could waste the debtor's resources in an attempt to use the bankruptcy process, even if a nonbankruptcy resolution would be less costly.¹⁴¹ This is also true of incentives for strategic behavior in a conflict between general and secured creditors, with the former as bankruptcy's proponents and the latter its opponents.

¹³⁷ See Michelle White, *The Corporate Bankruptcy Decision*, 3 J. ECON. PERSP. 129 (Spring 1989); Michelle White, *Public Policy Toward Bankruptcy: Me-First and Other Priority Rules*, 11 BELL J. ECON. 550 (1980); but see David T. Brown, *Claimholder Incentive Conflicts in Reorganization: The Role of Bankruptcy Law*, 2 REV. FIN. STUD. 109 (1989). Brown argues that the bankruptcy process facilitates the negotiation of an efficient insolvency resolution. Brown, however, assumes that a bankruptcy court provides an "unbiased estimate" of firm value. *Id.* at 113. The evidence weighs against the proposition that courts either provide such an unbiased estimate or try. See *supra* note 56.

¹³⁸ See Lynn M. LoPucki, *The Debtor in Full Control—Systems Failure Under Chapter 11 of the Bankruptcy Code?*, 57 AM. BANKR. L.J. 99, 100 (1983).

¹³⁹ The focus here is on strategic behavior of management and equity. Little is said of general unsecured creditors as junior claimants with their own strategic agenda. In theory, strategic manipulation is not the sole province of management or equity. The denial of pendency reimbursement to a secured creditor, for example, could induce unsecured creditors to extend the reorganization process and thus lengthen the time they can benefit from the uncompensated use of the secured creditor's collateral. See *supra* part I.B. However, unlike equity, which has little to lose from the waste of an insolvent firm, unsecured creditors, as the residual claimants of such a firm, bear reorganization's substantial costs. Thus general creditor strategy that protracts reorganization seems relatively unlikely.

¹⁴⁰ See, e.g., Baird, *supra* note 9, at 825.

¹⁴¹ Baird provides the example of a litigant who takes a costly trip to a distant courthouse, one with more favorable rules for that litigant than those of the courthouse next door. *Id.*

In theory, bankruptcy need not entail forum shopping costs. If bankruptcy did not offer special entitlements to any claimant then no creditor would employ the costly bankruptcy forum unless that forum provided benefits to the claimants collectively.¹⁴² Bankruptcy's reallocative provisions, however, necessarily rely on bankruptcy entitlements that differ from nonbankruptcy entitlements. So one might well attribute the cost of forum shopping to bankruptcy reallocation.

In the alternative, one could consider the cost of forum shopping as a subcategory of delay and uncertainty costs, of which reorganization is a principal cause.¹⁴³ Virtually any claimant, whether equity investor or creditor, who can take advantage of bankruptcy, has the option directly or through similarly situated claimants, to impose bankruptcy.¹⁴⁴ This option to impose bankruptcy makes nonbankruptcy entitlements meaningless. All claimants realize that the bankruptcy rules control, and all claimants bargain in the shadow of those rules,¹⁴⁵ both before and after the debtor's insolvency.¹⁴⁶ Because the bankruptcy forum will favor *someone*, if the

¹⁴² The ordinary solution to a common-pool problem is an exclusive solution because it is advantageous to have a single set of rules. Claimants to an oil well, for example, must at all times divide the oil in the well according to the common agreement. The common agreement *always* comprises the rule of the game, not only when others object to some individual claimant's rights under a different regime. See JACKSON, *supra* note 11, at 11 n.11 and accompanying text.

¹⁴³ See *supra* notes 101-02 and accompanying text.

¹⁴⁴ Technically, a rare claimant has a unilateral right to force a debtor into bankruptcy. First, no individual equity shareholder can petition for bankruptcy. If equity is to petition, it must be through the "debtor." 11 U.S.C. § 302 (1988). Thus, for an equity investor to force bankruptcy, management must act as equity's agent. See *supra* note 43. Second, a creditors' petition ordinarily is not effective unless at least three creditors file the petition. See 11 U.S.C. § 303 (1988). Third, a creditors' petition will not be effective unless the petitioners are undersecured (are owed more than the value of their collateral) by at least \$5000, and either the debtor is not generally paying on its obligations or a nonbankruptcy custodian recently has been appointed to administer the debtor's assets. *Id.* None of these potential restrictions, however, is a long-term impediment to any claimant who might desire bankruptcy. An equity investor who desires bankruptcy is likely to share that desire with management. See part I.B. A creditor who desires bankruptcy is likely to find many other creditors with as much to lose from delay and with the same desire.

¹⁴⁵ For a general discussion of bargains made in the shadow of the law, see Robert H. Mnookin & Lewis Kornhauser, *Bargaining in the Shadow of the Law: The Case of Divorce*, 88 YALE L.J. 950 (1979).

¹⁴⁶ Universal access to bankruptcy is no accident. Congress was quite adamant that every creditor have access to the bankruptcy process: "[O]nce a proceeding to liquidate assets has been commenced, the debtor's creditors have an absolute right to have the liquidation (or reorganization) proceed in the bankruptcy court and under the bankruptcy laws with all of the appropriate creditor and debtor protection those laws provide." HOUSE JUDICIARY COMM'N, THE BANKRUPTCY REFORM ACT OF 1978, H.R. REP. No. 989, 95th Cong., 1st Sess. 34 (1978). Congress's intent to grant management the right to bring the debtor into bankruptcy, on either equity's behalf or its own, is evident from management's plenary right to bankruptcy. See 11 U.S.C. § 302 (1988).

claimants cannot settle their disputes consensually, the favored claimants will opt for bankruptcy, and the bankruptcy forum will be the forum of resolution.¹⁴⁷

Thus, when the bankruptcy process imposes costs from strategic behavior, those costs arise from inherent uncertainties,¹⁴⁸ rather than from the parties "shopping" for the forum that best suits them. Therefore, however one characterizes the costs of bankruptcy and the protracted negotiation and litigation it encourages, the costs are real and borne by the claimants collectively.

3. *Perverse Investment Incentives*

Bankruptcy's reallocative provisions create two types of perverse incentives for managers whose interests are aligned with those of equity: perverse risk incentives and perverse diligence incentives.

a. *Risk Incentives*

As risk-sharing theorists contend, bankruptcy's reallocative provisions probably reduce management's incentive to take undue risks with the debtor's assets, on equity's behalf, when the debtor is insolvent, on or after the eve of bankruptcy.¹⁴⁹ But the effect these provisions have on incentives is not limited to the period immediately before bankruptcy. The provisions also provide incentives to management and equity in periods of debtor solvency. And in certain instances of debtor solvency, bankruptcy reallocation *increases* management's incentive to take undue risks with the debtor's assets on equity's behalf.

Recall that bankruptcy reallocation reduces management's equity incentive to risk the debtor's assets when the debtor is insolvent or barely solvent, because reallocation gives equity a stake in even an insolvent debtor, a stake management can lose with a foolish investment.¹⁵⁰ If the debtor is substantially solvent, however, the prospect of reallocation only *exacerbates* management's equity incentive to invest the debtor's assets in a risky project. Bankruptcy reallocation provides equity with a stake in an insolvent debtor regardless of insolvency's cause. In effect, bankruptcy reallocation forces the creditors to compensate equity for any of its losses from risky investment of the debtor's assets. This compensation both subsidizes and encourages such investment. Thus, bankruptcy reallocation's effect on management's equity risk incentive serves to dis-

¹⁴⁷ For a similar argument, see Warren, *supra* note 9, at 780-82.

¹⁴⁸ See *supra* part III.A.I.

¹⁴⁹ See Jackson & Scott, *supra* note 4, at 170; Daigle & Maloney, *supra* note 5; Frierman & Viswanath, *supra* note 5; see *supra* Part II.

¹⁵⁰ *Id.*

courage risky investment *only* when the debtor is insolvent or nearly insolvent at the time of a prospective investment. If the debtor is solvent and management has an opportunity to invest the debtor's equity cushion (assets that exceed debt obligations) but not a significant portion of the debtor's assets beyond the equity cushion, then reallocation creates a perverse incentive.

An example will clarify this point. Assume a debtor has \$200 in assets, \$99 from an equity investment and \$101 from creditors. Assume further that equity controls the debtor and has an option to have the debtor purchase a \$100 lottery ticket that offers a 50% chance of a \$190 return and a 50% chance of no return. From the investors' collective perspective, the debtor should not purchase the lottery ticket, which is worth only \$95.¹⁵¹ Without bankruptcy reallocation, the debtor will not make this unwise investment. If the ticket pays off, equity will benefit by \$90: the debtor will have \$290 worth of assets instead of \$200. But if the ticket ultimately is worthless, an equally likely event, the debtor will be insolvent (\$100 in assets and \$101 in debt) and equity will lose \$99, its entire investment. Equity thus has no incentive to invest the debtor's assets in the ticket.

The introduction of bankruptcy reallocation changes the calculus and the debtor may well purchase the "sucker" ticket. Suppose bankruptcy requires that equity receive 15% of a debtor's assets, regardless of whether the debtor can fully repay creditors. Now if the ticket pays off, equity will benefit by \$90, just as without reallocation. But if the ticket loses and the debtor enters bankruptcy, equity will lose only \$84: it will receive \$15 of the debtor's remaining \$100 value. Absent other considerations, equity would have the debtor purchase the ticket because the ticket's expected value, from the standpoint of equity, is positive. That is, equity has an equal chance of a \$90 gain and an \$84 loss. To equity, this is better than a fair bet, and hence bankruptcy reallocation provides a perverse incentive.¹⁵²

Bankruptcy's reallocation provisions will have a salutary effect if, after the debtor purchases the ticket and it loses, equity has an

¹⁵¹ The calculation is: $.5 (\$0) + .5 (\$190) = \$95$.

¹⁵² This illustration is simplistic. It assumes, for example, that assets the debtor does not use for the lottery ticket are risk-free. If the illustration corresponded with reality, and allowed the unused assets to vary in value, one could construct a hypothetical in which bankruptcy reallocation discouraged the ticket purchase. However, a mirror image of that observation is that variance in the value of an insolvent firm's assets allows a hypothetical in which bankruptcy reallocation encourages the ticket purchase. Thus simplification does not detract from the point in the text, which is that risk-sharing theory ignores the mirrored nature of bankruptcy reallocation's effects. For more on investment incentives, see generally White, *supra* note 137.

opportunity to control the firm for a period prior to bankruptcy. For example at this point, equity would not have the debtor purchase *another* \$100 lottery ticket, one with only a 5% chance of a \$200 payoff. Equity might have the debtor spend \$100 for this ticket, worth \$4.95¹⁵³ to equity if equity had no interest in the insolvent debtor, but would not risk the \$15 bankruptcy reallocation guarantees it. This is hardly a benefit from reallocation, however, because, in this example, the presence of bankruptcy reallocation in the first instance creates the loss such reallocation later limits.

When viewed from the whole-life perspective of a debtor, then, bankruptcy's reallocative provisions may provide risk incentive costs that outweigh the risk incentive benefits of insolvency. Investors initially expect that a small equity cushion is a more likely future event than none at all.¹⁵⁴ Given that a business firm ordinarily commits some portion of its assets to a use that management cannot alter, management is more likely to risk a small equity cushion than all, or almost all, of the debtor's assets. Thus reallocation's perverse risk incentive may well eclipse any beneficial incentive.¹⁵⁵

b. *Diligence Incentives*

The collective interests of the claimants, including creditors, extend beyond creditors' interests in managers' risk incentives. All nonmanager claimants also have an interest in management's incentive to find and manage the debtor's investments diligently. Debt serves this interest because the imposition of fixed obligations disciplines management. If management does not produce sufficient income to pay creditors, the debtor will become insolvent, equity will lose its investment, and the managers may lose their jobs.¹⁵⁶ Recall

¹⁵³ The calculation is: $[.05 (\$200 - \$101)] = \$4.95$.

¹⁵⁴ Investors purchase interests in a firm with the expectation that the firm will remain solvent, despite the ever-present risk that it will not. Insolvency will have a probability somewhere on the "tail" in a distribution of all possible outcomes. If that distribution is normal, all outcomes between the most probable outcome and insolvency are more likely than insolvency. See PHILIP J. MCCARTHY, INTRODUCTION TO STATISTICAL REASONING 233-44 (1978).

¹⁵⁵ One could speculate that some managers will invest so much firm-specific human capital in the debtor, or possess so large a fixed salary or other obligation, that the managers' predominant interest will be to avoid bankruptcy, which, such managers reasonably would fear, could cost their jobs. See Kitch, *supra* note 36, at 684 (discussing the interaction of law and human capital investment). In this case, little would persuade management to risk the debtor's equity cushion, and bankruptcy reallocation's perverse incentive would be small. If this is the case, however, bankruptcy reallocation's beneficial incentive is also small, because managers would risk almost anything to return the debtor to solvency and save their jobs.

¹⁵⁶ See generally Sanford J. Grossman & Oliver Hart, *Corporate Financial Structure and Managerial Incentives*, in INFORMATION AND UNCERTAINTY (J.J. McCall ed., 1982); Frank H. Easterbrook, *Two Agency-Cost Explanations of Dividends*, 74 AM. ECON. REV. 650, 655 n.24,

from risk-sharing theory that, once insolvency mutes the discipline of debt, bankruptcy reallocation provides management with a substitute disciplinary incentive.¹⁵⁷ Viewed at a time when the debtor is solvent, however, bankruptcy reallocation softens the blow of insolvency to any manager who owns an equity interest in the debtor. This reduced effect on the managers' equity investments lowers the managers' expected costs of leisure and perquisites, and thus dulls management's incentive to work diligently and invest the debtor's assets wisely. In short, the less insolvency hurts, the less personal expense and effort managers will devote to its avoidance. One must add the costs of a solvent debtor's lethargic and irresponsible management to the total costs of bankruptcy's reallocative provisions.

4. *Compulsory Contract Term Inefficiencies*

Viewed properly, from the time of equity or creditor investment, bankruptcy's reallocation of contractual priority constitutes an imposition of compulsory contract terms. This imposition carries two related costs: costs from inefficiencies in the expectation of bankruptcy and costs from inefficiencies in the avoidance of bankruptcy.

a. *In Expectation of Bankruptcy*

Bankruptcy reallocates broadly. Uncertain impulses favor junior claimants in negotiation and litigation.¹⁵⁸ Direct provisions also reallocate through the denial of senior status either to a secured creditor who is denied pendency reimbursement, or to any creditor whose failure to contribute to a troubled debtor will result in "equitable" subordination.¹⁵⁹ At least when direct reallocations are certain, as in the denial of pendency reimbursement, risk-sharing theorists intimate that the costs of such reallocation may be small.¹⁶⁰ This outcome, however, is not certain. There is a potentially large cost: even direct reallocation interferes with the operation of investment markets. To understand this cost, consider the plight of secured creditors who recognize that bankruptcy may not fully honor their contractual priority over other claimants. Secured creditors bargain in the shadow of the law¹⁶¹ and understand the prospect of subordination relative to the explicit terms of their contracts. Secured creditors therefore will account for the expected reduction in

658 (1984); Saul Levmore, *Monitors and Freeriders in Commercial and Corporate Settings*, 92 YALE L.J. 49 (1982).

¹⁵⁷ See *supra* notes 93-97 and accompanying text.

¹⁵⁸ See *supra* notes 74-75 and accompanying text.

¹⁵⁹ See *supra* part I.B.

¹⁶⁰ See Jackson & Scott, *supra* note 4, at 199.

¹⁶¹ See *supra* note 145 and accompanying text.

priority status, and will charge the debtor for this reduction in the form of higher interest rates. In essence, secured creditors become more like unsecured creditors. They face higher risks and, therefore, demand that the debtor promise a larger return. To a corresponding extent, the unsecured creditors become more like secured creditors. They face lower risks and can demand only a smaller return. Ostensibly, these counterbalanced shifts in security and interest rates have no effect. The debtor's blended interest rate appears not to change, and each creditor, whether secured or unsecured, receives the promise of return for which it bargains.¹⁶² In reality, however, the prospect of a secured creditor's partial relegation to unsecured status reduces the value of the security interest. The parties must have perceived the security interest as valuable or, presumably, they would not have agreed to establish it in the first instance.

Assume, for example, that a secured creditor bargains for security because it is an inherently poor monitor of a debtor's general financial affairs. Assume further that an unsecured creditor remains unsecured because it is a relatively good general monitor. If so, a debtor's investors collectively benefit from the secured creditor's reliance on its collateral and the unsecured creditor's reliance on its skills as a monitor.¹⁶³ Even partial relegation of the secured creditor to junior status reduces the mutually beneficial distinction between junior and senior claimants, because such relegation forces the secured creditor to forego some of its security. As a result, the secured creditor has a greater incentive to monitor, a task for which by hypothesis it is ill-suited. It follows that the secured creditor's relative incompetence will force it to charge the debtor more for its monitoring than the unsecured creditor will grant the debtor as a

¹⁶² See Modigliani & Miller, *supra* note 24, at 261.

¹⁶³ For a full discussion of this theory, see Jackson & Kronman, *supra* note 89. There is much debate about whether monitoring or some other phenomenon explains secured credit's value. There is, however, no contention that secured credit is valueless. (For the purposes of the text's discussion, any value will do.) For an account of the debate on secured credit, see, e.g., Barry E. Adler, *An Equity Agency Solution to the Bankruptcy Priority Puzzle*, 22 J. LEGAL STUD. (forthcoming 1993); Frank H. Buckley, *The Bankruptcy Priority Puzzle*, 72 VA. L. REV. 1393 (1986); Thomas H. Jackson & Alan Schwartz, *Vacuum of Fact or Vacuous Theory: A Reply to Professor Kripke*, 133 U. PA. L. REV. 987 (1985); Homer Kripke, *Law and Economics: Measuring the Economic Efficiency of Commercial Law in a Vacuum of Fact*, 133 U. PA. L. REV. 929 (1985); Levmore, *supra* note 156; Alan Schwartz, *A Theory of Loan Priorities*, 18 J. LEGAL STUD. 209 (1989); Alan Schwartz, *Security Interests and Bankruptcy Priorities: A Review of Current Theories*, 10 J. LEGAL STUD. 1 (1981); Alan Schwartz, *The Continuing Puzzle of Secured Debt*, 37 VAND. L. REV. 1051 (1984); Robert E. Scott, *A Relational Theory of Secured Financing*, 86 COLUM. L. REV. 901 (1986); James J. White, *Efficiency Justifications for Personal Property Security*, 37 VAND. L. REV. 473 (1984).

rebate for its diminished monitoring role.¹⁶⁴ Consequently, investors collectively suffer from wasted monitoring resources and a higher blended interest rate.

This inefficient incentive to monitor can be characterized as a general cost of bankruptcy reallocation. Because of reallocation, no creditor will rely fully on its priority position over equity. As a result, creditors may generally waste resources in an attempt to monitor the debtor's activity to an extent that would have been unnecessary had they been able to rely on contractual priority.¹⁶⁵ Put simply, bankruptcy reallocation coaxes creditors toward a position of eternal vigilance because by the time the debtor is on the brink of insolvency, the creditors may have already lost a significant portion of their investment. This added need for vigilance is costly not only to those creditors whose relatively weak skills as monitors place them at a competitive disadvantage, but also to equity investors who must compensate the creditors for costs that the equity investors would have otherwise avoided.

Bankruptcy reallocation can exact a particularly high price from management equity investors, who may wish to have the firm issue debt instead of additional equity in order to offer their equity investment as a bond against management misbehavior.¹⁶⁶ Bankruptcy reallocation limits the effectiveness of such a bond and, consequently, impairs the efficient allocation of risk and responsibility between equity and creditors.¹⁶⁷

¹⁶⁴ In their exposition of risk-sharing theory, Jackson and Scott specifically note this potential inefficiency. Jackson & Scott, *supra* note 4, at 162 n.13. Moreover, the inefficiency is analogous to that which Jackson and Scott call screening costs:

Parties who would be willing to pay the added cost to share common risks presumably would prefer not to pay to share those risks that can be reduced by individual precautions. Screening failures force claimants to pay for more bankruptcy sharing than they would have agreed to in the original creditors' bargain.

Id. at 201. Thus Jackson's and Scott's oversight is not from inattention to this inefficiency, but from their reluctance to realize that the inefficiency is unnecessary. See *infra* part III.B.

¹⁶⁵ Saul Levmore similarly argues in defense of secured credit and against the suggestion that the law should permit only general creditors. Levmore, *supra* note 156. Levmore builds on the work of Jackson & Kronman, *supra* note 89.

¹⁶⁶ See *supra* notes 80, 156 and accompanying text.

¹⁶⁷ A possible counterargument to the text's conclusion is that a bankruptcy court can efficiently subordinate a senior claim if the court limits such subordination to cases in which the senior claimant has misbehaved. A court could, for example, subordinate a creditor's claim if the creditor terminated a line of credit, not because the debtor posed an unacceptable credit risk, but because the creditor sought extracontractual payments from the debtor for a new line of credit. Inasmuch as the creditor and the debtor's management would not have agreed at the time of the creditor's initial investment to allow such strategic behavior, the court's subordination of the creditor's claim in this illustration would serve the collective interests of the investors. This defense of reallocation fails, however. A contract is nothing more than an agreement. So in this illustra-

An additional inefficiency of reallocation arises when a secured creditor becomes a senior investor because of its particular sensitivity to the risk of the debtor's insolvency.¹⁶⁸ In such a case, bankruptcy reallocation shifts risk of loss to a party disinclined to bear it. As a result, such a secured creditor will charge more to bear insolvency risk than junior investors, general creditors, and equity wish to pay for the reallocation.¹⁶⁹ Once again, bankruptcy reallocation hinders a mutually beneficial agreement.¹⁷⁰

b. *In Avoidance of Bankruptcy*

Just as compulsory contract terms prevent efficient contractual arrangements, rules that increase the expense of an efficient contractual arrangement discourage that arrangement and sacrifice net benefit.¹⁷¹ To address exclusively those costs that arise in bankruptcy would, therefore, underestimate bankruptcy reallocation costs. A proper account includes the efficiency losses to firms that never enter bankruptcy but operate inefficiently so as to avoid the risk of costs that result from bankruptcy's reallocative provisions. To avoid bankruptcy's unnecessarily high costs, a firm may, for example, abjure valuable debt in its corporate structure, or forego a risky but potentially lucrative investment opportunity.¹⁷² These missed occasions for profit are bankruptcy reallocation costs, even though the firms that bear them never enter bankruptcy.

B. Bankruptcy Reallocation's Illusory Benefits

To critique risk-sharing theory, one might now speculate whether the purported benefits of risk-sharing outweigh the costs of bankruptcy reallocation. Ultimately, however, such speculation is

tion, for example, either the creditor had no contractual right to terminate the line of credit (in which case the subordination is not a reallocation) or the creditor did have the contractual right to terminate (in which case it is impossible to say that the debtor's management would not have agreed to grant the creditor such a right). See generally *supra* part I.B.

¹⁶⁸ For an explanation of secured credit's role, see White, *supra* note 163, at 473.

¹⁶⁹ Risk-sharing theory presupposes that sensitivities to risk run the other way, from the most sensitive junior investors to the least sensitive senior investors. This assumption may stem from a misapplication of risk aversion analysis. See *infra* notes 173-79 and accompanying text.

¹⁷⁰ The proposition that all parties lose when regulation prohibits the freedom to contract is not unique to secured finance. See Alan Schwartz, *Justice and the Law of Contracts: A Case for the Traditional Approach*, 9 HARV. J.L. & PUB. POL'Y 107 (1986); see also *Kham & Nate's Shoes No.2 v. First Bank of Whiting*, 908 F.2d 1351, 1357 (7th Cir. 1990) (Easterbrook, J.) (arguing that unless pacts are enforced according to their terms, the institution of contract is jeopardized); *Travelers Ins. Co. v. Budget Rent-A-Car Sys., Inc.*, 901 F.2d 765 (9th Cir. 1990) (holding that court will not supply an implied term when the language of the contract is clear).

¹⁷¹ See authorities cited *supra* note 170.

¹⁷² See also *supra* note 156 and accompanying text.

unnecessary because bankruptcy reallocation as a vehicle for risk-sharing furnishes only illusory benefits. First, risk-sharing theory's misapplication of risk aversion analysis overstates risk-sharing's potential benefits. Second, one should not compare the benefits of risk-sharing to the costs of bankruptcy's reallocative provisions. Only the actual benefit *from those provisions* matters. This important distinction draws attention to reallocation alternatives that provide the same benefits at a lower cost.

In any case, even if one assumes for the sake of argument that some form of bankruptcy reallocation is in some way justifiable, bankruptcy's actual reallocative provisions, reorganization most notably, are unjustifiable.

1. *Limited Benefits*

Bankruptcy's reallocative provisions provide benefits, if at all, to a strictly limited class of investors, because the benefits from risk-sharing accrue exclusively to those investors who bear undiversified risk. Only manager-equity investors are likely to bear a heavy burden of undiversified risk. Most other investors diversify their wealth and shed risk related to a particular firm in order to maximize the value of their investments. Even trade creditors who cannot diversify across industries will diversify their investments through a portfolio of customers within an industry. Risk-sharing, therefore, benefits only a small class of investors. Moreover, even under circumstances in which risk-sharing can plausibly provide benefits to undiversified investors, bankruptcy's reallocative provisions are as likely to harm as to help such investors.

a. *Firm-Specific Risk*

Ordinary investors garner little benefit from risk-sharing. To understand why, consider those insolvencies that are the product of poor management or some other firm-specific characteristic, and are not the product of an industry-wide or economy-wide downturn. From the perspective of a potential equity investor or creditor, the prospect of any one of these insolvencies is, by hypothesis, uncorrelated with any other. As a result, this insolvency risk is ordinarily no risk at all. The risk disappears—is “diversified”—because an investor can purchase interests in or make loans to a large number of firms and thus insulate itself from the failure of any one in particular.¹⁷³ So insulated, the investor will not benefit from sharing risk that is unique to any particular firm.

¹⁷³ See BREALEY & MYERS, *supra* note 8, at 136 (discussing mutual funds as a means to accomplish diversity).

To illustrate, consider how a diversified junior investor, equity or general creditor, views the unique risk of a debtor's insolvency in a world with and then without bankruptcy's compulsory risk-sharing. From the investor's perspective, bankruptcy reallocation alters contractual priority to the benefit of junior claims and may, therefore, increase the likelihood that the investor will get a return from each firm in which it invests. The investor, however, must pay a higher price for its interest in each firm in exchange for that higher expected return. That is, the investor must pay a premium for this insurance against bankruptcy. In an efficient market, the price of the insurance will offset the present value of the increased expected returns. This offset ensures that the net value of the investor's portfolio is no higher with a risk-sharing regime than it is without one. Thus risk-sharing is in net valueless here even if risk-sharing is *costless*.

This conclusion is unaltered by the probability that the investor is risk averse, because the total expected return on the diversified investor's portfolio remains unchanged regardless of the insurance afforded by bankruptcy reallocation. Each diversified investor estimates the likelihood of a typical firm's insolvency and incorporates this estimate into its anticipated portfolio insolvency rate. Thus the investor bases its investment on the probability that a large portion of the firms in its portfolio will remain solvent despite its uncertainty as to which particular firms will become insolvent. As a result of this fixed probability of success, risk aversion becomes irrelevant.¹⁷⁴ No investor will pay to avoid risk that it does not bear in any case.¹⁷⁵ Consequently, with respect to firm-specific risk, even risk-averse, well-diversified, equity investors and general creditors would abjure a risk-sharing regime with some expense, no matter how little, be-

¹⁷⁴ For a more concrete example, consider the relative prices of investments A, B, and C. Investment A: The immediate right to receive a certain \$5000. Investment B: The immediate right to receive \$10,000 if a single toss of a fair coin lands heads. Investment C: The immediate right to receive \$.01 for each time a tossed fair coin lands heads in one million tosses (to occur simultaneously). Any investor, of course, will pay \$5000 for Investment A. A risk-averse investor will pay less than \$5000 for Investment B, because, by hypothesis, a risk-averse investor will demand compensation for the risk that it will receive nothing. But the same risk-averse investor will pay almost *exactly* \$5000 for Investment C, not because the number of tosses reduces its risk aversion, but because there is almost no probability that the one million tosses will produce a payoff significantly less than \$5000.

¹⁷⁵ For a full description of the capital asset pricing model, which includes and builds on the advantages of diversification, see, e.g., EDWIN J. ELTON & MARTIN J. GRUBER, *MODERN PORTFOLIO THEORY AND INVESTMENT ANALYSIS* (2d ed. 1984); HAIM LEVY & MARSHALL SARNAT, *PORTFOLIO AND INVESTMENT SELECTION: THEORY AND PRACTICE* (1984); Modigliani & Pogue, *supra* note 77. For a good summary, see BREALEY & MYERS, *supra* note 8, at 149-66.

cause such investors garner no benefit from the regime.¹⁷⁶ All costs of bankruptcy's reallocative provisions are wasted to the extent they serve to limit firm-specific risk.

Risk-sharing theorists do not ignore the significance of diversification as a substitute for bankruptcy reallocation.¹⁷⁷ Indeed, a principal justification for risk-sharing is the benefit to a debtor managed by an *undiversified* equity investor.¹⁷⁸ But risk-sharing theory posits that the benefits of risk-sharing extend beyond the limited category of the manager equity investor. Thomas Jackson and Robert Scott pose the case of a trade creditor, a lumber supplier, whose business requires that it extend credit to debtors in a single industry. As a result, concentrated investment in the lumber industry sensitizes the supplier to the risk that insolvencies will pervade that industry regardless of whether the supplier is well diversified in its loans within that industry. From this Jackson and Scott conclude: "As long as a significant group of the participants in the [hypothetical creditors'] bargain are thus rendered risk averse, a risk-sharing scheme will be a plausible strategy, even where other claimants are fully diversified and risk neutral."¹⁷⁹

The flaw in the Jackson and Scott analysis is subtle but important. Their conclusion blurs the distinction between risk aversion and risk diversification. Even fully diversified investors are risk-averse. Those investors, however, are fully diversified with respect to a particular outcome, and no longer bear the risk of that outcome. Because the investors spread the expected cost across a number of investments, they gain a fixed rate of return. The lumber supplier's aversion to risk has nothing to do with its ties to a single industry. While those ties may be significant sources of risk sensitivity when the risk stems from an industry-wide downturn, they do not bear at all on the supplier's sensitivity to uncorrelated insolvency risk within an industry, which the supplier can eliminate through diversification of its loans within that industry. Consequently, if industry-wide insolvency risk, correlated with the economy, is small relative to the wholly firm-specific insolvency risk that stems from mismanagement or isolated disaster, general creditors may benefit little from risk-sharing, bankruptcy-induced or otherwise, despite any inability to diversify across industries.

¹⁷⁶ See *supra* note 174.

¹⁷⁷ See Jackson & Scott, *supra* note 4, at 175.

¹⁷⁸ See *supra* notes 77-81 and accompanying text.

¹⁷⁹ Jackson & Scott, *supra* note 4, at 168 n.26.

b. *Interdependent Risk*

Ordinary investors can shed not only firm-specific risk, but, in theory, all risk that is uncorrelated with general trends in the economy. An investor could, for example, purchase a portfolio of diversified equity interests in and debt obligations of firms in all industries. Such an investor would be indifferent to even a costless risk-sharing regime *regardless* of the insolvency risk's source. No risk-sharing regime could reduce such an investor's "systematic" risk of an economy-wide downturn, and, as a benefit of diversification, the investor bears no firm-specific risk.¹⁸⁰

Not all investors, however, can afford full diversification and some may benefit from risk-sharing. These investors may include the manager equity investor and, when the source of insolvency risk encompasses all sources, investors such as Jackson's and Scott's lumber supplier.¹⁸¹ Suppose a lumber supplier is equipped only to serve as a general creditor who deals exclusively in the lumber industry. The supplier would be sensitive to the risk that the industry might decline, and would prefer to shed some of that risk.¹⁸² The supplier, therefore, could benefit from a transaction that reduces its potential losses from a spate of lumber insolvencies.

Bankruptcy's reallocative provisions would generate beneficial risk-sharing, even for such a creditor, however, only by mere chance. Bankruptcy reallocation provides the supplier with relief from risk only through the imposition of risk on other creditors, such as secured creditors denied pendency reimbursement. There is no reason to believe that the secured creditor can bear the risk any more efficiently than the supplier. The secured creditor may well be *more* sensitive to risk than the supplier. Perhaps the secured creditor is an undiversified manufacturer of the property that serves as its collateral and is itself a debtor with significant obligations. If so, the secured creditor could be more risk averse and less well diversified than the supplier. Indeed, the secured creditor's higher sensitivity to risk might have led the secured creditor to bargain for a security interest in the first instance. Bankruptcy reallocation, therefore, might often reallocate risk in a counterproductive fashion. The threat of such a shift would lead to adjustments in interest

¹⁸⁰ See sources cited *supra* note 175.

¹⁸¹ See *supra* note 179 and accompanying text.

¹⁸² The undiversified creditor would receive an unsatisfactory return for the risk that a significant portion of its debtors may become insolvent simultaneously. This unsatisfactory return occurs because the covariance in value among the firms in which the supplier invests is greater than the covariance in value among firms in the economy generally. The supplier would do better were it not constrained to a single industry and could invest in a more diversified "market" portfolio and, perhaps, risk-free government securities. For a further discussion of this point, see sources cited *supra* note 175.

rates to include a risk "premium" that neither equity investors nor general creditors would choose to pay if bankruptcy were to permit them to contract freely.¹⁸³

Risk-sharing theorists assume, nonetheless, that a firm's investors would collectively agree to have a secured creditor "share with unsecured creditors and equity some of the asset pool otherwise reserved to them" in the event of insolvency.¹⁸⁴ Perhaps this assumption is a product of a misapprehension that a secured creditor is risk-neutral.¹⁸⁵ In fact, a secured creditor is more likely than any creditor to be risk-averse. A fully secured creditor, like a fully diversified creditor, simply bears little or no risk. Each may well be quite averse to the prospect that it will suffer unexpected losses. This may indeed be why each is careful to avoid risk through diversification or collateral, as in the illustration above.

In sum, a large number of investors, relatively well equipped to bear risk, receive no benefit from bankruptcy reallocations. Bankruptcy reallocation, moreover, often interferes with deliberate contractual risk allocation. Thus even if bankruptcy reallocation does provide some benefit to manager-equity investors, risk-sharing theorists overestimate reallocation's total benefit. The discussion could proceed from here to an analysis of how bankruptcy's reallocative provisions could be narrowly tailored to produce benefits. But such a discussion becomes unnecessary on closer analysis, which reveals that all purported benefits are illusory.¹⁸⁶

2. *Contractual Risk-Sharing*

Bankruptcy reallocation benefits no one, because a bankruptcy process that abandons reorganization and honors absolute priority would allow *investors* to accomplish risk-sharing at a fraction of the cost that bankruptcy reallocation imposes. Recall that bankruptcy law could in theory replace reorganization with a forced auction of the insolvent debtor and the distribution of proceeds in strict accord with contractual priorities.¹⁸⁷ This procedure would sacrifice bankruptcy's reallocative tendencies. However, the elimination of bankruptcy's reallocation function would not foreclose the possibility of any risk-sharing advantage. Investors can accomplish risk-sharing with a simple set of contracts. A manager-equity investor can, for example, receive compensation in or purchase debt obligations of the firm she manages. This would reduce the manager's losses if the

¹⁸³ See *supra* notes 90-92 and accompanying text.

¹⁸⁴ Jackson & Scott, *supra* note 4, at 168.

¹⁸⁵ See *supra* note 179 and accompanying text.

¹⁸⁶ Part III.B.3. discusses alternative bankruptcy reallocation rules.

¹⁸⁷ See *supra* notes 123-33 and accompanying text.

firm failed,¹⁸⁸ and would dampen the manager's eve-of-bankruptcy incentive to risk the debtor's assets.¹⁸⁹ To illustrate, assume that instead of an initial equity investment of \$100,000 and a loan from an outsider of \$100,000, a manager equity investor contributes only \$90,000 in equity and makes a \$10,000 loan to the debtor along with the outsider's \$100,000 loan.¹⁹⁰ If the debtor suffers a financial setback and is sold at public auction for just less than \$100,000, absolute priority would provide the equity investor with nothing in the former capitalization, but with about \$9000 in the latter. The latter structure, then, allows the equity investor to share assets in the event of the debtor's insolvency, and provides an incentive to tread more carefully with those assets.¹⁹¹

Contractual risk-sharing is not merely an alternative to bankruptcy's reallocative provisions, it is the superior alternative. Unlike bankruptcy's reallocative provisions, a capital structure that includes managers as creditors provides insurance against failure and any beneficial eve-of-bankruptcy incentive without the costs of uncertainty, delay, contract abrogation, and strategic behavior. Moreover, such a capital structure does not suffer from bankruptcy reallocation's tendency to exacerbate endogenous risk in preinsolvency time periods. The contractual solution is superior in this respect because a manager holds the contractual debt investment whether or not she invests the solvent debtor's assets in an unduly risky project. In contrast, bankruptcy reallocation not only insulates the manager from risk, it effectively *rewards* the manager with her insolvency share if she invests the debtor's assets in the foolish project.¹⁹²

¹⁸⁸ See *supra* notes 81-86 and accompanying text.

¹⁸⁹ See *supra* notes 93-99 and accompanying text.

¹⁹⁰ Equity's investment in debt, which provides risk-sharing in bankruptcy, appears occasionally in highly leveraged corporations, where bankruptcy risk is presumably great. See Michael C. Jensen, *Takeovers: Their Causes and Consequences*, 2 J. ECON. PERSPECTIVES 21 (1988).

¹⁹¹ Even a narrow interpretation of the equitable subordination doctrine could prevent this arrangement, because the manager-equity investor is an insider. See *supra* part I.B. The doctrine *should not*, however, work to subordinate any arms-length transaction, even one involving an insider.

¹⁹² See *supra* notes 134-39 and accompanying text. Another example will further clarify this difference. Assume a widely-held firm has \$100 million in assets and \$90 million in outstanding debt, leaving a \$10 million equity cushion. Assume further that management has an opportunity to have the debtor invest \$10 million in a project that has an equal chance of a \$19 million payoff or a total loss. The project has a negative expected value of \$500,000. Thus the investors collectively would not have the debtor invest in the project. If bankruptcy honored contractual priority, management would act in the best interest of the investors and would not have the debtor invest in the project. This is so whether the managers own only equity in the debtor or own some of the debtor's debt obligations. If the managers own only equity, they will not have the debtor invest, because the managers would expect to lose 5% of their total investment

If risk-sharing establishes benefits, then, contractual risk-sharing is the most efficient means to achieve them. Recall, however, that risk-sharing theorists assume contractual risk-sharing is impractical. One account of the impracticality stems from the "formidable operational difficulties in distinguishing common risks from those that have been assigned to individual claimants."¹⁹³ The equity investor who becomes a creditor, and thus partially insures himself against financial disaster, does become insured against both endogenous risk of failure due to his own indolence or incompetence, and exogenous risk of failure due to circumstances beyond his control. But bankruptcy's reallocative provisions suffer the same inability to distinguish between endogenous risk, for which creditors would not endorse insurance, and exogenous risk, for which they might.¹⁹⁴

There is another explanation for contractual risk-sharing's impracticality: manager-equity investors could trade away any debt obligation that they initially agree to purchase, and thereby "undo" the beneficial capital structure. The manager-equity investor would so act in order to regain her ability to gamble the debtor's assets at

in the firm. If the managers hold 10% of their investments in debt obligations, they also will not have the debtor invest, because the managers would expect to lose again, this time \$4.50 out of every \$100 they have invested. (If the managers' investments consist of 9/10 debt—the firm's debt to asset ratio—the managers would expect to lose \$.50 on every \$100 invested. This, of course, is the firm's loss ratio for this project.) If, however, the investors collectively rely for risk-sharing on bankruptcy reallocation, and such reallocation guarantees equity as little as 2.2% of the debtor's assets, management will have an incentive to have the debtor invest in the project. This is because if the managers own only equity, the managers will expect to gain 5% of their total investment: that is, they will expect to gain a share of a \$9 million profit if the project succeeds and to lose only a share of \$8 million if the project fails. The \$10 million the firm would lose on failure is not borne fully by equity because equity is guaranteed 2.2%, or \$2 million, of the \$90 million in assets remaining after failure.

¹⁹³ Jackson & Scott, *supra* note 4, at 168. See also *supra* Part II. The discussion in the text assumes for the sake of argument that these difficulties are insurmountable. It is not wholly obvious, however, that they are. "To tie sharing to exogenous risks, the [creditor's] contract could trigger the sharing (no interest, payment in stock, or forced conversion to equity) if demand in the industry falls to [a specified] level of production or price." Roe, *supra* note 4, at 223. Roe further argues that the absence of such explicit contracts suggests investors may not wish to share even exogenous risk. He points to informational asymmetries as the source of their desires to allocate such risk to individual investors. *Id.* at 222-29. The text points out, however, that risk-sharing theory is insupportable, even when Roe is incorrect.

¹⁹⁴ Creditors would not accept insurance against endogenous risk, because creditors fear that, so insured, a manager-equity investor would have too little incentive to manage wisely. See *supra* notes 83-86 and accompanying text. This is sometimes called a fear of "moral hazard." Mark Roe also observes that bankruptcy's imposed risk-sharing does not solve this problem: "The moral hazard does not disappear simply because the morally hazardous term is written into the contract by bankruptcy law rather than through contract negotiation." Roe, *supra* note 4, at 231.

the creditors' expense.¹⁹⁵ This ostensible danger has a simple solution. Managers could bond themselves against misbehavior with an investment in restricted debt obligations that would be enforceable only so long as the manager serves the firm. In fact, the issuance of restricted securities is common.¹⁹⁶

Thus bankruptcy's reallocative provisions appear to be no more than a complex and costly way to accomplish that which investors can achieve more cheaply on their own.¹⁹⁷ Perhaps certain investors do not contract for risk-sharing because managers already receive some compensation in the form of fixed salary and would acquire from risk-sharing incentives that are *too* closely aligned with those of creditors.¹⁹⁸ For that reason, or any other, the investors collectively may simply find risk-sharing not in their best interests.

¹⁹⁵ See Frierman & Viswanath, *supra* note 5. See also *supra* notes 83-86 and accompanying text.

¹⁹⁶ One example of restricted securities is "phantom stock." Under a phantom stock plan, a firm issues to its manager units that correspond to shares of stock. The firm credits the manager with dividends and increases in the value of the stock as these amounts accrue until the manager retires. Simple inalienable stock options perform much the same function. See RIBSTEIN, *supra* note 34.

¹⁹⁷ Despite his significant criticism, see *supra* note 193, Roe ultimately argues that risk-sharing theory is at least plausible. The ground for this defense is that equity may be unable to contract for insurance against exogenous risk because equity's acceptance of such insurance would signal to creditors that equity is likely to expose the creditors to endogenous risk. Bankruptcy-imposed sharing, the explanation concludes, allows an equity investor to insure against exogenous risk without the cost of the destructive signal. Roe, *supra* note 4, at 231-33. Roe's defense of risk-sharing theory, however, does not withstand scrutiny. Bankruptcy's imposition of sharing does not eliminate a *false* signal that a debtor suffers from heightened endogenous risk. The imposed sharing instead ensures that a heightened risk exists for all debtors. This saves the risk-sensitive equity investor from the need disadvantageously to distinguish herself, but it causes all debtors to become bad risks. Imagine a law that prohibits traffic signals in all communities. Could anyone defend such a law on the ground that it saves communities without traffic signals the unflattering appearance of relatively dangerous intersections? Roe himself refers to this problem. *Id.* at 233. But he does not conclude that the problem necessarily disqualifies signalling as a justification for bankruptcy's reallocative provisions. Despite his reluctance, it is difficult to escape such a conclusion.

¹⁹⁸ One might speculate, for example, that a debtor's nonmanager-equity investors do not wish managers to hold debt, because such debt might encourage indolence and discourage risk, even risk justified by a higher return. See Jensen & Meckling, *supra* note 7, at 312-13. For their part, creditors might consent to control management's perverse risk incentives through restrictive covenants. See, e.g., Avner Kalay, *Stockholder-Bondholder Conflict and Dividend Constraints*, 10 J. FIN. ECON. 211 (1982); Clifford Smith & Jerold Warner, *On Financial Contracting: An Analysis of Bond Covenants*, 7 J. FIN. ECON. 117 (1979). Managers' interests, moreover, are well aligned with those of creditors even without an ordinary credit investment, at least preinsolvency, because the managers hold fixed salary claims and firm-specific human capital investments. See Susan Rose-Ackerman, *Risk Taking and Ruin: Bankruptcy and Investment Choice*, 20 J. LEGAL STUD. 277 (1991).

3. *Proceeds Reallocation*

Finally, assume for the sake of argument that *some* bankruptcy reallocative provisions are necessary to accomplish risk-sharing, and that bankruptcy-imposed risk-sharing is worth its costs of inefficiency in compulsory contract terms.¹⁹⁹ Not even these ill-supported assumptions justify bankruptcy's actual reallocative provisions, most significantly, bankruptcy reorganization.

As an alternative to reorganization and its substantial costs,²⁰⁰ bankruptcy could impose risk-sharing features on the distribution of sale proceeds after the court auctioned a debtor free of all prebankruptcy claims. In their exposition of risk-sharing theory, Jackson and Scott recognize this possibility, but argue that once bankruptcy abandons contractual priority, "something like the rules found in [bankruptcy's reorganization provisions] are necessarily reintroduced. . . . If that is so, not much would have been gained by resorting to [the auction] and then introducing risk-sharing rules into the distributional process."²⁰¹ This response is not persuasive. An inexpensive and effective mechanical risk-sharing rule may be sufficiently certain to discourage costly negotiation or litigation. Such a rule might, for example, require creditors to sacrifice some fixed percent of their claim to a general fund in which equity would share. In addition to negotiation and litigation savings, such a rule would eliminate the "disruption" of the debtor's operations that results from reorganization.²⁰² Disruption cannot be a cost of postauction risk-sharing, because the auction frees the debtor from prebankruptcy claims against it. As a result, the imbroglio among claimants over a debtor becomes, at worst, an imbroglio over a pot of cash, which even the most bitter conflict cannot easily diminish.²⁰³

199 See *supra* notes 100-72 and accompanying text.

200 *Id.*

201 Jackson & Scott, *supra* note 4, at 191 n.84.

202 See *supra* note 108 and accompanying text.

203 A related advantage to certainty in reallocation has its source outside of risk-sharing. This advantage arises when an insolvent debtor possesses going-concern surplus derived largely from a synergy between manager equity investors and the debtor's assets. A rule that, in the extreme, awards the entire value of the debtor to equity is, *ex post*, the most efficient rule because it avoids costly negotiation and strategic behavior. See *supra* part I.B. A mirror-image rule that awards the entire value of the firm to the creditors as senior claimants does not similarly eliminate strategic behavior costs, because for the creditors to realize the debtor's full value, they would in any case need to negotiate with equity for equity's managerial skills. An argument similar to this one appears, as part of a discussion on the new value exception to the absolute priority rule, in Baird & Picker, *supra* note 52, at 344-47. This argument is not, however, a defense of bankruptcy reallocation. It is rather an observation that postinsolvency strategic behavior is a cost a firm should consider before it abandons an all equity structure and issues debt.

CONCLUSION AND IMPLICATIONS

There is no good reason for bankruptcy to alter nonbankruptcy contractual priorities. Although risk-sharing theory proposes that bankruptcy reallocation of contractual entitlement from high-priority to low-priority investors mitigates equity's prebankruptcy incentive to risk the debtor's assets and serves a valuable insurance function for low-priority investors, bankruptcy reallocation may well exacerbate, not temper, the problems of prebankruptcy behavior and uninsured risk. Contract, not mandatory rules, can most effectively provide any conceivable benefit that bankruptcy reallocation now provides, if at all, only at substantial cost to investors.

An important consequence of this conclusion is that there is no need for bankruptcy reorganization, which serves no purpose other than reallocation. Congress should repeal bankruptcy's reorganization provisions. As a result of reorganization's exorcism, bankruptcy could provide an easier and less costly resolution of business insolvency.

Courts, moreover, can prevent the worst of the reallocation abuses even under extant law if, whenever possible, the courts interpret the law to respect contractual priorities. Unless the Supreme Court reverses itself, there is little lower courts can do to reimburse undersecured creditors for foregone pendency income. But courts are free to eliminate the "new value" exception to contractual priority and cease "equitable" subordination of fairly negotiated claims. Courts can also limit reallocation in the reorganization process if they refuse to extend the period of management's exclusive right to propose a plan, check their own tendency to overvalue debtors' assets, refuse to confirm distributions to junior classes over senior class dissent unless the debtor's assets defy market valuation, and confirm only those reorganization plans that respect contractual priority in the distribution of a debtor's full going-concern value and not merely its piecemeal liquidation value.²⁰⁴

In sum, a bankruptcy system that respects contractual priority is equitable, more certain, and promotes greater economic efficiency, than a system that gives free reign to the crude and costly tools of compulsory risk-sharing.

²⁰⁴ Each proposal responds directly from the inefficiencies described *supra* part I.B.