

UC Berkeley

Boalt Working Papers in Public Law

Title

Managers' Fiduciary Duty Upon the Firm's Insolvency: Accounting for Performance Creditors

Permalink

<https://escholarship.org/uc/item/78n6j94h>

Authors

Chaver, Alon
Fried, Jesse M.

Publication Date

2002-06-01

Managers' Fiduciary Duty Upon the Firm's Insolvency: Accounting for Performance Creditors

*Alon Chaver**

*Jesse M. Fried***

I.	INTRODUCTION	1814
II.	THE RISE OF THE FINANCIAL VALUE MAXIMIZATION APPROACH	1819
A.	<i>The Shareholder Value Maximization Approach</i>	1819
1.	Shareholder Value Maximization in a Solvent Firm	1819
2.	Shareholder Value Maximization in an Insolvent Firm: The Problem of Excessive Risk Taking	1821
B.	<i>Creditor Value Maximization in an Insolvent Firm</i>	1822
1.	Creditor Value Maximization and the Elimination of Excessive Risk Taking	1822
2.	Creditor Value Maximization and the Problem of Insufficient Risk Taking	1823
C.	<i>Financial Value Maximization upon Insolvency</i>	1824
III.	THE PROBLEM WITH FINANCIAL VALUE MAXIMIZATION.....	1825

* Boalt Hall School of Law, Class of 2002.

** Acting Professor of Law, Boalt Hall School of Law. For helpful comments, we would like to thank Barry Adler, Douglas Baird, Lucian Bebchuk, Stephen Choi, Mel Eisenberg, Andrew Guzman, Henry Hansmann, Marcel Kahan, Mark Lemley, Bob Rasmussen, Alan Schwartz, and participants at the 2002 American Law and Economics Association meeting in Boston and at the Vanderbilt University Law School Symposium, "Convergence on Delaware: Corporate Bankruptcy and Corporate Governance." We are also grateful to Miranda Gong, Jesse Fletcher Ladomirak, Jay Metz, and Aaron Monick for excellent research assistance, and to the Boalt Hall Fund for financial support.

A.	<i>Financial Value Maximization When Firm Pays Full Damages for Breach</i>	1826
B.	<i>The Cost of Breach to an Insolvent Firm: "Ratable Damages"</i>	1828
1.	Expected Cost of Breach When Bankruptcy Is Certain.....	1828
2.	Expected Cost of Breach When Bankruptcy Is Uncertain.....	1830
C.	<i>Distortions Caused by FVM When a Firm Pays Ratable Damages</i>	1830
1.	Underinvestment in Ability to Perform Contracts.....	1831
2.	Distorted Breach/Performance Decisions.....	1833
D.	<i>Potential Mechanisms for Reducing Distortions</i>	1835
1.	Security Interests.....	1835
2.	Renegotiation.....	1837
a.	<i>Renegotiation and Inefficient Breach</i>	1838
b.	<i>Renegotiation and Underinvestment</i>	1839
IV.	THE DESIRABLE APPROACH: MAXIMIZING THE TOTAL VALUE OF ALL CLAIMS AGAINST THE FIRM.....	1841
A.	<i>Description of the Approach</i>	1841
B.	<i>The Effect on Shareholders</i>	1843
V.	CONCLUSION.....	1844

I. INTRODUCTION

A corporation's managers¹ generally owe a fiduciary duty to the corporation and its shareholders.² Legal scholars interpret this duty as requiring the managers to maximize shareholder value.³ When a firm

1. By "managers," we mean those officers and directors who have decisionmaking power in the firm.

2. Steven L. Schwarcz, *Rethinking a Corporation's Obligations to Creditors*, 17 CARDOZO L. REV. 647, 649 (1996).

3. See MICHAEL P. DOOLEY, FUNDAMENTALS OF CORPORATION LAW 97 (1995) (reporting that corporate law scholars "generally agree . . . that management's principal fiduciary duty is to maximize the return to the common shareholders"); Thomas A. Smith, *The Efficient Norm for Corporate Law: A Neotraditional Interpretation of Fiduciary Duty*, 98 MICH. L. REV. 214, 214 (1999) (reporting that "the orthodox view among corporate law scholars is that the corporate fiduciary duty is a norm that requires firm managers to maximize shareholder value").

is solvent, the obligation to maximize shareholder value tends to give managers an incentive to deploy firm assets efficiently—that is, in a way that maximizes total value.

When a firm is insolvent, however, the duty to maximize shareholder value could lead managers to take actions that reduce the value of debt more than they increase the value of equity and therefore reduce total value. Accordingly, a number of courts have held that upon a firm's insolvency, managers owe a fiduciary duty not only to shareholders but also to creditors.⁴

The courts have yet to clearly articulate how managers of an insolvent firm should balance the interests of shareholders against those of creditors. However, economically oriented legal scholars addressing this issue have argued that managers of an insolvent firm should have a duty to maximize the sum of the values of all financial claims (both those held by shareholders and those held by creditors) against the firm.⁵ Put differently, an insolvent firm's managers should maximize the total financial value of the firm, not just the value of its equity.⁶ We call this view the “financial value maximization” (“FVM”) approach.

To be sure, an insolvency-triggered fiduciary duty to maximize the financial value of the firm would be difficult to enforce. Thus, one might argue that even if courts were to impose an FVM duty on managers of insolvent firms, that duty would have little effect on managers' behavior. Whether or not it would affect managers' behavior, however, FVM is considered to be the conceptually correct approach to managers' fiduciary duty upon their firm's insolvency.⁷

4. See, e.g., *In re Xonics, Inc.*, 99 B.R. 870, 872 (Bankr. N.D. Ill. 1989); cf. Schwarcz, *supra* note 2, at 667-68.

5. See Gregory Scott Crespi, *Rethinking Corporate Fiduciary Duties: The Inefficiency of the Shareholder Primacy Norm*, 55 SMU L. REV. 141, 152-53 (2002); Smith, *supra* note 3, at 223 (proposing as a default rule that firm managers “make the choices that would maximize the value of the sum of financial claims against the corporation . . . whether doing so primarily benefited shareholders or some other class of corporate claimants”).

6. See, e.g., Crespi, *supra* note 5, at 143; Laura Lin, *Shift of Fiduciary Duty upon Corporate Insolvency: Proper Scope of Directors' Duty to Creditors*, 46 VAND. L. REV. 1485, 1497 (1993); Smith, *supra* note 3, at 218.

7. Our own view is that judicially articulated fiduciary duties, even if they are unenforceable, can influence managerial behavior by affecting social norms. See, e.g., Robert Cooter, *Do Good Laws Make Good Citizens? An Economic Analysis of Internalized Norms*, 86 VA. L. REV. 1577 (2000); Melvin A. Eisenberg, *Corporate Law and Social Norms*, 99 COLUM. L. REV. 1253 (1999); Edward B. Rock & Michael L. Wachter, *Islands of Conscious Power: Law, Norms and the Self-Governing Corporation*, 149 U. PA. L. REV. 1619 (2001); Edward B. Rock, *Saints and Sinners: How Does Delaware Corporate Law Work?*, 44 UCLA L. REV. 1009 (1997); cf. LYNN STOUT, ON THE EXPORT OF U.S.-STYLE CORPORATE FIDUCIARY DUTIES TO OTHER CULTURES: CAN A TRANSPLANT TAKE? (UCLA Research Series, Working Paper 02-11, 2002) (observing a relatively high degree of compliance with fiduciary duties by U.S. corporate insiders even in the

This Article demonstrates that the FVM approach is, in fact, conceptually flawed. Proponents of FVM conclude correctly that when a firm is insolvent, efficiency requires that the interests of shareholders and creditors should be equally weighted: \$1 of shareholder value should be treated the same as \$1 of creditor value. However, supporters of FVM overlook the fact that an insolvent firm is likely to have two types of creditors: (1) “payment creditors”—parties owed a fixed cash payment, which have a financial claim against the firm; and (2) “performance creditors”—parties owed contractual performance, which have a claim for performance against the firm.⁸

The FVM approach, which creates a duty to maximize solely the financial value of the insolvent firm, requires managers to take into account the effect of their actions on payment creditors and to ignore their impact on performance creditors. From an economic perspective, there is no justification for treating the interests of these two types of creditors differently. Indeed, as we explain, the requirement to maximize the financial value of the insolvent firm regardless of the effect on performance creditors might obligate managers to take steps that harm performance creditors more than they benefit payment creditors and shareholders and therefore are inefficient.

We identify two potential distortions that may arise under the FVM approach. First, managers seeking to maximize the financial value of an insolvent firm might have an incentive to inefficiently underinvest in the firm’s ability to perform its contracts, reducing the likelihood that the firm will be able to meet its contractual obligations. Second, in certain situations, managers might have an incentive to choose to breach value-creating contracts that the firm could perform.

Neither of these distortions would arise under the FVM approach if the firm were solvent. If a solvent firm cannot (or chooses not to) perform a contract, the firm is forced to pay the injured party full monetary damages for breach, which reduces the firm’s financial value by that amount. Thus, the firm and those with claims against its financial value fully internalize the cost breach imposes on the other

absence of effective external rewards and punishments, and attributing this to insiders’ preference to “do the right thing”). However, this Article abstracts from the question of how fiduciary duties affect managers’ decisionmaking in order to focus on what the content of those duties should be.

8. A “performance creditor” would include any party that has an “executory” (unperformed) contract with the firm, including a party that (1) owes performance *to* the firm and (2) has not been paid in full by the firm. For ease of exposition, however, we will assume that performance creditors are owed performance *by* the firm. This assumption does not affect the Article’s analysis or its conclusions.

party. As a result, managers seeking to maximize the financial value of the firm would decide to reduce the firm's investment in its ability to perform, or choose not to perform a contract, only if the financial benefit to the firm from that decision exceeds the cost to the other party.

An insolvent firm, on the other hand, is unlikely to pay the injured party full damages when it breaches. Consequently, the firm and those with claims against its financial value fail to internalize completely the cost breach imposes on the other party. Managers seeking to maximize the financial value of the firm therefore might decide to reduce the firm's investment in its ability to perform a contract, or choose not to perform a contract, even when the benefit to the firm is less than the cost to the other party.

To be sure, not all insolvent firms have unperformed contracts. Such contracts, which include unexpired intellectual property licenses, franchise agreements, leases, and long-term supply contracts, are more common in some business settings than in others. But in many important sectors of the economy—for example, the software industry—such licenses and other long-term arrangements play a significant role. And whenever an insolvent firm owes performance under one or more contracts, the FVM approach could give managers an incentive to act inefficiently.

Our analysis indicates that an insolvent firm's managers should have as their objective the maximization of the sum of the values of *all* claims—both financial and performance—against the firm. Put differently, managers should maximize the sum of the financial value and “performance value” (the value of performance to performance creditors) of the firm, even if doing so reduces the financial value of the firm.⁹

Although our proposed approach might make equityholders of insolvent firms worse off *ex post*, it would actually benefit them *ex ante* by a greater amount. In a world where managers of insolvent firms maximize the total value of the firm, rather than only the financial value of the firm, parties would agree to enter into contracts with firms on more favorable terms. And to the extent our approach reduces the deadweight loss associated with the identified distortions, the expected *ex ante* benefit provided by these more favorable contract terms would outweigh the expected *ex post* costs to shareholders

9. We assume that the only parties affected by managers' decisions upon a firm's insolvency are those holding financial and performance claims against the firm. To the extent that other parties—such as potential tort victims—are affected by managers' decisions, our approach would need to be modified to require managers to account for the interests of these other parties.

arising from the “dilution” of their fiduciary protection to accommodate the firm’s performance creditors.

Before proceeding, we should note that this Article abstracts from the important question of *when* managers’ fiduciary duty should broaden to include creditors. The courts have used a number of different tests to determine the moment at which managers’ fiduciary duties shift,¹⁰ while commentators have suggested a variety of others.¹¹ The most radical approach is that proposed by Thomas Smith, one of the proponents of FVM, who argues that even when a firm is legally solvent there is always some possibility that the firm will fail (either despite the managers’ decisions or because of them).¹² Thus, the distortions that may arise from shareholder value maximization when the firm is legally insolvent may also be present—though to a lesser degree—even when the firm is legally solvent. Accordingly, Smith argues that at all times managers should be required to maximize the sum of the values of all financial claims against the firm.¹³

For purposes of this Article, however, it does not matter when managers’ fiduciary duty is considered to shift to include creditors. Our claim is that whenever managers begin to owe a fiduciary duty to creditors, they should owe such a duty not only to payment creditors but to performance creditors as well. Otherwise, managers might have an incentive to act in ways that reduce the value available to all the parties with claims against the firm.

The remainder of the Article is organized as follows. Part II describes the rise of the FVM approach. It first explains why the shareholder value maximization approach (which tends to create desirable incentives when the firm is solvent) is likely to create undesirable incentives when the firm is insolvent. Next, it considers the possibility of a creditor value maximization approach, and shows why such an approach is also likely to create undesirable incentives when the firm is insolvent. Part II then concludes by explaining why commentators believe that FVM avoids the problems associated with the other two approaches. Part III demonstrates the problem with the FVM approach. By providing fiduciary protection to one type of

10. For discussions of courts’ approaches to the timing issue, see, e.g., Andrew D. Shaffer, *Corporate Fiduciary—Insolvent: The Fiduciary Relationship Your Corporate Law Professor (Should Have) Warned You About*, 8 AM. BANKR. INST. L. REV. 479, 546 (2000); Ronald Trost et al., *Fiduciary Duties of Directors in the Chapter 11 and Insolvency Contexts*, SE71 ALI-ABA 265, 290 (2000).

11. See, e.g., Schwarcz, *supra* note 2, at 647.

12. Smith, *supra* note 3, at 223-24.

13. *Id.* at 238.

creditor—payment creditors—but not to the other—performance creditors, FVM gives rise to two potential distortions: (1) underinvestment in the firm's ability to perform its contracts; and (2) inefficient breach versus performance decisions. We also show in Part III that two mechanisms that might be used to eliminate these distortions—the use of security interests *ex ante* and renegotiation *ex post*—cannot be counted on to do so. Part IV puts forward our proposed approach to the fiduciary duty of managers of insolvent firms—namely, that managers be required to maximize the value of all claims against the firm. It shows that such an approach avoids the problems associated with FVM and, if it were adopted by managers, would benefit shareholders *ex ante*. Part V sets forth our conclusions.

II. THE RISE OF THE FINANCIAL VALUE MAXIMIZATION APPROACH

The purpose of this part is to describe the leading approach to managers' fiduciary duties when the firm is insolvent—the financial value maximization approach—and briefly explain the reasoning that has led legal commentators to conclude that this approach provides managers with an incentive to act efficiently. Section A describes what we call the “shareholder value maximization” (“SVM”) approach, which characterizes managers' fiduciary duty when the firm is solvent. It explains that while SVM tends to give managers appropriate incentives when the firm is solvent, it can distort managers' incentives when the firm is insolvent. In particular, SVM can cause an insolvent firm's managers to take excessive risks at creditors' expense. Section B considers an alternative approach to managers' fiduciary duty when the firm is insolvent, which we call “creditor value maximization” (“CVM”), and explains why CVM would also distort managers' incentives. Section C describes the FVM approach, which was developed by commentators in an attempt to provide managers of insolvent firms with desirable incentives.

A. *The Shareholder Value Maximization Approach*

1. Shareholder Value Maximization in a Solvent Firm

It is a fundamental principle of corporate law that the managers of a solvent corporation owe a fiduciary duty to the corporation and its residual claimants, the shareholders.¹⁴ Under this duty, managers must place the interests of the corporation's

14. See Lin, *supra* note 6, at 1510 & n.82; Smith, *supra* note 3, at 231.

shareholders ahead of their own interests and ahead of the interests of any other parties with claims against the firm's value, including creditors.¹⁵ Creditors have been considered adequately protected by their contractual agreements with the firm.¹⁶ Thus, it has been widely believed that there is no need to extend fiduciary protection to creditors.¹⁷

Modern corporate law scholars have interpreted this shareholder-oriented fiduciary duty as obligating managers to maximize the value of shareholders' equity interests in the firm.¹⁸ When the firm is solvent and very likely to remain so, the obligation to maximize shareholder value tends to give managers an incentive to deploy firm assets efficiently—that is, in a way that maximizes total value.¹⁹

Consider first the hypothetical case in which the firm will be solvent forever, and everybody knows that the firm will be solvent forever. In this hypothetical situation, managers know that shareholders always will be the firm's only residual claimants and thus that they benefit \$1 from every \$1 increase in firm value, and lose \$1 from every \$1 decrease in firm value. Under this scenario, managers maximize shareholder value if, and only if, they maximize total value.²⁰ As a result, shareholder value maximization corresponds to total value maximization.

In the real world, of course, no firm is certain to be solvent forever. Any firm could find itself in a position where it is unable to

15. See, e.g., *United States v. Jolly*, 102 F.3d 46, 48 (2d Cir. 1996) (holding that "a firm's obligations to creditors are generally regarded as solely contractual" and that creditors are not owed duties as shareholders); *Metro. Life Ins. Co. v. RJR Nabisco, Inc.*, 716 F. Supp. 1504, 1519, 1524-25 (S.D.N.Y. 1989) (refusing to imply a covenant of good faith in a debenture contract and restricting the duties owed a creditor to those expressly delineated in the agreement); *Simons v. Cogan*, 549 A.2d 300, 300-04 (Del. 1988) (holding that an owner of a convertible debenture was a creditor of the corporation and thus protected only "by the contractual terms of the indenture").

16. See Lin, *supra* note 6, at 1511; Smith, *supra* note 3, at 231.

17. See, e.g., Lin, *supra* note 6, at 1511.

18. See DOOLEY, *supra* note 3, at 97 (reporting that corporate law scholars "generally agree . . . that management's principal fiduciary duty is to maximize the return to the common shareholders"); Smith, *supra* note 3, at 214 (reporting that "the orthodox view among corporate law scholars is that the corporate fiduciary duty is a norm that requires firm managers to 'maximize shareholder value'"); Richard A. Booth, *Stockholders, Stakeholders, and Bagholders (or How Investor Diversification Affects Fiduciary Duty)*, 53 BUS. LAW. 429, 430 (1998) (reporting that most scholars of corporate law agree that managers have a duty to maximize shareholder value).

19. See Lin, *supra* note 6, at 1490.

20. We make the standard assumption that the firm's activities do not create any externalities (positive or negative) on third parties that are not in a contractual relationship with the firm, such as the firm's competitors.

pay its debts.²¹ As Thomas Smith has argued, managers could render almost any firm insolvent by distributing assets to shareholders and taking sufficiently risky bets with the assets that remain.²² And, to the extent the firm can become or be made insolvent, shareholders cease to be the only residual claimants: creditors also bear part of the risk.

However, as long as managers run the firm in a way that keeps the likelihood of insolvency relatively low, shareholders remain the primary residual claimants. Under these conditions, managers seeking to maximize shareholder value *tend* to have an incentive to deploy firm assets efficiently.²³

2. Shareholder Value Maximization in an Insolvent Firm: The Problem of Excessive Risk Taking

Although the shareholder value maximization approach tends to promote desirable behavior by managers when the firm is solvent and is highly likely to remain so, it is well understood that it may lead to undesirable behavior when the firm is insolvent.²⁴ In particular, managers might have an incentive to benefit shareholders in ways that impose a larger cost on creditors. For example, managers might have an incentive to choose excessively risky projects.²⁵

The following example illustrates the problem:

Example 1: Suppose that Firm has \$100 of debt due at the end of the year. If Firm continues in its current "safe" line of business ("S"), it will have assets totaling \$80 by the end of the year. As a result, Firm will default on its debt and be taken over by its creditors. Alternatively, Firm could change to a different "risky" line of business ("R_o"). If Firm switches to business R_o, there is a 50% likelihood that Firm will have assets totaling \$120 by the end of the year and a 50% likelihood that it will have no assets by the end of the year. Because the expected value of business R_o is \$60 and the expected value of business S is \$80, from an efficiency perspective, Firm's managers should choose business S. However, if Firm continues in business S, the expected value of equity is \$0, and if Firm switches to business R_o, the expected value of equity is \$10 (50% of \$20). Thus, shareholder

21. See Smith, *supra* note 3, at 223.

22. *Id.* at 224.

23. See Lin, *supra* note 6, at 1490, 1497 & n.15.

24. See, e.g., *id.* at 1490.

25. Other ways in which managers might seek to benefit shareholders at creditors' expense include (1) delaying the liquidation of a company in an attempt to preserve its option value; and (2) withdrawing assets from the corporation.

value maximization would lead managers to choose business R_0 over business S , which is inefficient.

The intuition behind this example is that when the firm would otherwise fail and leave shareholders with nothing, managers seeking to maximize shareholder value will have an incentive to choose a different strategy—one in which there is some possibility that the firm will be able to pay its debts. The alternative strategy will be chosen even if the risks and cost of failure, which are borne entirely by creditors, are too high.²⁶ The shareholders have little or nothing to lose, and something to gain, by the managers pursuing such a high-risk strategy.

B. Creditor Value Maximization in an Insolvent Firm

1. Creditor Value Maximization and the Elimination of Excessive Risk Taking

Because the possibility of insolvency makes creditors residual claimants, and because shareholder value maximization can lead to excessive risk taking at their expense, it is worth briefly considering an alternative approach to managers' fiduciary duty upon insolvency: creditor value maximization. Under such an approach, managers of an insolvent firm would be obligated to maximize the value of creditors' claims. The CVM approach is not purely hypothetical. A number of courts have held that, upon insolvency, managers owe a fiduciary duty exclusively to creditors.²⁷

The advantage of CVM—or indeed any approach that takes into account creditors' welfare—is that it eliminates the excessive risk taking that can result when managers seek to maximize shareholder value without regard to the effect on creditors.

Consider the following example:

Example 2: Suppose that, as in Example 1, Firm owes \$100 that is due at the end of the year, and has the same two business opportunities: S , which will leave Firm with assets totaling \$80 by the end of the year, and R_0 , which has a 50% probability of leaving Firm with assets totaling \$120 by the end of the year and a 50% probability of leaving Firm with no assets. We saw in Example 1 that SVM would lead managers to choose business R_0 over business S , an outcome that is inefficient. Now suppose that managers must instead maximize creditor value. The expected value of creditors' claims under business

26. See Lin, *supra* note 6, at 1491.

27. See, e.g., *Amussen v. Quaker City Corp.*, 156 A. 180, 181 (Del. Ch. 1931); Schwarcz, *supra* note 2, at 667-68.

S is \$80. The expected value of those claims under business R_0 is \$50 (50% of \$100). An obligation to maximize creditor value (or indeed any duty focusing exclusively on creditors' interests) would require managers to choose business S —the value-maximizing decision.

The intuition is that under the CVM approach, managers seek to maximize the value available to creditors and do not take into account the effect of their decisions on shareholders. Thus, they will not engage in risky strategies that reduce the value of creditors' claims. To the extent managers avoid strategies that reduce the value of creditors' claims, they will not pursue any inefficient strategy having that effect.

2. Creditor Value Maximization and the Problem of Insufficient Risk Taking

Although CVM eliminates the problem of excessive risk taking upon a firm's insolvency, such a duty can give rise to the opposite problem: insufficient risk taking. In particular, managers required to maximize creditor value when the firm is insolvent might forgo risky opportunities that increase total value because they make creditors worse off. This problem, of course, is the inevitable result of an approach that seeks to maximize creditor value without regard to the effect on shareholder value.

Example 3: Suppose again that Firm has \$100 of debt due at the end of the year, and that if Firm continues in its "safe" business ("S"), it will have assets totaling \$80 by the end of the year. As a result, Firm will default on its debt and be taken over by its creditors. Firm could change to a "risky" business (" R_1 "), which has a higher expected value than business S : it will leave the firm with \$200 in assets by the end of the year with a 50% probability, and no assets with a 50% probability. The expected value of business R_1 is therefore \$100, \$20 more than the value of business S . From an efficiency perspective, Firm's managers should choose business R_1 . However, if Firm continues in business S , the expected value of the debt is \$80, and if Firm switches to business R_1 , the expected value of debt is \$50. In that case, CVM would lead managers to an inefficient result, i.e., the selection of business S over business R_1 .

The intuition behind this example is that creditors bear most of the downside if the firm does poorly but do not enjoy much of the upside if the firm does very well. Therefore, CVM leads managers to

act conservatively, even if the total value available to both creditors and equityholders is thereby reduced.²⁸

C. Financial Value Maximization upon Insolvency

As we saw in Sections A and B, both the SVM and CVM approaches can give managers an incentive to act inefficiently when the firm becomes insolvent. Each approach is flawed because it obligates managers to make decisions for the benefit of one class of claimholders without considering the effect of those decisions on the other.²⁹

Most courts have held that upon insolvency a firm's managers owe a fiduciary duty both to shareholders and to creditors. However, none of these courts—with the possible exception of the Delaware Chancery Court—has described exactly how the interests of shareholders should be balanced against the interests of creditors. Should shareholders' interests be given priority, in accordance with the notion of shareholder primacy underlying managers' fiduciary duty when the firm is solvent? Or should creditors' interests be given priority, in the spirit of older court holdings that managers of an insolvent firm owe a fiduciary duty exclusively to creditors?

Among the legal commentators who have addressed this question, the prevailing view is that an insolvent firm's managers should maximize the sum of the values of all of the financial claims against the firm—or, equivalently, the financial value of the firm itself.³⁰ Chancellor William Allen's opinion in the well-known Delaware Chancery Court *Credit Lyonnais* decision can be read as endorsing this view.³¹ The purpose of this approach, which we call the

28. Creditors might also prefer that the firm be liquidated earlier than is optimal. Lin, *supra* note 6, at 1494.

29. *See id.* at 1496-97.

30. *See Crespi, supra* note 5, at 152-53; Lin, *supra* note 6, at 1485, 1500; Smith, *supra* note 3, at 218; *cf.* Mark J. Roe, *Bankruptcy and Debt: A New Model for Corporate Reorganization*, 83 COLUM. L. REV. 527, 583 (1983) (describing the incentives of managers of an insolvent firm, and suggesting that the resulting distortions "might be avoided by a concept of corporate duty of officers and directors to the abstract firm, not just to its shareholders").

31. *Credit Lyonnais Bank Nederland, N.V. v. Pathe Communications Corp.*, No. Civ.A.12150, 1991 Del. Ch. LEXIS 215 (1991). Chancellor William Allen wrote that the board of a solvent company in "the vicinity of insolvency" has an "obligation to the community of interest that sustained the corporation, to exercise judgment in an informed, good faith effort to maximize the corporation's long-term wealth creating capacity." *Id.* at *109. In footnote 55, the court offered a numerical example in which managers had to choose whether to accept a settlement offer or proceed with litigation. *Id.* at *108 n.55. The settlement offer exceeded the expected value of litigating. *Id.* However, because bondholders would receive most of the settlement, shareholders would be better off if the managers turned down the settlement offer and litigated. The court concluded that the managers should settle the case because settlement

financial value maximization approach, is to discourage managers from taking steps that increase shareholder value by less than they reduce creditor value (and vice versa). Such an approach would eliminate the problems of excessive risk taking and insufficient risk taking associated with giving preference to one type of investor interest over the other. Because the FVM approach is believed to increase the value available to the parties (as a group) ex post, proponents argue that shareholders and creditors would bargain for it ex ante if they had the ability to do so.³²

III. THE PROBLEM WITH FINANCIAL VALUE MAXIMIZATION

We saw in Part II that managers seeking to maximize shareholder value or to maximize creditor value might, upon insolvency, have an incentive to act in a way that reduces the total value available to shareholders and creditors. Commentators have thus suggested that managers should maximize the value of the sum of all financial claims against the firm—or, equivalently, the financial value of the firm itself.³³

The purpose of this part is to point out an unrecognized problem with the FVM approach. The problem with FVM is that it fails to recognize that there are likely to be *two* types of creditors: (1) parties owed cash by the firm, which we call “payment creditors,” that hold financial claims against the firm; and (2) parties owed contractual performance by the firm, which we call “performance creditors,” that have claims for performance against the firm. FVM requires managers to take into account the effect of their decisions on the first group of creditors, payment creditors, but not on the second group, performance creditors.

As this part explains, there is no economic justification for denying performance creditors the fiduciary protection accorded to payment creditors. Indeed, just as SVM and CVM can give rise to distortions by requiring managers to ignore the effects of their decisions on the other type of claimholder, FVM can create distortions by requiring managers to ignore the effect of their decisions on performance creditors.

would, by providing a higher expected value, make the “community of interests that the corporation represents”—in this case the bondholders and shareholders—better off. *Id.* Although the court applies FVM in this particular example, it leaves open the possibility that the community of interests could include nonfinancial claimants, such as employees. If so, the court would be endorsing an approach different from FVM.

32. See Smith, *supra* note 3, at 244.

33. See, e.g., *id.* at 238.

Section A explains why FVM would not distort managers' decisions when a firm is solvent. When a firm is solvent, it can be forced, under the expectation damages rule, to provide full financial compensation for any damages it causes by breaching its contract with a performance creditor. As a result, the firm and those with financial claims against it fully internalize the cost that breach imposes on the performance creditor. Thus, even if the managers of a solvent firm are seeking only to maximize the financial value of the firm, the expectation damages rule forces them to take into account the effect of their decisions on performance creditors.

However, as Section B explains, when the firm is insolvent, managers do not expect the firm to pay full expectation damages when it breaches a contract. In particular, if the insolvent firm breaches and then enters bankruptcy, any breach of contract claim by the injured party will be treated as a prebankruptcy unsecured claim, and the injured party will receive only a fraction of the claim's face amount.

Section C examines the two types of distortions that may result under the FVM approach when managers anticipate that the insolvent firm can breach without paying full damages. First, FVM might cause managers to underinvest in the firm's ability to perform its contracts. Second, managers seeking to maximize the financial value of the firm might choose to breach a contract that the firm is able to perform even when the cost of breach imposed on the firm's contract partner exceeds the benefit of breach to the insolvent firm.

While these distortions impose costs on the performance creditor ex post, they force the potentially insolvent firm to contract on worse terms ex ante. Thus, it will be in the parties' joint interest to take steps to avoid these distortions. Section D considers two mechanisms that might enable the parties to avoid these distortion costs: (1) security interests, which would make any damage claim secured, and therefore payable in full; and (2) renegotiation of the contract terms to capture the surplus that otherwise would be lost because of underinvestment and inefficient breach. Although these mechanisms may reduce the frequency of these distortions, we explain why they are very unlikely to eliminate them.

A. Financial Value Maximization When Firm Pays Full Damages for Breach

Under ordinary contract law, a party breaching a contract must pay damages if its contract partner is injured by the breach. Under the so-called expectation damages rule, the measure of damages is the amount that is necessary to put the injured party in the same

economic position it would have occupied had the contract been performed.³⁴ Therefore, expectation damages are designed to provide full financial compensation to the injured party for breach.

Whether the injured party actually can collect full expectation damages, however, depends on whether the breaching firm is solvent. If the breaching firm is solvent, it could be forced to pay full expectation damages. Thus, a solvent firm's managers considering breaching a contract will expect the firm to pay full expectation damages upon breach. As a result, the firm and those with financial claims against it fully internalize the cost breach imposes on the other party. Even if managers are seeking only to maximize the financial value of the firm, when the firm is solvent the expectation damages rule forces them to consider the effect of their decisions on performance creditors. As is already familiar, when the firm is solvent the expectation damages rule generally discourages breach when performance is value-creating and encourages breach when performance is value-wasting.³⁵ (Moreover, as we will explain shortly, when the firm is solvent the expectation damages rule encourages managers seeking to maximize the financial value of the firm to invest in the firm's ability to perform contracts when it is efficient to do so.)

Consider the following example, which we will use throughout the remainder of this Article. Suppose that a corporation ("Firm") enters into a contract with another party ("Contract Partner") to supply the latter with software, and a subsequent update of the software, in exchange for \$100 paid immediately and another \$10 to be paid upon delivery of the software update. After supplying Contract Partner with the software and receiving \$100, Firm considers the extent to which it should invest in its ability to produce the software update and receive the additional \$10. The update would provide a \$50 benefit to Contract Partner, for a net benefit of \$40 (\$50 less \$10).

Suppose Firm is solvent. Contract Partner could recover full expectation damages of \$40 if Firm were to breach by failing to supply the software update. Because Firm would be required to compensate Contract Partner in full, Firm would bear all of the costs breach imposes on Contract Partner. Thus, to the extent Firm's managers are seeking to maximize the firm's financial value on behalf of financial claimholders, the managers have an incentive to perform the contract

34. See generally Richard Craswell, *Contract Remedies, Renegotiation, and the Theory of Efficient Breach*, 61 S. CAL. L. REV. 629, 636 (1988).

35. See, e.g., RICHARD POSNER, *ECONOMIC ANALYSIS OF THE LAW* 117-26 (4th ed. 1991); John H. Barton, *The Economic Basis of Damages for Breach of Contract*, 1 J. LEGAL STUD. 277 (1972); Steven Shavell, *Damage Measures for Breach of Contract*, 11 BELL J. ECON. 466, 478-79 (1980).

unless the benefit of breach to Firm exceeds \$40—that is, unless breach is efficient.³⁶

B. The Cost of Breach to an Insolvent Firm: “Ratable Damages”

As Section A explained, when a firm can be made to pay full damages for breach, managers obligated to maximize the firm’s value would not have an incentive to take steps that harm a contract partner more than they benefit the firm. As this section explains, however, an insolvent firm’s managers do not expect the firm to pay full damages when they have the firm breach a contract.

We consider two cases. In the first case, at the time the firm’s managers must make a contract investment or performance decision, the managers know with certainty that the firm will become bankrupt. In the second, at the time of decision, managers know that there is a positive probability (less than 100%) that the firm will become bankrupt. By “become bankrupt,” we mean that the firm cannot pay its debts in full and, as a result, the firm’s creditors will be paid less than the amount they are owed. Such a firm might file for bankruptcy under Chapter 7 (for liquidation) or Chapter 11 (for reorganization) of the Bankruptcy Code, enter an insolvency proceeding under state law, or engage in a voluntary workout or liquidation with creditors. For our purposes, the particular procedure used is not important. What matters is that the firm’s creditors cannot be paid in full. However, for ease of exposition, we will assume that if the firm becomes bankrupt, it will file under Chapter 11 of the Bankruptcy Code.

1. Expected Cost of Breach When Bankruptcy Is Certain

Let us begin with the simple case in which a firm’s managers know for certain that the firm will file for bankruptcy and that by the end of the bankruptcy proceeding the firm will not be able to pay in full all of the claims against it.

As in the previous examples, suppose that Firm enters into a contract to supply Contract Partner with software and, eventually, an update to that software. Contract Partner pays Firm \$100 for the software and promises to pay \$10 when the update is delivered. After supplying Contract Partner with the software (and receiving the \$100), but before discharging its obligation to supply the software update, Firm becomes insolvent. Firm then breaches the contract with

36. In Part III.C.2, we provide a more detailed numerical example illustrating this point.

Contract Partner by refusing to supply the update and files for bankruptcy.

Once Firm files for bankruptcy, any damage claim asserted by Contract Partner either before or after the filing would be considered an ordinary unsecured claim.³⁷ Holders of such unsecured claims have a right to receive, pro rata, any value that remains after secured claims and the claims of certain priority unsecured creditors have been satisfied.³⁸

The effect of these bankruptcy priority rules on the allocation of the firm's value is significant. Even in cases where a business debtor successfully reorganizes under Chapter 11,³⁹ the mean recovery by general unsecured creditors is typically only 20¢ to 30¢ on the dollar.⁴⁰ One of us has labeled the pro rata recovery of contract breach damages in bankruptcy the "ratable damages" rule.⁴¹

Therefore, when Firm's managers know for certain that Firm will file for bankruptcy, they do not expect to pay full damages for breach. For example, suppose that, as in the earlier examples, Contract Partner values the update called for by the contract, for which it must pay \$10, at \$50. Thus, Firm's failure to provide the update would inflict a loss of \$40 on Contract Partner. Contract Partner would then submit a damage claim of \$40. Suppose the payout rate for unsecured claims is 25%. Under such a payout rate, Contract Partner would be paid \$10 (25% of \$40). When managers are

37. See 11 U.S.C. §§ 365(g)(2)(B)(i), 502(g) (2000). For an explanation of why contract breach claims are usually unsecured, see *infra* Part III.D.1.

38. The U.S. Bankruptcy Code gives full priority (over ordinary unsecured claims) to specified unsecured claims, such as postbankruptcy administrative claims and certain wage and other compensation-related claims. § 507(a).

39. Following a successful Chapter 11 reorganization, the debtor firm continues operating as an ongoing enterprise. In exchange for their prebankruptcy claims, creditors typically receive some combination of cash, stock, and debt in the continuing business. In many cases, however, the attempted reorganization is unsuccessful, and the firm is liquidated piecemeal, either in Chapter 11 or after the case has been converted to Chapter 7.

40. See, e.g., Lynn M. LoPucki, *A General Theory of the Dynamics of the State Remedies/Bankruptcy System*, 1982 WIS. L. REV. 311, 311 (1982) (finding that average payout promised—but not necessarily paid—to general unsecured creditors in reorganization cases was about 32¢ per dollar). Even in successful Chapter 11 reorganizations of large, publicly traded corporations with relatively little secured debts, the average return to general unsecured creditors is less than 50¢ on the dollar. See 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, 142 (1990).

41. See Jesse M. Fried, *Executory Contracts and Performance Decisions in Bankruptcy*, 46 DUKE L.J. 517, 519 (1996).

considering whether to have Firm perform or breach the contract, they will therefore anticipate Firm paying only \$10 for breach.⁴²

2. Expected Cost of Breach When Bankruptcy Is Uncertain

Let us now consider the case in which an insolvent firm's managers are not certain that the firm will be forced to file for bankruptcy. Suppose, for example, that there is some possibility that the firm will financially recover and regain solvency before it is forced to file for bankruptcy. Suppose further that the firm is considering breaching a contract. If the firm breaches and then recovers financially, the firm must pay the damage claim in full. If Firm breaches and is then (for other reasons) forced to file for bankruptcy, however, the firm will not pay the breach damage claim in full. In that case, the firm's managers do not anticipate paying, on an expected value basis, full damages for breach.

To illustrate numerically, suppose again that if Firm breaches, Contract Partner will have a damage claim of \$40, and that if Firm enters bankruptcy, the payout rate for unsecured claims will be 25%. However, now suppose that there is a 20% probability that Firm will regain solvency and be able to pay the \$40 damage claim in full. Thus, there is only an 80% probability that Firm will be forced to file for bankruptcy. In that case, the expected cost of breach to Firm will be \$16 (20% of \$40 plus 80% of \$10). The expected cost of breach is \$6 more than when bankruptcy is certain, but still \$24 less than Contract Partner's actual damages.

C. Distortions Caused by FVM When a Firm Pays Ratable Damages

In Section B we saw that when a firm is insolvent, its managers do not expect the firm to pay full expectation damages for breaching a contract, but rather expect it to pay only partial damages. Thus, the insolvent firm and those holding claims for payment against the firm do not expect to bear the entire cost that breach imposes on the injured party.

As this section explains, because the firm does not have to bear all of the costs of breach, managers obligated to maximize the sum of the values of all financial claims against the firm might choose to underinvest in the firm's ability to perform its contract, or to breach a

42. Contract Partner will either be paid \$10 in cash at the end of the proceeding or will receive a combination of cash, debt, and/or equity with a value of \$10.

contract the firm could perform.⁴³ We consider each of these distortions in turn.

1. Underinvestment in Ability to Perform Contracts

We first consider the effect of an insolvent firm's failure to fully internalize the cost of breach on managers' investment decisions. As we explain below, when a firm does not expect to pay full damages for breach, and managers are obligated to maximize the firm's financial value, managers' investment decisions can be distorted. In particular, an insolvent firm's managers might underinvest in the firm's ability to perform its contracts if they know that, on an expected value basis, the firm will pay less than full damages should it be unable to perform the contracts and be forced to breach.

Continuing with our example, suppose a particular managerial decision will affect Firm's future ability to provide the software update to Contract Partner, and that update will provide Contract Partner with a benefit of \$50 (a net benefit of \$40, after taking into account the \$10 payment that Contract Partner must make to Firm). In particular, suppose that Firm is considering whether to lay off the computer engineers who had designed the software and who are now the ones best suited for producing the update required under the contract. The cost of retaining the engineering group is \$15. If Firm fires the engineering group, however, there is only a 30% chance that Firm can produce the update. In contrast, there is an 80% likelihood that Firm can produce the update if Firm retains the engineering group. For simplicity, assume that the engineering group would generate no value for Firm other than an increased likelihood that Firm can produce the software update. Assume further that Firm would incur no costs in creating the software update beyond the \$15 needed to retain the engineering group.⁴⁴

43. As noted in the Introduction, a "performance creditor" would include any party that has an "executory" (unperformed) contract with the firm, including a party that (1) owes performance to the firm and (2) is owed payment for that performance by the firm. If the insolvent firm (1) is owed performance under an executory contract and (2) has not been paid in full by the firm, the problem of underinvestment will be different. In this situation, managers seeking to maximize the firm's financial value may have an incentive to underinvest in the firm's ability to benefit from the other party's performance, rather than an incentive to underinvest in the firm's ability to perform. The problem of inefficient breach is essentially the same, except that the insolvent firm breaches by refusing to pay rather than by refusing to perform.

44. We assume that the parties know the value and cost of performance and that expectation damages reflect the injured party's actual losses (including litigation expenses). These assumptions, which are made for simplicity, are not necessary for the Article's analysis and conclusions. The problems identified by the Article would be less severe if judicially determined expectation damages far exceeded actual damages (say, by 100% or more). In that

From an efficiency perspective, it would be desirable for Firm to retain the engineering group. If Firm lays off the group, the total expected value associated with the update is \$15 (the product of a 30% likelihood of success and a \$50 benefit to Contract Partner). If Firm retains the group, it will incur a cost of \$15. However, if Firm retains the group, the total expected value associated with the update is \$40 (80% likelihood of success and a \$50 benefit to Contract Partner). The total expected value of retaining the engineering group is \$25 (or \$40 less \$15), \$10 more than if the engineering group is let go.

Now let us turn to consider Firm's economic incentives. Assume first that Firm is solvent and can be forced to pay full damages for breach. When Firm is solvent, managers anticipate that contract breach would force Firm to pay Contract Partner financial damages of \$40 (\$50 forgone benefit to Contract Partner, less \$10 avoided payment). If Firm pays \$15 and retains the engineering group, there is only a 20% likelihood that it will not be able to produce the update, and an 80% likelihood that the firm will produce the update and receive \$10. Here, the expected financial value associated with retaining the group is 80% of \$10 less 20% of \$40, all less \$15, for a total of -\$15.

If Firm fires the engineering group, it will save \$15 in labor costs. However, there is a 70% likelihood that Firm will breach and be forced to pay \$40 in damages and only a 30% chance that Firm will be able to perform and make \$10. The expected value associated with Firm firing the engineering group is therefore 30% of \$10 less 70% of \$40, which equals -\$25. Managers seeking to maximize Firm's financial value in accordance with the FVM approach thus have an incentive to retain the engineering group, the socially desirable outcome, when Firm can be made to pay full damages for breach.⁴⁵

Now consider what happens when Firm is insolvent and expects to file for bankruptcy. Suppose that managers know that Firm

case, even insolvent firms paying ratable damages would still expect to pay a substantial amount (relative to actual damages) upon breach.

However, it is widely believed that expectation damages in fact undercompensate the injured party. See, e.g., Melvin A. Eisenberg & Brett McDonnell, *Expectation Damages and the Theory of Overreliance*, HASTINGS L.J. (forthcoming 2003) (manuscript on file with author); Stewart Macaulay, *An Empirical View of Contract*, 1985 WIS. L. REV. 465, 469-470 (1985); George G. Triantis, *The Effects of Insolvency and Bankruptcy on Contract Performance and Adjustment*, 43 U. TORONTO L.J. 679, 687 (1993).

45. The alignment between private and social optimality in this example is not an artifact of the particular values used. It would be easy to show that when Firm can be made to pay full expectation damages for breach, managers who are required to maximize the expected value of payments to payment creditors and shareholders will have an incentive to keep the engineering group whenever it is efficient to do so. Similarly, the managers will have an incentive to lay off the engineering group whenever it is inefficient to retain the engineers.

will file for bankruptcy, and that the expected payout rate in bankruptcy is 25%.⁴⁶ In that case, the expected financial value associated with retaining the group is -\$9 (\$8, the expected revenues from delivery of the update (80% of \$10), less \$2, the expected damages for breach (the product of a 20% probability of breach and 25% of \$40), less \$15, the cost of retaining the group). The expected financial cost to Firm of firing the group is -\$4 (\$3, the expected revenues from delivery of the update (30% of \$10), less \$7, the expected damages from breach (70% of 25% of 40)). Thus, managers expecting to pay ratable damages of 25% and obligated to maximize the value of the sum of financial claims against the firm have an incentive to fire the engineering group, which would reduce total value.⁴⁷

2. Distorted Breach/Performance Decisions

As noted earlier, general principles of contract law require that a party breaching a contract pay expectation damages that would make the injured party as well off as it would have been had the contract were performed. When the firm is solvent, the expectation damages rule discourages breach of a value-creating contract by making the breaching party bear the entire cost imposed on the other party. Therefore, a solvent party will not have an incentive to breach when its gain from breach (the loss it avoids by not performing) is less than the cost imposed on the other party (the other party's forgone gain from performance)—that is, when performance increases the size

46. Alternatively, one could imagine that there is a 75% probability that Firm will enter bankruptcy, in which case the payout rate for unsecured claims will be 0%, and a 25% probability that Firm will regain solvency and pay any damage claim in full.

47. Cf. Triantis, *supra* note 44, at 686 (observing that insolvent firms have an incentive to engage in riskier methods of production than solvent firms). A number of contract scholars have argued that expectation damages may induce overreliance by promisees who, knowing that they will be compensated completely whether the promisor performs or breaches, have no incentive to take into account in their reliance decisions the possibility of promisor breach. See, e.g., Steven Shavell, *supra* note 35; Robert Cooter, *Unity in Tort, Contract, and Property: The Model of Precaution*, 73 CAL. L. REV. 1 (1985); Aaron S. Edlin, *Cadillac Contracts and Up-Front Payments: Efficient Investment Under Expectation Damages*, 12 J.L. ECON. & ORG. 98 (1996). To the extent such overreliance occurs, managers might have an incentive to overinvest in the firm's ability to perform its contracts. *Id.* at 689-90. As a result, there might be circumstances in which managers of an insolvent firm reduce somewhat their level of investment in the firm's ability to perform.

However, other contract scholars have argued that, as a practical matter, expectation damages are applied in such a way that overreliance is very unlikely. See Eisenberg & McDonnell, *supra* note 44. Even if such overreliance occurs, there are likely to be circumstances in which the incentive for underinvestment will be much stronger than the incentive for overinvestment. In those circumstances, the underinvestment problem will still arise.

of the total pie shared by both parties. As previously recognized, however, when firms are insolvent and therefore expect to pay only ratable damages for breach, managers might have an incentive to inefficiently breach contracts.⁴⁸

Returning to our example, suppose again that the net benefit to Contract Partner of the software update is \$40 (\$50 benefit less the \$10 payment to Firm). But now suppose that the cost to Firm of providing the software turns out to be \$30 (for a net cost of \$20 (\$30 less the \$10 payment from Contract Partner)). Unlike in the example involving investment in ability to perform, where paying \$15 to the engineers merely increased the likelihood that Firm could perform the contract from 30% to 80%, now suppose that the \$30 cost is both necessary and sufficient for Firm to produce the update. The cost of \$30 could represent the expenses Firm must incur to provide the update. Alternatively, the \$30 could represent the opportunity cost to Firm of providing the update to Contract Partner rather than using the same resources to create other products that Firm could sell for \$30. In either case, performance would be efficient because the net benefit to Contract Partner (\$40) exceeds the net cost to Firm (\$20).

Begin by assuming that Firm is solvent. If Firm breaches by refusing to update the software, Firm will neither incur any costs (before paying damages) nor receive the \$10 payment, and Contract Partner will have an expectation damages claim for \$40. Accordingly, Firm would be forced to pay \$40. If Firm performs, it will incur a net cost of \$20 (\$30 cost of production less the \$10 payment from Contract Partner). When the firm is solvent, managers owing a duty to maximize the financial value of the firm will not breach because the cost of breach (\$40) exceeds the net cost of performance (\$20).⁴⁹ This result is efficient.

However, suppose that the likelihood of bankruptcy is 100%, and that in bankruptcy, the payout rate for unsecured claims, including Contract Partner's breach claim, is expected to be 25%. If Firm's managers breach, Firm must pay just \$10 on the \$40 damages claim. Because breach benefits Firm by saving it from incurring a net expense of \$20, breaching would provide a \$10 (\$20 less \$10) net gain to Firm. Thus, FVM will obligate managers to breach even when

48. See Fried, *supra* note 41, at 529-33; Triantis, *supra* note 44, at 692-94.

49. As in the example involving managers' investment decision, the alignment between private and social optimality in the managers' breach decision when the firm can be made to pay full damages is not an artifact of the particular values used. It would be easy to show that when Firm can be made to pay full expectation damages for breach, managers required to maximize the expected value of payments to creditors and shareholders will have an incentive to perform the contract if, and only if, performance would create value.

performance would increase value. As the expected payout rate declines, the strength of the distortion increases.

The problem of inefficient breach under ratable damages is identical to the problem that arises from the treatment of pre-bankruptcy contracts in bankruptcy under § 365 of the Bankruptcy Code.⁵⁰ Under § 365, the debtor may choose, subject to court approval and various statutory restrictions, to “reject” (breach), perform, or assign a contract. The consequences of rejection are the same as if the firm had breached the contract prior to bankruptcy. That is, the firm must pay ratable damages. Furthermore, the duty of the trustee is to maximize the value available to pay those holding financial claims against the estate. Thus, just as there is an incentive for inefficient breach before bankruptcy under the FVM approach, there is an incentive for inefficient rejection in bankruptcy under the Bankruptcy Code.⁵¹

D. Potential Mechanisms for Reducing Distortions

As demonstrated in Section C, managers required to maximize the value of financial claims against the firm might find themselves obligated to underinvest in the firm's ability to perform its contracts and to inefficiently breach contracts that the firm could perform. The question remains whether parties to a contract can take steps to ensure that these distortions—and the resulting losses—do not actually arise. If these potential distortions can be eliminated at little cost, then the FVM approach, while not conceptually correct, is almost as good as the broader fiduciary duty that we propose.

This section considers two mechanisms that might reduce the frequency and severity of these distortions: (1) the use of security interests *ex ante* (at the time of contracting) to give contract partners' breach claims priority in the event of either party's insolvency; and (2) *ex post* renegotiation. As we explain below, these mechanisms might mitigate the problems that we identify as arising from FVM but are unlikely to substantially reduce them.

1. Security Interests

The distortions described in Section C can arise only to the extent managers believe that, on an expected value basis, the firm will not pay full damages for breach. However, the firm bears the costs associated with these distortions *ex ante*. To the extent Contract Party

50. 11 U.S.C. § 365 (2000).

51. See Fried, *supra* note 41, at 519-20.

anticipates that Firm might become insolvent and underinvest in contract performance or breach, Contract Party will insist on being compensated in the contract *ex ante* by a more favorable contract price. Thus, Firm has an incentive to structure the arrangement in a way that eliminates these distortions.

Firm therefore might consider giving Contract Partner a security interest in its assets to enable Contract Partner to enforce its contractual rights (and perhaps vice versa). For example, Contract Partner could take a security interest in some of Firm's assets. If Firm fails to perform, Contract Partner could seize those assets, sell them, and keep as much of the proceeds as is necessary to offset its damages. If Firm's obligation could be secured completely—that is, if Firm could offer Contract Partner collateral whose value equals or exceeds the amount of any damages claim—Firm would be forced to pay full damages for breach, even if Firm were insolvent. Accordingly, Firm would be forced to internalize all of the cost that breach imposes on Contract Partner.

For that reason, one might believe that if the problems of underinvestment and inefficient breach arising during insolvency were expected to be costly to the contracting parties, the parties simply would take sufficient security interests in each other's assets to eliminate these two problems. However, Firm and Contract Partner are generally unlikely to issue each other adequate security interests even if underinvestment and inefficient breach would impose a significant cost upon the insolvency of one of the parties. First, neither Firm nor Contract Partner is likely to have sufficient unencumbered assets to fully collateralize the dozens (or more) of (non-loan) contracts into which each may enter every year.⁵² Second, even if there were sufficient collateral at the time of contracting, the use of the security interests would be costly: the security interests would tie up the assets serving as collateral, restricting the granting party's ability to transfer, sell, or pledge the assets in order to enter into new projects or pay for current expenses.⁵³ And the costs associated with the use of the security interests would be incurred whether or not either party becomes insolvent. Thus, often it will not be worthwhile for the parties

52. In fact, the firm is unlikely to have enough collateral to secure all of its payment creditors.

53. See Lucian Arye Bebchuk & Jesse M. Fried, *The Uneasy Case for the Priority of Secured Claims in Bankruptcy*, 105 YALE L.J. 857, 878 (1996); F.H. Buckley, *The Bankruptcy Priority Puzzle*, 72 VA. L. REV. 1393, 1437-39 (1986); George G. Triantis, *Secured Debt Under Conditions of Imperfect Information*, 21 J. LEGAL STUD. 225, 247-48 (1992). There would also be transaction expenses associated with creating and maintaining a valid security interest. See Bebchuk & Fried, *supra*, at 877-78.

to fully or even partially secure each other's obligation even if collateral is available.⁵⁴ The apparently infrequent use of security interests to secure performance of non-loan contracts is therefore not surprising.⁵⁵

2. Renegotiation

Even if contracting parties do not use security interests to secure each other's future performance, they are free to renegotiate the terms of their deal *ex post*. They will have an incentive to do so if such renegotiation could, by avoiding the efficiency losses associated with underinvestment and inefficient breach, make both parties better off.

We begin by examining the likelihood that renegotiation will solve the problem of inefficient breach and then turn to consider renegotiation's ability to solve the problem of underinvestment. As we explain, renegotiation might reduce somewhat the frequency of inefficient breach but is unlikely to eliminate it, and it is likely to have

54. For example, suppose that the probability of one of the firms becoming insolvent during the contract period is 5%. In that case, the parties will not find it worthwhile to use security interests unless the cost to the two parties of using security interests is less than 5% of the cost of the distortions that are expected to arise if one of the firms becomes insolvent. The expected cost of the distortions would be 5% of D , where D is the expected cost of the distortion, given that one of the firms has become insolvent. The parties would be willing to spend no more than 5% of D to eliminate the distortion.

55. One might consider the possibility of statutorily providing prebankruptcy unsecured breach claims higher priority in bankruptcy and under state debtor-creditor law. *Cf.* Triantis, *supra* note 44, at 696-99 (suggesting that damage claims arising from rejection of contracts *in* bankruptcy be given priority in order to avoid inefficient rejection in bankruptcy). For example, unsecured breach claims arising before bankruptcy could be given priority in bankruptcy over other unsecured claims. Certain unsecured claims—such as for unpaid wages to employees and back taxes—are already given priority over other unsecured claims. *See* 11 U.S.C. § 507 (2000). In principle, prebankruptcy breach claims could be added to the current list of priority unsecured claims. To the extent that priority could be provided statutorily to contract breach claims—under both bankruptcy and state insolvency law—it would have an effect equivalent to securing all of the firm's contract claims with a security interest in the firm's assets, with potentially lower transaction costs.

Even if such statutorily provided priority were desirable, however, it is unlikely to solve completely the problems identified in this Article. Just as there is unlikely to be enough collateral to secure all of a firm's performance obligations at the time it incurs those obligations, there might well not be sufficient assets in bankruptcy or in a state insolvency proceeding to pay all prebankruptcy breach damage claims in full. To the extent there are insufficient assets to pay all of these claims in full, FVM would continue to give rise to distortions. *Cf.* Fried, *supra* note 41, at 546-47 (offering a similar criticism of Triantis's suggestion that damage claims arising from rejection in bankruptcy be given priority). In any event, such statutory priority would require significant revisions of the Bankruptcy Code and state insolvency laws. Thus, even if statutory priority for prebankruptcy contract breach claims could completely solve the problems we have identified, the distortions created by FVM would continue to arise until such priority was created.

even less of an effect on the problem of underinvestment in ability to perform.

a. Renegotiation and Inefficient Breach

As is by now a familiar point in the contracts literature, both parties to a value-creating contract that otherwise might be breached inefficiently have an incentive to renegotiate and perform the contract because the surplus created by performance can be shared in such a way as to make both parties better off than under breach.⁵⁶ However, it is recognized that whether renegotiation occurs (and if it occurs, whether it is successful) will depend in part on the transaction costs associated with renegotiation, including those arising from the parties' incentive to engage in strategic behavior.⁵⁷ Renegotiation is not likely to substantially mitigate the problems of inefficient breach and insufficient investment in the firm's ability to perform.

Even under normal conditions—when both parties are solvent—transaction costs and strategic behavior by the parties can sometimes make successful renegotiation very difficult.⁵⁸ When one party is insolvent, renegotiating is unlikely to become any easier. Indeed, the failure of thousands of firms to negotiate workouts with their creditors in order to avoid a costly bankruptcy proceeding indicates that impediments to bargaining in the vicinity of insolvency can be substantial.⁵⁹

One reason why insolvency might exacerbate the difficulty of renegotiating with performance creditors is that the need to conserve cash or stem losses might require insolvent firms to decide the disposition of numerous contracts, many of them interconnected, within a short period of time. Time constraints might make it impossible for an insolvent firm to renegotiate successfully with multiple, interdependent contract partners.

For example, suppose that the software sold by Firm to Contract Partner in our earlier examples is instead sold to ten licensees, each of which is contractually entitled to the update. Under

56. Craswell, *supra* note 34, at 638-40.

57. *Id.* at 638-39; Charles J. Goetz & Robert E. Scott, *The Mitigation Principle: Towards a General Theory of Contractual Obligation*, 69 VA. L. REV. 967, 982-83 (1983).

58. Goetz & Scott, *supra* note 57, at 982-83.

59. If an insolvent firm could easily renegotiate with its creditors, the problem of excessive risk taking would not arise under the SVM approach because shareholders and creditors with financial claims against the firm would renegotiate the terms of their arrangements so that all of the parties could be made better off by a higher-value, lower-risk project. Thus, if renegotiation were a panacea, there would be no efficiency rationale for courts shifting managers' fiduciary duty to include any creditors—payment or performance—when the firm becomes insolvent.

the terms of the licenses, each licensee must pay \$10 for the update. The benefit to each licensee of the update is \$50, so the net benefit to each licensee of getting the update is \$40 (for a total of \$400). Suppose it will cost the Firm \$300 to produce the update, for which it will receive \$10 from each of the ten licensees (for a total of \$100).

Suppose again that if Firm breaches, it will be required to pay damages at 25% of their face amount for a total of \$100. Firm might consider asking each licensee for an additional payment of \$25 each, bringing the total each pays to \$35, in exchange for the update. Such an arrangement would make everyone better off than if Firm breaches: instead of paying \$100 in damages (25% of \$400), Firm would make a \$50 profit. (It would invest \$300 in producing the update and receive payments totaling \$350 from the licensees.) Instead of recovering \$100 in damages, the licensees collectively would pay \$350 for software worth \$500 to them, and thus collectively enjoy a (net) benefit of \$150.

However, bargaining with ten licensees to get them each to pay \$25 extra would take time—more time than if Firm were just negotiating with (a single) Contract Partner. In insolvency, Firm would face greater time pressures because of the need to conserve cash and reduce costs, which would greatly reduce the likelihood of such negotiations ever taking place.

Even if negotiations begin with each of the licensees, there is an obvious holdout problem. Once the update is created, the marginal cost of supplying a copy to another licensee would be zero, and Firm would agree to sell such a copy to a licensee for the original contract price of \$10. Each licensee therefore has an incentive to refuse to pay an extra \$25 for the update while hoping that a sufficient number of the remaining nine licensees agree to pay an extra \$25 each so that it becomes worthwhile for Firm to produce the update. The situation would be even worse if—as is often the case—the licensees operate in different geographical regions, making face-to-face meetings between Firm and the licensees and coordination among the licensees more difficult. In short, even if renegotiation can prevent inefficient breach in some cases, in other situations it is likely to be ineffective.

b. Renegotiation and Underinvestment

Even if renegotiation could substantially reduce the incidence of inefficient breach, it is likely to have a much smaller impact on the problem of underinvestment. The reason is that it will be more difficult for the insolvent party to convince the other party to accept worse terms in exchange for *the promise* of optimal investment than to

accept worse terms in exchange for performance. We briefly expand on this claim using our example of insolvent Firm and Contract Partner.

Start with the scenario in which insolvent Firm and Contract Partner bargain over performance of the contract rather than over Firm's investment in its ability to perform the contract. A necessary condition for successful renegotiation is that Firm must convince Contract Partner that the latter is better off agreeing to terms more favorable to Firm than insisting on the original provisions of the contract. Thus, Firm must convince Contract Partner that if the terms are not adjusted, (1) Firm will breach and (2) as a result, Contract Partner will receive less than the net benefit it would enjoy from performance under the renegotiated terms.⁶⁰ Of course, this is easier said than done. And meeting this condition will not be sufficient for the renegotiation to be successful: the parties still might haggle over the terms, in the hope of extracting a larger portion of the surplus. However, unless Firm can convince Contract Partner that (1) and (2) are true, the renegotiation surely will fail.

Now consider renegotiation over Firm's investment in its ability to perform. Here, Firm must convince Contract Partner that (1) if the terms are adjusted, Firm will invest optimally in its ability to perform the contract; (2) if the terms are not adjusted, Firm will not invest optimally; and (3) if Firm does not invest optimally, Contract Partner will be worse off, on an expected value basis, than if the terms were adjusted and Firm invested optimally.

It is easy to see that, however difficult it may be to renegotiate over performance, it would be much more difficult to convince Contract Partner to adjust the terms of the contract in favor of Firm in exchange for Firm's promising to invest optimally in its ability to perform the contract. To begin with, Firm must convince Contract Partner that if the latter agrees to worse terms, Firm will optimally invest in its ability to perform the contract. However, depending on the parameters, Firm might have an incentive to continue to underinvest even after extracting a concession from Contract Partner. The level of investment cannot readily be observed and verified by Contract Partner or a third party. Furthermore, even if the level of investment could readily be observed and verified, Firm's commitment to make certain investments could not easily be enforced because Firm is insolvent. There is no similar requirement in bargaining over performance.

60. Firm does not need to convince Contract Partner that, if the latter accepts the terms, Firm will perform the contract, unless acceptance of the new terms reduces the size of Contract Partner's damage claim in the event of Firm's breach.

In both types of renegotiation, Firm must convince Contract Party that it will take a certain step—breach or fail to invest optimally—if the terms are not readjusted. Firm can convince Contract Partner that it will breach the contract if the terms are not readjusted, simply by announcing its intention to do so. The announcement of breach is credible because it gives Contract Partner the right to sue for breach and/or terminate the contract, and thus imposes a potentially high cost on Firm. Convincing Contract Partner that Firm will not invest optimally is much more difficult; such a statement is not credible because it does not impose any cost on Firm.

Because it imposes no cost on Firm, Firm's managers have an incentive to make the threat to underinvest whether or not they plan to follow through on it in order to try to extract better terms from Contract Party. For these reasons, we believe that the obstacles to renegotiation over investment are likely to be even greater than the stumbling blocks to renegotiation over performance, and thus that renegotiation is unlikely to eliminate the investment distortion that arises under the FVM approach.

IV. THE DESIRABLE APPROACH: MAXIMIZING THE TOTAL VALUE OF ALL CLAIMS AGAINST THE FIRM

In Part III, we saw that the FVM approach favored by commentators is not the conceptually correct approach to the fiduciary duty of an insolvent firm's managers because it might cause those managers to make contract investment and performance decisions that are not efficient. The purpose of this part is to put forward and describe the conceptually correct approach to managers' fiduciary duty when the firm is insolvent: to require managers to maximize the value of the sum of all claims—both performance and financial—against the firm. Section A sets out this approach and shows that such an approach would (in principle) eliminate the identified distortions. Section B then explains how such a duty could make shareholders better off *ex ante*.

A. Description of the Approach

In Part III we showed that when the firm is insolvent, managers seeking to maximize the financial value of the firm might underinvest in the firm's ability to perform its contractual obligations and to breach inefficiently contracts the firm can perform. The problem is that by obligating managers to maximize the value of the sum of financial claims against the firm without regard to the effect of

their decision on the value of performance claims against the firm, FVM encourages managers to inefficiently transfer value from performance creditors to those holding financial claims against the firm.

Our analysis indicates that the correct approach from an efficiency perspective is to have managers maximize the sum of the values of all claims, both financial and performance, against the firm. Equivalently, managers should maximize the sum of the financial and performance values of the firm.

We illustrate the difference between our proposed approach and FVM using a simple example: Suppose that the only decision an insolvent firm's managers must make is whether to breach or perform a contract that would provide performance value to the firm's contract partner. Consider first the case in which performance would increase the financial value of the firm. In such a case, under both the FVM approach and our proposed approach, the firm's managers should perform the contract. Next, consider the situation in which performance would reduce the financial value of the firm by more than the value it would provide the firm's contract partner. Again, the FVM approach and our proposed approach would yield the same result: managers should not perform the contract, even though breach would hurt the performance creditor (which does not receive full compensation). Finally, consider the case in which performance would reduce the financial value of the firm but provide a greater amount of performance value to the other party. In that case, the prescriptions of the FVM approach and our approach would diverge. Under FVM, managers would be obligated to breach the contract. Under our approach, managers would be obligated to perform the contract, even though performance would reduce the financial value of the firm. Put differently, when the firm is insolvent, managers' fiduciary duty would require them to perform the contract unless breach would be efficient.

It is important to emphasize that the approach we advocate would apply after fiduciary duties have shifted to include the firm's creditors, but before the firm has entered bankruptcy. Once the firm enters bankruptcy, the managers' decisions—including their decisions to perform, reject, or assign prebankruptcy contracts—are governed by the Bankruptcy Code, which supersedes corporate law whenever the two are inconsistent.⁶¹

61. For a description of the treatment of prebankruptcy contracts in bankruptcy, see *supra* note 55.

B. The Effect on Shareholders

Requiring managers of an insolvent firm to consider the effect of their decisions on the firm's performance creditors would tend to make shareholders of these firms worse off *ex post* than they would be under the FVM approach. Shareholders would be worse off because their fiduciary protection is further "diluted": managers would be obligated to treat as on par with shareholders not only the firm's payment creditors but also the firm's performance creditors.

Under our proposed approach, managers would be prohibited from taking steps that transfer value to shareholders (and payment creditors) from a firm's contract partner unless the benefit to the firm exceeds the loss to the contract partner. In addition, managers might be required to take steps that transfer value from shareholders (and payment creditors) to the firm's performance creditors whenever the gain to performance creditors exceeds the loss to shareholders and payment creditors.

One therefore might object to extending fiduciary protection to the contract partners of an insolvent firm on the ground that such a step is inconsistent with the notion of shareholder primacy. However, it is already well established that managers owe, and should owe, a fiduciary duty to payment creditors when the firm is insolvent. Extending this duty to include performance creditors is no more inconsistent with the notion of shareholder primacy than is the duty already extended to payment creditors.

In addition, and more importantly, if managers were to take performance creditors into account should the firm become insolvent, shareholders would benefit *ex ante*. To be sure, managers would be prohibited from inefficiently transferring value from performance creditors to shareholders and payment creditors *ex post*.⁶² But to the extent eliminating this distortion increases the profits (or reduces the losses) of performance creditors, performance creditors would provide the firm with more favorable terms when entering into contracts with the firm. The more favorable terms would, in turn, benefit the firm's residual claimants, the shareholders. And the benefit from improved terms that the shareholders capture *ex ante* should exceed (on an expectation basis) the amount captured by shareholders of the insolvent firms *ex post* under FVM.

Finally, it is important to keep in mind that firms are more likely to enter into contracts with a firm that later becomes insolvent

62. *Cf.* Lin, *supra* note 6, at 1498 (making the analogous point about the *ex ante* benefits to shareholders of extending managers' fiduciary duty to creditors holding financial claims).

than they are likely to become insolvent themselves. As a result, shareholders of any given firm are more likely to gain *ex post* under our approach (relative to FVM) than they are likely to lose.

V. CONCLUSION

There is an emerging consensus among corporate law scholars that, from an efficiency perspective, an insolvent firm's managers should be required not to maximize shareholder value but rather the value of the sum of the values of all financial claims against the firm—both those held by shareholders and those held by creditors. This Article has pointed out an unrecognized flaw with this financial value maximization approach that may cause managers to act inefficiently.

The Article has shown that the FVM approach fails to recognize that a firm is likely to have two types of creditors: (1) “payment creditors”—parties owed cash by the firm, which have a financial claim against the firm; and (2) “performance creditors”—parties owed contractual performance, which have claims for performance against the firm. The FVM approach requires managers to take into account the effect of their actions on one type of creditor—payment creditors—but to ignore the effect of their actions on the other—performance creditors. This in turn might cause managers to take steps that hurt performance creditors more than they benefit those holding financial claims against the firm—payment creditors and equityholders.

We have proposed, as an alternative to FVM, that managers of an insolvent firm have a fiduciary duty to maximize the sum of the values of claims—both financial and performance—against the firm. Finally, we have explained how such a duty would actually benefit shareholders in the long run by reducing the cost to firms of entering into contracts. We hope that this Article will contribute to a better understanding of the proper scope of managers' fiduciary duty upon a firm's insolvency.