

BANKRUPTCY FIRE SALES

Lynn M. LoPucki*
Joseph W. Doherty**

For more than two decades, scholars working from an economic perspective have criticized the bankruptcy reorganization process and sought to replace it with market mechanisms. In 2002, Professors Douglas G. Baird and Robert K. Rasmussen asserted in The End of Bankruptcy that improvements in the market for large public companies had rendered reorganization obsolete. Going concern value could be captured through sale. This Article reports the results of an empirical study comparing the recoveries in bankruptcy sales of large public companies in the period 2000 through 2004 with the recoveries in bankruptcy reorganizations during the same period. Controlling for company values measured at case commencement and operating profits, the recoveries in reorganization cases are more than double the recoveries from going concern sales. The authors attribute the low recoveries in sale cases to continuing market illiquidity, managers' and professional advisors' conflicts of interest, and the corruption of the bankruptcy process by competition among bankruptcy courts for large public company cases. As a result, debtors agree to sell at low prices, the auctions are rushed, and in most cases only a single bidder participates. The authors also report other sale characteristics. Bankruptcy recoveries are higher when debt capacity in the debtor's industry is lower—the opposite of the effect predicted by Professors Andrei Shleifer & Robert W. Vishny in their landmark article in 1992. Cases in which debtors sell their companies as going concerns—often in the first few months—on average remain pending significantly longer than reorganization cases. Bankruptcy recoveries are high in years when merger and acquisition activity is high for reasons other than high stock prices. Lastly, the number and proportion of bankruptcy sales have sharply declined in the past two years, suggesting that the sale era may be ending.

* Security Pacific Bank Professor of Law, UCLA School of Law. The author can be contacted at lopucki@law.ucla.edu.

** Director, Empirical Research Group, UCLA School of Law; Ph.D., UCLA. The author can be contacted at doherty@law.ucla.edu. We thank Ken Klee and Grant Newton for advice on which rocks to look under; Douglas Baird, Dan Bussel, Jonathan Cohen, John Pottow, Bob Rasmussen, Elizabeth Warren, and William H. Widen for comments on earlier drafts; and Arvin Abraham, Shahab Asghar, Mike Campion, Douglas Flahut, Anil Kalia, and Brett Kaplan for assistance with research.

TABLE OF CONTENTS

INTRODUCTION	2
I. THE SALE VERSUS REORGANIZATION DEBATE	5
A. <i>Reorganization</i>	6
B. <i>The Going-Concern Sale Alternative</i>	8
C. <i>The Market for Large Public Companies</i>	11
D. <i>Prior Empirical Evidence</i>	15
II. METHODOLOGY	15
A. <i>Sample Selection</i>	15
B. <i>Research Design</i>	19
III. FINDINGS	22
A. <i>The Regression Models</i>	22
1. <i>The Choice between Sale and Reorganization</i>	24
2. <i>Timing</i>	25
3. <i>Stock Market and Merger Market Conditions</i>	27
4. <i>Industry Distress</i>	28
B. <i>Negative Findings</i>	30
1. <i>Asserted Nonviability Did Not Correlate</i> <i>with Low-Sale Recoveries</i>	30
2. <i>Larger Firms Did Not Have Higher</i> <i>Recovery Ratios</i>	31
IV. EXPLAINING THE MARKET'S FAILURE	31
A. <i>Why Do Companies Sell Rather Than Reorganize?</i>	32
1. <i>Managers</i>	32
2. <i>Financial Advisors</i>	34
B. <i>Why Don't Creditors Object?</i>	37
C. <i>Why Do Courts Approve Inadequate-Price Sales?</i>	39
D. <i>If Sales Are Bargains, Why Don't Bids Go Higher?</i>	41
E. <i>Have Sales Been Increasing?</i>	42
CONCLUSION	44
APPENDICES	46

INTRODUCTION

[T]he best way to determine [bankrupt company] value is exposure to a market.

—United States Supreme Court (1999)¹

Q. So the 20 million dollars in [estimated collectible] receivables is included in the assets that the purchaser is purchasing for 15.8 million dollars?

A. That's correct.

—Hearing on the sale of Network Plus Corporation
as a going concern for 4% of book value²

1. Bank of Am. Nat'l Trust & Sav. Ass'n v. 203 N. LaSalle St. P'ship, 526 U.S. 434, 457 (1999).

Bankruptcy reorganization provides a remedy for capital market inadequacy. It protects from dismemberment firms whose value cannot be realized through sale or preserved by soliciting investment in capital markets. Law and economics scholars—strong believers in the marketplace—are skeptical of the need for reorganization. They either deny the market’s inadequacy or seek to design substitute markets. For decades, they have debated how best to end reorganization.

In 2002, two leading scholars, Douglas Baird and Robert Rasmussen, suddenly declared the mission accomplished. In the opening sentence of an article titled *The End of Bankruptcy*, Baird and Rasmussen claimed that “[c]orporate reorganizations have all but disappeared.”³ They argued as follows:

In the nineteenth century, no single group of investors could amass the capital needed to buy large firms, and the market for small ones was undeveloped. Today, both small and large firms can be sold as going concerns, inside of bankruptcy and out. The ability to sell entire firms and divisions eliminates the need for a collective forum in which the different players must come to an agreement about what should happen to the assets. That decision can be left to the new owners.⁴

Baird and Rasmussen concluded that “[t]he days when reorganization law promised substantial benefits are gone.”⁵ Later, Baird expanded on the claim, writing that “[t]oday, creditors of insolvent businesses . . . no longer need a substitute for a market sale. Instead of providing a substitute for a market sale, chapter 11 now serves as the forum where such sales are conducted.”⁶

In this Article, we present empirical evidence that reorganization remains essential for dealing with distressed large public companies. We compared the prices for which thirty large public companies were sold with the values of thirty similar companies that were reorganized in the period 2000 through 2004. We found that companies sold for an average of 35% of book value but reorganized for an average fresh-start value of 80% of book value and an average market capitalization value—based on post-reorganization stock

2. Transcript of Hearing Before the Honorable Peter J. Walsh United States Bankruptcy Judge at 71, *In re Network Plus Corporation*, No. 02-10341, (Bankr. D. Del. Apr. 25, 2002). The witness testified that “the 55 million dollar receivable is an included asset so the purchaser is taking over those receivables, and it’s our best estimate that 20 million dollars will be collected by the purchaser.” *Id.*

3. Douglas G. Baird & Robert K. Rasmussen, *The End of Bankruptcy*, 55 STAN. L. REV. 751, 751 (2002) [hereinafter Baird & Rasmussen, *End of Bankruptcy*]. In a later essay they clarified that they claim only the disappearance of “traditional reorganizations.” Douglas G. Baird & Robert K. Rasmussen, *Chapter 11 at Twilight*, 56 STAN. L. REV. 673, 674 (2003) [hereinafter Baird & Rasmussen, *Chapter 11 at Twilight*] (“As we claimed in *The End of Bankruptcy*, traditional reorganizations have largely disappeared.”).

4. Baird & Rasmussen, *End of Bankruptcy*, *supra* note 3, at 756.

5. *Id.* at 789.

6. Douglas G. Baird, *The New Face of Chapter 11*, 12 AM. BANKR. INST. L. REV. 69, 71 (2004).

trading—of 91% of book value.⁷ Even controlling for the differences in the pre-filing earnings of the two sets of companies, sale yielded less than half as much value as reorganization. These results suggest that creditors and shareholders can more than double their recoveries by reorganizing large public companies instead of selling them.

Part I of this Article examines the reorganization process and explains why the market is an inadequate substitute. It then briefly describes law-and-economics scholars' efforts to fashion market substitutes for bankruptcy reorganization and elaborates on Baird and Rasmussen's claim that the market has in fact replaced reorganization.

Part II describes the methodology employed in our study, and Part III presents our findings. Those findings include a regression model that shows the choice between reorganization and sale to be a principal determinant of the value realized in the bankruptcy of a large public company. The companies sold had significantly lower earnings than the companies reorganized, but even controlling for that difference, sales produced much less value than reorganizations.

Part IV attempts to explain the market failure we document. The obvious problem is insufficient market liquidity. That problem, we argue, is compounded by managers' personal incentives to sell their companies for inadequate prices. In addition, the investment banks that advise those managers have interests of their own that may conflict with price maximization. Unsecured creditors—the principal losers when distressed companies are sold—sometimes object to the sales. But bankruptcy institutions discourage the objectors and impair their pursuit.

Bankruptcy law charges bankruptcy judges with the responsibility to prevent inadequate-price sales. But the judges are powerless to do so, because a historical accident placed the bankruptcy courts in competition for large public company bankruptcies. That accident gave the parties who select venue for bankruptcy cases—the debtor's managers, debtor-in-possession (“DIP”) lenders, and professional advisors—the right to choose their bankruptcy courts. These parties prefer courts that will not scrutinize the adequacy of the prices at which they have chosen to sell, and there is no shortage of bankruptcy courts willing to bend the law as necessary to accommodate them. Appellate remedies are rarely available to challenge sale prices.⁸

In nearly every instance, the sales we examined were “market-tested” by public auction. But those auctions failed to prevent inadequate-price sales. In most cases, only a single bidder appeared. We interpret the data as show-

7. These percentages are calculated using the raw values of the underlying variables. Consequently they are skewed positive. The resulting mean values are systematically higher than the medians. The natural logs of the percentages (the ratios) are used in the regression analysis in order to compensate for the skew and to provide more reliable estimates. The corresponding values of these percentages, using the logged variables and not controlling for Earnings Before Interest, Taxes, Depreciation, and Amortization (“EBITDA”), are 26% for sale value, 67% for fresh start value, and 76% for market capitalization value.

8. See *infra* note 163.

ing that the high costs of evaluating companies, combined with the low probability of success for competing bidders, discourages competitive bids.

Part IV also presents new empirical evidence regarding Baird and Rasmussen's claim that going-concern sales have in fact replaced reorganizations. Although the numbers and proportions of bankruptcy going-concern sales had been increasing at the time Baird and Rasmussen first made their claims in 2002, those numbers and proportions have decreased sharply in the past two years.

I. THE SALE VERSUS REORGANIZATION DEBATE

Bankruptcy offers three alternatives for addressing the problems of a large public company in financial distress. The debtor may reorganize the business, sell it as a going concern, or close the business and sell the assets piecemeal. Scholars and policymakers are in agreement that piecemeal sales are the least desirable alternative because they provide the lowest values.⁹ Until recently, scholars and policymakers were also in agreement that markets were inadequate to support going-concern sales of bankrupt large public companies, leaving reorganization as the only practical alternative.¹⁰

In the mid-1980s, however, Douglas Baird and Thomas Jackson each challenged that view. Baird merely raised the issue of whether going-concern sales were capable of replacing reorganization.¹¹ Jackson flatly asserted that they were.¹²

9. Baird & Rasmussen, *Chapter 11 at Twilight*, *supra* note 3, at 69 ("Bankruptcy scholars for years have viewed the choices facing a corporation as either to reorganize consensually in order to preserve going-concern value or have its assets sold piece by piece for a fraction of their value."). The legislative history of the current Bankruptcy Code takes an equally dismal view of piecemeal liquidation:

The purpose of a business reorganization case, unlike a liquidation case, is to restructure a business's finances so that it may continue to operate, provide its employees with jobs, pay its creditors, and produce a return for its stockholders. The premise of a business reorganization is that assets that are used for production in the industry for which they were designed are more valuable than those same assets sold for scrap.

H.R. REP. NO. 95-595, at 220 (1977), *as reprinted in* 1978 U.S.C.C.A.N. 5963, 6179.

10. Until recently, going-concern sales of companies were not even considered among the alternatives. *See, e.g., supra* note 9.

11. Douglas G. Baird, *The Uneasy Case for Corporate Reorganizations*, 15 J. LEGAL STUD. 127, 128 (1986) [hereinafter Baird, *Uneasy Case*] ("In this paper I ask whether corporate reorganizations should exist at all."). Baird explains as follows:

The question is . . . whether [third parties] are so apt to undervalue a firm's value or so apt to find the valuation process itself costly that they are likely to be unwilling to pay an amount that is at least equal to the value of the firm in the hands of the existing investors.

Id. at 136; *see also* Douglas G. Baird, *Revisiting Auctions in Chapter 11*, 36 J.L. & ECON. 633, 653 (1993) [hereinafter Baird, *Revisiting Auctions*] ("The case for mandatory auctions is hard to make precisely because it depends crucially on a new player entering the picture who does not exist now.").

12. THOMAS H. JACKSON, *THE LOGIC AND LIMITS OF BANKRUPTCY LAW* 223 (1986) ("There is no reason why chapter 7 could not be used as the vehicle to sell the firm as a going concern in the same way that companies go public.").

To be effective, a sale or reorganization must, directly or indirectly, solve three problems of the bankrupt business: lack of operating profits, excessive debt, and illiquidity. A business lacks operating profit when its revenues are insufficient to cover the noninterest expenses of continued operation. Neither sale nor reorganization can directly affect a company's lack of operating profits. But if a debtor could either reduce its debt burden or ease its illiquidity, that might free up resources to address operating profits.

The next Sections explain how reorganization and sale can each solve the problems of excessive debt and illiquidity. The principal difference between the two methods is that in a reorganization, a judge, rather than the market, determines the debtor's valuation. Law and economics scholars generally prefer sales because they consider market valuations more accurate.

A. Reorganization

Reorganization addresses the problem of excessive debt by reducing the amount that the debtor owes. To illustrate, assume that a business with future annual revenues of ten faces future interest expense of eight and other expenses of four. With total annual expenses of twelve, this business will suffer a loss of two each year. Unless something changes, the business will eventually fail as unpaid debts accumulate and unpaid creditors seek legal remedies.

If, however, reorganization reduces the debt of this business by half, interest expense also drops by half—to four. With revenues of ten, interest expense of four, and other expenses of four, the business will have profits of two and can operate indefinitely. That is the essence of reorganization.

To reduce the rights of creditors while leaving the rights of shareholders intact would violate the basic legal principle of “absolute priority.”¹³ That principle holds that a debtor must provide for full payment to creditors before making any payment at all to shareholders.¹⁴ Much ink has been spilled explaining the importance of absolute priority and the adverse consequences of deviating from it.¹⁵

13. *E.g.*, *N. Pac. Ry. Co. v. Boyd*, 228 U.S. 482, 504 (1913).

14. The absolute priority rule is reflected in state statutes prohibiting the payment of dividends to shareholders that would render the company unable to pay the full amount of its obligations to shareholders. *See, e.g.*, MODEL BUS. CORP. ACT §6.40 (2005) (“No distribution may be made if, after giving it effect: (1) the corporation would not be able to pay its debts as they become due in the usual course of business; or (2) the corporation's total assets would be less than . . . its total liabilities . . .”).

15. Douglas G. Baird & Thomas H. Jackson, *Bargaining After the Fall and the Contours of the Absolute Priority Rule*, 55 U. CHI. L. REV. 738, 740 (1988) (considering whether adverse consequences flow from allowing a creditor entitled to payment under the absolute priority rule to give part of its recovery to one subordinate party with no entitlement while freezing out a more senior party with no entitlement); Bruce A. Markell, *Owners, Auctions, and Absolute Priority in Bankruptcy Reorganizations*, 44 STAN. L. REV. 69 (1991) (considering whether the new value exception is harmful to the absolute priority rule's purposes). *But see* Douglas G. Baird & Donald S. Bernstein, *Absolute Priority, Valuation Uncertainty, and the Reorganization Bargain*, 115 YALE L.J. 1930, 1935 (2006) (arguing that difficulty of appraisal, not lack of commitment to the absolute priority rule, is the cause of many if not most deviations from absolute priority).

Reorganization law enforces the absolute priority rule by requiring shareholders to surrender to creditors that portion of the shareholders' ownership necessary to compensate the creditors for the debt reduction. If the company's debts exceed the total value of its assets, the absolute priority rule requires the surrender of all shares.¹⁶ The creditors become the company's owners. This process is referred to as the conversion of debt to equity. Conversion of debt to equity has long been the principal technique for the reorganization of large public companies.

Such conversions require valuations. To see why, reconsider the debtor with revenues of ten, interest expense of eight, and other expenses of four. Assume additionally that the amount this debtor owes is eighty and that, in reorganization, the debt is cancelled entirely. Interest expense drops to zero, and the company has profits of six each period. The company is saved, but the shareholders must compensate the creditors by giving them stock worth eighty.

To determine how much stock has a worth of 80, reorganization must value the shares.¹⁷ In this example, a determination that the future earnings of 6 per year have a present value of 120 would also determine that the company's shares have a total value of 120. Surrendering two-thirds of the shares would provide creditors with value of 80 and make them whole.

Scholars in law, finance, and economics have long debated the best way to determine a distressed company's value. Standard appraisal methods that fix the value as some multiple of past earnings fail because distressed companies' past earnings are typically negative and not fairly indicative of future earnings. Stock and bond prices are unreliable because the companies' situations change rapidly, information flows are generally inadequate, and trading is often suspended entirely. The most common method of valuation employed in reorganization cases is to "discount[] future cash flows for the reconstituted business that will emerge from Chapter 11 . . . at rates reflecting the business and financial risks involved."¹⁸

16. This aspect of the absolute priority rule is expressed in 11 U.S.C. § 1129(b)(2)(B):

(2) [T]he condition that a plan be fair and equitable . . . includes the following requirements:

(B) With respect to a class of unsecured claims—

(i) the plan provides that each holder of a claim of such class receive or retain on account of such claim property of a value, as of the effective date of the plan, equal to the allowed amount of such claim; or

(ii) the holder of any claim or interest that is junior to the claims of such class will not receive or retain under the plan on account of such junior claim or interest any property

11 U.S.C.A. § 1129(b)(2)(B) (West 2004 & Supp. 2007).

17. *E.g.*, Baird & Bernstein, *supra* note 15, at 1935 ("Applying the absolute priority rule in the context of a corporate reorganization requires the enterprise to be valued.").

18. ACCOUNTING STANDARDS EXECUTIVE COMM., AM. INST. OF CERTIFIED PUB. ACCOUNTANTS, STATEMENT OF POSITION 90-7: FINANCIAL REPORTING BY ENTITIES IN REORGANIZATION UNDER THE BANKRUPTCY CODE (1990) [hereinafter SOP 90-7], *reprinted in* 2 AM. INST. OF CERTIFIED PUB. ACCOUNTANTS, AICPA TECHNICAL PRACTICE AIDS § 10,460, at 19,273 (1997).

The values of those future cash flows—famously referred to as a “guess compounded by an estimate”¹⁹—are fixed by negotiations among the representatives of creditors and shareholders.²⁰ If the parties fail to agree on a value, the court hears the parties’ evidence—typically investment bankers’ opinions regarding value—and makes the determination. That determination is what has drawn the law and economics scholars’ ire.²¹

The conversion of debt into equity solves not only the excessive debt problem but also the illiquidity problem. Illiquidity occurs when a debtor owns valuable property but cannot obtain the money necessary to pay its debts without selling the property for a less-than-fair price. To illustrate, assume a corporate debtor whose future earnings prospects (the valuable property) have a present value of \$1 million. Because those earnings will be realized only over a period of years, the debtor may be unable to pay a debt now due in the amount of \$600,000. But if reorganization converts the \$600,000 debt to stock, the debtor no longer has to pay it. After reorganization, the old and new stockholders together will own the company. The majority will decide when the company should pay the \$600,000 (as dividends). The debtor’s liquidity problem has been solved.²²

B. *The Going-Concern Sale Alternative*

In the 1980s, the sale of nonbankrupt large public companies became commonplace. That development inspired the bankruptcy scholars of the period to consider whether bankrupt companies could be similarly sold and, if so, whether sale could provide a “market” alternative to judicial valuation. Some, including Professors Thomas Jackson²³ and Michael Jensen,²⁴ leapt directly to the conclusion that such sales were both feasible and desirable. As Jackson explained, “the justification for chapter 11 based on undervaluations by third parties is suspect, at least in a society such as our current one with well-developed capital markets.”²⁵

19. H.R. REP. NO. 95-595, at 222 (1977), as reprinted in 1978 U.S.C.C.A.N. 5963, 6181; Peter F. Coogan, *Confirmation of a Plan Under the Bankruptcy Code*, 32 CASE W. RES. L. REV. 301, 313 n.62 (1982). Apparently, the guess is at the amounts of future earnings and the estimate is of the appropriate discount rate.

20. SOP 90-7, *supra* note 18, at 19,273 (“Reorganization value and the terms of the plan are determined only after extensive arms-length negotiations or litigation between the interested parties. Before the negotiations, the debtor-in-possession, creditors, and equity holders develop their own ideas on the reorganization value of the entity that will emerge from Chapter 11.”).

21. *See infra* text accompanying notes 34–38.

22. An alternative means for relieving the pressure on the debtor to pay would be to reschedule payment of the \$600,000 debt to a time when the debtor can pay it. Parties use both the conversion of debt to equity and the extension of repayment schedules in reorganization cases.

23. *See* JACKSON, *supra* note 12, at 218–24.

24. *See* Michael C. Jensen, *Corporate Control and the Politics of Finance*, 4 J. APPLIED CORP. FIN., Summer 1991, at 13, 31–32 (proposing that reorganizations be eliminated and that all bankruptcy filings lead to mandatory auctions).

25. JACKSON, *supra* note 12, at 219.

If distressed companies could sell their businesses for fair prices in cash deals, that would solve both the problems of excessive debt and of illiquidity. When the grounds for such sales are present, the bankruptcy courts have the power to authorize the sale of a debtor's business free and clear of debts, including secured debts.²⁶ Because the debts do not follow the business, they cannot impair its future operations. The buyer pays the purchase price in cash, solving the debtor's illiquidity problem. Cash in an amount equal to the full value of the company is immediately available for the payment of debt in accord with the absolute priority rule.

Scholars who argue for such sales generally assume that the buyer is also sufficiently liquid to spend whatever is necessary to address the operating profits problem. As Baird and Rasmussen put it, "The ability to sell entire firms and divisions eliminates the need for a collective forum in which the different players must come to an agreement about what should happen to the assets. That decision can be left to the new owners."²⁷

What going-concern-sale advocates missed, however, was the fact that anyone capable of supplying the extraordinary amounts of market liquidity needed to buy and rehabilitate large public companies would demand a substantial return on investment. The advantage of reorganization was that it eliminated the need to pay that return on investment.

Many sale advocates recognized that the assumption of virtually free, virtually unlimited market liquidity was unrealistic. In articles published in 1986 and 1993, Professor Baird stopped short of claiming that distressed companies could routinely be sold at auction for market values.²⁸ Specifically, he doubted that a sufficient number of third parties would attend the sales and bid. As Baird put it, "The case for mandatory auctions is hard to make precisely because it depends crucially on a new player entering the picture who does not exist now."²⁹

Others shared Baird's doubts about the assumed market for distressed large public companies, but were nevertheless determined to invent ways of bringing markets to bear. Mark Roe,³⁰ Barry Adler and Ian Ayres,³¹ and

26. See 11 U.S.C.A. § 363(b)(1), (f) (West 2004 & Supp. 2007) (authorizing trustees to sell assets free and clear of liens outside the ordinary course of business "after notice and a hearing").

27. Baird & Rasmussen, *End of Bankruptcy*, *supra* note 3, at 756. See also Donald S. Bernstein, *U.S. Chapter 11 Today: A Funny Thing Happened On the Way to the Courthouse*, in GLOBAL LEGAL GROUP, THE INTERNATIONAL COMPARATIVE LEGAL GUIDE TO: CORPORATE RECOVERY AND INSOLVENCY 2007, at 5, 6 (2007), <http://www.iclg.co.uk/khadmin/Publications/pdf/1215.pdf>. ("The breadth and depth of today's M&A and financing markets means the size of the distressed business no longer operates as a constraint on sale . . . [and] buyers have become less likely to impose an 'insolvency' discount in connection with such a sale.")

28. Baird, *Revisiting Auctions*, *supra* note 11, at 653; Baird, *Uneasy Case*, *supra* note 11, at 147 ("This paper has suggested that the premise underlying Chapter 11 of the Bankruptcy Code may be unsound.") (emphasis added).

29. Baird, *Revisiting Auctions*, *supra* note 11, at 653.

30. Mark J. Roe, *Bankruptcy and Debt: A New Model for Corporate Reorganization*, 83 COLUM. L. REV. 527, 559 (1983) (proposing that bankruptcy courts value reorganizing firms by offering 10% of their shares in public markets and extrapolating the value obtained to the remaining 90%).

31. Barry E. Adler & Ian Ayres, *A Dilution Mechanism for Valuing Corporations in Bankruptcy*, 111 YALE L.J. 83, 101-03 (2001) (proposing that the bankruptcy courts value reorganizing

Philippe Aghion, Oliver Hart, and John Moore³² each floated hybrid schemes for market-based reform. Each of the schemes was market-based in that bidders, rather than judges, determined values. Each was hybrid in that it preserved reorganization's method for dealing with the problem of liquidity. That method was to force at least some creditors to remain invested in the bankrupt firm.

Sale proponents seemed to concede that the costs of sales would be at least as high as the costs of reorganization.³³ But they were virtually unanimous in arguing that market valuation was preferable to bankruptcy judge valuation because the market would be more accurate. Thus, Mark Roe charged that "[t]he bankruptcy court is unlikely to make an astute independent determination of . . . the firm's value Bankruptcy courts lack substantial financial expertise; they are judges, not investment bankers."³⁴ Michael Jensen added that "bankruptcy judges . . . have neither the information nor the expertise to assess the firm's value."³⁵ Thomas Jackson noted that "there is likely to be a cost to valuations by a bankruptcy judge that is not present in marketplace valuations. Substantial evidence suggests that valuations by bankruptcy judges are systematically too high."³⁶ Douglas Baird explained that a "bankruptcy judge may be less able to cast a cold eye on an enterprise and make tough decisions than someone who has put his own money on the line."³⁷ Barry Adler and Ian Ayres concluded that "[n]ot only do judges lack the business expertise of individual capital investors, but also a judicial valuation cannot benefit from the collective wisdom of market investors in the aggregate."³⁸

Our findings indicate precisely the opposite. The judicially-based valuations in reorganization cases were surprisingly accurate predictions of postreorganization trading values. The market valuations in sale cases appeared to average less than half of what the companies were actually worth.³⁹

firms by requiring claimants to submit their personal supply and demand schedules for all quantities of securities that might be issued and then determining the point or points at which the markets would clear).

32. Philippe Aghion, Oliver Hart, & John Moore, *Improving Bankruptcy Procedure*, 72 WASH. U. L.Q. 849, 861-63 (1994) (proposing that the bankruptcy courts value reorganizing firms by soliciting both cash and noncash bids for the companies, and allowing the claimants to choose among them by majority vote).

33. *E.g.*, Barry E. Adler, *Bankruptcy and Risk Allocation*, 77 CORNELL L. REV. 439, 468 n.128 (1992) (citing data suggesting that the expense of the auctions would exceed the expense of reorganization); Baird, *Revisiting Auctions*, *supra* note 11, at 642 (comparing elements of cost for reorganization and liquidation). Baird concludes that "[o]nce all this is taken into account, it is hard to support the case for mandatory auctions [in Chapter 11] on the basis of the direct costs of bankruptcy." *Id.*

34. Roe, *supra* note 30, at 547.

35. Jensen, *supra* note 24, at 31.

36. JACKSON, *supra* note 12, at 220.

37. Baird, *Uneasy Case*, *supra* note 11, at 137.

38. Adler & Ayres, *supra* note 31, at 90.

39. *See infra* Section III.A.1.

The scholars also portrayed the judges' roles in reorganization valuations as larger than they were. First, in a substantial majority of large public company bankruptcies, the reorganization value of the company was fixed not by the judge but by the opposing parties in negotiations. If those parties negotiated in the shadow of systematically biased judicial decisions—as Jackson charged—the scholars' complaint might have been valid. But the “evidence”⁴⁰ Jackson cited for his charge of systematic overvaluation was virtually nonexistent.⁴¹ Since Jackson wrote, ours is the third study to show that fresh-start reorganization values are slightly *lower* than the values the market placed on the same firms in postconfirmation trading.⁴² In our study, we found that reorganization values were, on average, 12% lower than postconfirmation market values. Thus, well-informed negotiators would have no reason to believe that judges' valuations would be “systematically” higher than postconfirmation market values.⁴³

Second, in the few instances when judges value companies, they do not rely on their personal expertise. They listen to the testimony of investment bankers regarding value. Those witnesses are the same investment bankers who advise private investors what to bid or ask in sale scenarios.

Although reorganization's detractors had not shown that remedy to be inadequate, they focused on whether going-concern sales could provide a substitute.

C. The Market for Large Public Companies

Historically, bankruptcy lawyers and judges expressed doubt that capital markets were good enough to replace reorganizations. In a study of

40. JACKSON, *supra* note 12, at 220 (“Substantial evidence suggests that valuations by bankruptcy judges are systematically too high.”).

41. *Id.* at 220 n.36. Jackson's “evidence” was primarily the opinions of two law professors that the securities issued in reorganization cases would not immediately sell for the reorganization values assigned to them. Blum seemed to think that the market value was correct and reorganization value in error, referring to “the inflation of reorganization value to exceed market value.” Walter J. Blum, *The Law and Language of Corporate Reorganization*, 17 U. CHI. L. REV. 565, 578 n.18 (1950). Brudney seemed to think reorganization value was correct and the market in error, arguing that issuance of securities to senior claimants that had an immediate market value equal to their claims “would measure the pay-out in the depressed liquidation values which the reorganization process is designed to avoid.” Victor Brudney, *The Investment-Value Doctrine and Corporate Readjustments*, 72 HARV. L. REV. 645, 679 (1959). Our finding that reorganization values are in fact higher than sale values suggests that Brudney's conceptualization is more accurate than Blum's and Jackson's.

42. See Stuart C. Gilson, Edith S. Hotchkiss, & Richard S. Ruback, *Valuation of Bankrupt Firms*, 13 REV. FIN. STUD. 43, 54 tbl.2, 55 (2000) (finding a mean difference in fresh start valuation from market value of -4.7% in a sample of twenty-eight cases); Reuven Lehavy, *Reporting Discretion and the Choice of Fresh Start Values in Companies Emerging from Chapter 11 Bankruptcy*, 7 REV. ACCT. STUD. 53, 54 (2002) (“Using the market value of equity immediately after emergence from Chapter 11 as a measure of a firm's intrinsic value, I find that the fresh start equity value is, on average, understated by about 4% and that the average absolute difference between the fresh start and market values is about 11%.”). We found that the fresh-start value was, on average, understated by about 11%, and that the average absolute difference between fresh-start and market values is about 18%.

43. JACKSON, *supra* note 12, at 220.

reorganizations completed in the 1980s, LoPucki and Whitford elaborated on this skepticism:

Several of our [bankruptcy attorney] interviewees expressed the view that capital markets are not sufficiently developed to produce enough bidders to ensure that the winning bid will approximate the going concern value of the firm Sizeable businesses were sold in many of our cases, but none of the purchases were financed through an initial public offering. The successful bidder was, in every instance, an already existing firm, usually one in the same line of business. This suggests that for most large businesses, only a limited number of potential buyers exists.⁴⁴

Bankruptcy judge Samuel Bufford put the case more bluntly, stating that “[d]ebtors need an opportunity to suspend the rights of creditors because markets are so inefficient” and that “[b]ankruptcy is overwhelmingly a result of imperfect markets and high transaction costs.”⁴⁵

In the 1990s, changes in bankruptcy practice and economic ideology combined to increase both the parties’ preferences for sales and the likelihood that bankruptcy courts would approve sales. The change in bankruptcy practice was that the bankruptcy courts began competing for big cases. The change in economic ideology was a growth in the influence of law and economics among judges, bankruptcy professionals, and opinion makers more generally.

The Delaware bankruptcy court triggered the court competition in the early 1990s.⁴⁶ Historical accident had given bankrupt large public companies the right to file in any bankruptcy court they chose.⁴⁷ Beginning in 1990, the Delaware bankruptcy court adopted a variety of practices that appealed to the “case placers”—the lawyers, executives, and DIP lenders who choose courts for bankrupt companies.⁴⁸ By 1996, the Delaware bankruptcy court had a near-national monopoly on large public company bankruptcies, attracting thirteen of the fifteen such cases filed that year (87%).⁴⁹ In the late 1990s, other courts responded by copying many of Delaware’s practices, thus joining in the competition.⁵⁰

One practice widely adopted by competing courts was to permit sale of the debtor’s business as a going concern under section 363 of the Bank-

44. Lynn M. LoPucki & William C. Whitford, *Corporate Governance in the Bankruptcy Reorganization of Large, Publicly Held Companies*, 141 U. PA. L. REV. 669, 763–64 (1993) (footnotes omitted).

45. Samuel L. Bufford, *What is Right About Bankruptcy Law and Wrong About Its Critics*, 72 WASH. U. L.Q. 829, 846 (1994). See also Lynn M. LoPucki, *Strange Visions in a Strange World: A Reply to Professors Bradley and Rosenzweig*, 91 MICH. L. REV. 79, 100 (1992) (“Chapter 11 addresses the deficiencies of the marketplace by offering the owners, and more importantly the creditors, an alternative to putting the debtor’s assets on the auction block.”).

46. LYNN M. LOPUCKI, *COURTING FAILURE: HOW COMPETITION FOR BIG CASES IS CORRUPTING THE BANKRUPTCY COURTS* 49–76 (2005).

47. *Id.* at 15–16.

48. *Id.* at 49–68.

49. *Id.* at 49–50.

50. *Id.* at 123–35.

ruptcy Code.⁵¹ Prior to the competition, courts had required “good business reason[s]” for selling a company without plan formalities and disclosures.⁵² Routine section 363 sale approval appealed to case placers because it was essentially an option for them to sell the company. If they chose to exercise the sale option, they could sell on short notice, without giving creditors either the opportunity to vote or the extensive disclosure statement required by reorganization law in connection with voting.⁵³ Most section 363 sales were of doubtful legality.⁵⁴ But if a court refused to permit them, the case placers simply took their business elsewhere.

The competitive pressures on the bankruptcy courts to permit section 363 sales coincided with a growing national faith in the efficiency of markets.⁵⁵ In 1999, the U.S. Supreme Court expressed what amounted to a preference for sale over reorganization. The Court complained that in reorganization “any determination that the price [of a bankrupt company] was top dollar would necessarily be made by a judge in bankruptcy court, whereas the best way to determine value is exposure to a market.”⁵⁶

In combination, these pressures from court competition and promarket ideology reached such an extreme that when managers sought to sell their companies, some courts refused to hear evidence that the companies could be worth more than the sale prices. In the Polaroid bankruptcy, for example, managers sought confirmation of a sale for approximately a third of the company’s book value. The sale price was widely criticized in the financial press as inadequate.⁵⁷ The creditors’ committee objected to the sale and sought to show that the company was worth more in reorganization. The presiding Delaware judge, Peter J. Walsh, refused even to take the committee’s evidence into account:

[The principal] conflict here is between those persons and entities who preach and believe that there must be some valuation done which would

51. *Id.* at 167–80.

52. *Comm. of Equity Sec. Holders v. Lionel Corp.* (*In re Lionel Corp.*), 722 F.2d 1063, 1071 (2d Cir. 1983); Elizabeth B. Rose, Comment, *Chocolate, Flowers, and § 363(B): the Opportunity for Sweetheart Deals Without Chapter 11 Protections*, 23 EMORY BANKR. DEV. J. 249, 263–68 (2006) (reviewing the case law).

53. 11 U.S.C. § 1125(a)(1) requires that the plan proponent furnish the following:

[I]nformation of a kind, and in sufficient detail, as far as is reasonably practicable . . . including a discussion of the potential material Federal tax consequences of the plan to the debtor, any successor to the debtor, and to a hypothetical investor typical of the holders of claims or interests in the case, that would enable such a hypothetical investor of the relevant class to make an informed judgment about the plan.

11 U.S.C.A. § 1125(a)(1) (West Supp. 2007).

54. LoPUCKI, *supra* note 46, at 167–69.

55. *Id.* at 233–34.

56. *Bank of Am. Nat’l Trust & Sav. Ass’n v. 203 N. LaSalle St. P’ship*, 526 U.S. 434, 457 (1999) (citing DOUGLAS G. BAIRD, *THE ELEMENTS OF BANKRUPTCY* 262 (rev. ed. 1993)).

57. *See, e.g.*, Kris Frieswick, *What’s Wrong With This Picture?*, CFO, Jan. 2003, at 40; Tom Becker & Lingling Wei, *Questions Mount In Chapter 11 Case of Former Polaroid*, WALL ST. J. ONLINE, Jan. 28, 2003 (on file with author).

demonstrate that this enterprise is [not] worth more than what is being proposed by the proposed transaction. . . . I have never accepted the proposition that the Court should be guided by valuation when a sale transaction, and in many of these cases, including this one, an appropriately shopped sales transaction is the alternative. And even in this case where the disparity is dramatic, to say the least, I think the fundamental proposition, which this Court has fought for a lot of years, is that a transaction appropriately conducted is the better test of value I favor the market test approach and that was done in this case.⁵⁸

By approving the sale, Judge Walsh in effect took judicial notice that a large public company could be worth no more in reorganization than was bid at an “appropriately conducted” auction sale.

In the 1990s, section 363 sales of large public companies grew from a trickle to a flood.⁵⁹ Sales under confirmed plans were also on the increase.⁶⁰ Baird and Rasmussen noted the increasing numbers and interpreted them not as the result of court competition combined with a shift in ideology but rather as the result of an improvement in the market for large public companies. It was in that context they announced that “[c]orporate reorganizations have all but disappeared.”⁶¹

To Baird and Rasmussen, the growing number of companies that chose sale over reorganization proved sale’s victory over reorganization in the marketplace and the lack of any need for a reorganization alternative. Baird and Rasmussen are skeptical that the distressed companies that file bankruptcy have much going-concern value. But to the extent the companies do have going-concern value, Baird and Rasmussen argue that going-concern sales now capture that value:

In examining the nature of the change in the large corporate Chapter 11s of 2002, we see that fundamental forces at work in the economy have made the traditional reorganization increasingly obsolete. Railroads had enormous going-concern value and incoherent capital structures, while facing primitive capital markets. Today’s businesses can be replicated with virtual businesses that organize production through the marketplace over the Internet. Any going-concern surplus can be captured for creditors via a sale.⁶²

The study we present here was designed to test empirically Baird and Rasmussen’s assertion that “[t]he days when reorganization law promised

58. Transcript of Sale Hearing Before Honorable Peter J. Walsh United States Chief Bankruptcy Judge at 172–73, 177, *In re Polaroid Corp.*, No. 01-10864 (Bankr. D. Del. July 3, 2002).

59. See LoPUCKI, *supra* note 46, at 170–71 (showing only three section 363 sales of large public companies in the decade of the 1980s, as compared with fifty-two in the four year period 2000–03).

60. See Baird & Rasmussen, *Chapter 11 at Twilight*, *supra* note 3, at 675–78.

61. Baird & Rasmussen, *End of Bankruptcy*, *supra* note 3, at 751.

62. Baird & Rasmussen, *Chapter 11 at Twilight*, *supra* note 3, at 699.

substantial benefits are gone⁶³ by comparing the actual outcomes of sale and reorganization cases.

D. Prior Empirical Evidence

To date, no direct empirical evidence exists comparing going-concern sale values with reorganization values. A study of the Japanese bankruptcy system compared official estimates of piecemeal sale value with reorganization value.⁶⁴ Studies of the Swedish bankruptcy system have compared official estimates of piecemeal sale value with going-concern sale value.⁶⁵ But this Article is the first to report an empirical study comparing going-concern sale value with reorganization value.

II. METHODOLOGY

We studied large public companies. Scholars generally agree that sale prices are most likely to compare well with reorganization values for companies that are large and publicly traded.⁶⁶ Information regarding large public companies is more readily available to prospective buyers, and the market for public companies' shares is already developed.⁶⁷

A. Sample Selection

We drew samples of thirty section 363 sale cases and thirty reorganization cases from Lynn LoPucki's Bankruptcy Research Database ("BRD").⁶⁸

63. Baird & Rasmussen, *End of Bankruptcy*, *supra* note 3, at 789.

64. Theodore Eisenberg & Shoichi Tagashira, *Should We Abolish Chapter 11? The Evidence From Japan*, 23 J. LEGAL STUD. 111 (1994).

65. *E.g.*, Per Stromberg, *Conflicts of Interest and Market Illiquidity in Bankruptcy Auctions: Theory and Tests*, 55 J. FIN. 2641 (2000); B. Espen Eckbo & Karin S. Thorburn, Automatic bankruptcy auctions and fire-sales (February 2007) (unpublished manuscript, on file with the authors) [hereinafter Eckbo & Thorburn, *Fire Sales*] ("Fire-sale discounts exist when the auction leads to piecemeal liquidation, but not when the bankrupt firm is acquired as a going concern."); B. Espen Eckbo & Karin S. Thorburn, Bidding in mandatory bankruptcy auctions: Theory and evidence (February 2005) (unpublished manuscript, on file with the authors).

66. Baird, *Revisiting Auctions*, *supra* note 11, at 637 ("The case for the mandatory auction is easiest when the firm in question is publicly traded."); Baird, *Uneasy Case*, *supra* note 11, at 128 ("[T]he entire law of corporate reorganizations is hard to justify under any set of facts and virtually impossible when the debtor is a publicly held corporation."); Robert K. Rasmussen & David A. Skeel, Jr., *The Economic Analysis of Corporate Bankruptcy Law*, 3 AM. BANKR. INST. L. REV. 85, 109 (1995) ("[A]uctions work best with a publicly traded firm."); Roe, *supra* note 30, at 563 ("[Bankruptcy institutions] have failed to make necessary distinctions between the market faced by a publicly held firm with widely distributed securities and that faced by a bankrupt local barber shop, for example. The market for the former could be effective even if the market for the latter often is not.").

67. *See supra* note 66.

68. Lynn M. LoPucki, Bankruptcy Research Database, <http://lopucki.law.ucla.edu> (last visited May 14, 2007). Some may consider these sample sizes small. The proper measure of whether the sample size is adequate for empirical research, however, is whether it is the appropriate size to yield statistically significant results given the expected magnitude of the effect under investigation. In other words, a large sample is needed to detect small effects, and a small sample is needed to

That database includes all large public company bankruptcies filed in the United States since the effective date of the Bankruptcy Code, October 1, 1979. For our section 363 sale case sample, we chose the most recent cases available as of the time of data collection and then worked back in time until we reached our preset goal of thirty cases. The earliest sales included were in December 2000. The latest were in April 2004. For that period, we included substantially every case in which (1) the debtor sold all or substantially all of its assets pursuant to section 363 of the Bankruptcy Code, (2) the debtor indicated the amount of its total assets on Exhibit A to the Petition,⁶⁹ and (3) the PACER file included sufficient information to support calculation of a sale price. The sales studied were thirty of the fifty-one sales occurring during that period (59%).⁷⁰

With one exception,⁷¹ we chose cases without advance knowledge of the sale prices. Once we began work on a case, we pursued it to final valuation or proof that such a valuation was impossible. Thus, we think our sample, though not quite the universe of qualifying cases for the period studied, is unbiased within that universe.

Although we examined thirty sale cases, our findings with respect to going-concern sales are based on only twenty-four of them. In five of the remaining cases, the debtor's business was not operating at the time of the sale. We excluded these cases from our comparison because legal scholars generally assume that such piecemeal sales of assets occur at prices well below reorganization values.⁷² Our focus is on comparing going-concern sale prices with reorganization values.

In the final sale case that we excluded from our going-concern sale findings, the debtor's bankruptcy resulted from managerial fraud. We excluded all fraud cases from our sale and reorganization samples because we consider the values on Exhibit A in fraud cases too unreliable to serve as the control in making our comparison.⁷³ Because we actually processed the fraud sale case—*In re Impath Inc.*⁷⁴—before excluding it,⁷⁵ we know that its

detect large effects. By that measure, our sample size is clearly adequate with respect to the issue of whether sale recoveries are lower than reorganization recoveries.

69. If the debtor did not list its total assets on Exhibit A, we lacked a book-asset value by which to measure the recovery.

70. We omitted thirteen cases because the debtor did not file an Exhibit A indicating the book value of its assets. We omitted eight cases because the PACER files contained information insufficient to calculate a sale price.

71. We did know the sale price in *In re Polaroid Corp.*, No. 01-10864 (Bankr. D. Del. filed Oct. 12, 2001), before selecting it for our study, but virtually any method of sample selection would have included it.

72. Appendix A-1 shows the relationship between recoveries in piecemeal and going-concern sales.

73. The division of cases into "fraud" and "not fraud" was made by the classifications in Lynn M. LoPucki's Bankruptcy Research Database. See LoPucki, *supra* note 68. Those classifications were all made by LoPucki prior to our decision to use them.

74. No. 03-16113 (Bankr. S.D.N.Y. filed Sept. 28, 2003).

75. In deciding to exclude fraud cases, we assumed that the frauds were accounting frauds that would result in the overstatement of asset values at the time of filing and thus cause under-

exclusion made no difference in our findings.⁷⁶ We did not process the fraud reorganization cases, so we do not know whether their exclusion made any difference.

We drew the reorganization case sample after completing our analysis of the sale cases. A case was eligible for inclusion in the reorganization case sample if (1) the debtor confirmed a plan of reorganization during the period 2000 through 2004,⁷⁷ (2) the debtor emerged from bankruptcy as a going concern and filed an annual report (form 10-K) with the Securities and Exchange Commission after confirmation,⁷⁸ (3) the debtor elected fresh-start accounting at the conclusion of its case,⁷⁹ and (4) the debtor's bankruptcy was not principally the result of fraud, as indicated in the BRD.⁸⁰ Fifty-two cases met these criteria.

We arranged the list of fifty-two cases alphabetically. One of our research assistants processed cases from the top of this list; the other processed cases from the bottom. They worked until they had processed a total of thirty cases. Because we can think of no reason why cases with names in the middle of the alphabet would differ from cases at either end, we also consider this sample to be unbiased within our criteria.

Our samples may not be representative of large public company sale and reorganization cases in several respects. First, the sale cases included only sales under section 363 of the Bankruptcy Code. Sales under confirmed plans were excluded. One might suppose that sales under confirmed plans would bring better prices because the properties are exposed to the market for longer periods, because more information is disclosed to creditors and prospective purchasers, or because greater disclosure deters fraud and self-dealing. On the other hand, the pre-filing

statements of sale and reorganization recoveries. Thus we assumed that we were removing the lowest sale and reorganization recovery ratios. The one sale fraud case excluded involved the expected type of fraud: an overstatement of the value of the company's assets. Impath, Inc., Current Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 (Form 8-K) (July 30, 2003) (reporting that Impath's Audit Committee had initiated an investigation into the possibility that accounts receivable had been overstated and another asset carried at an inappropriate value); Bloomberg News, *Sentence in Impath Fraud*, N.Y. TIMES, May 31, 2006, at C6 (stating that the former president and former CEO of Impath had both been convicted of securities fraud). In the six months prior to filing, Impath wrote its assets down by nearly 50%. It then sold those assets for 123% of reduced value, by far the highest recovery ratio in a sale case. We decided to deal with this conundrum by making our calculations with and without Impath and reporting any significant differences resulting from Impath's exclusion.

76. Adding Impath to the final regression model (Table 1, Model V) does not substantively change the coefficients or p-values. The R-square changes by less than .005.

77. The years 2000 through 2004 are the same years covered by the sale case sample.

78. These criteria exclude cases in which debtors sold their assets under a plan of reorganization. We consider such cases to be sale/reorganization hybrids. The criteria also exclude cases in which the debtors emerged as private companies. We could not have valued the latter group because we would not have access to either fresh-start or stock sale data.

79. This criterion assured that we would be able to calculate fresh-start values in all cases.

80. We concluded that the book-asset values reported on Exhibit A in fraud cases were not sufficiently reliable. One fraud case, involving Impath Inc., was included in the sale case sample before we recognized the problem. We excluded Impath when comparing the sale and reorganization samples, but the exclusion had no significant impact on our results.

earnings before interest, taxes, depreciation and amortization (“EBITDA”); earnings before interest and taxes (“EBIT”); and net income of the companies selling under confirmed plans were each, on average, lower than those of the section 363 sale companies.⁸¹ That suggests sale prices under confirmed plans would also have been lower.⁸² We are left with no substantial reason for believing that sale recoveries would have been closer to reorganization recoveries if we had included sales of going concerns under confirmed plans.

Neither Baird and Rasmussen, nor other scholars, have expressly distinguished between section 363 sales and confirmed plan sales in their endorsements of sale over reorganization. Scholars generally consider section 363 sales at least as effective as confirmed plan sales:

Baird and Rasmussen make a valid point regarding the prevalence of section 363(b) sales in the twenty-first century. An increasingly large number of articles praise the benefits and popularity of these sales, with law firms and financial groups urging clients to pursue them whenever possible. The examples of successful sales have become too numerous to detail, and it appears that these sales will continue to grow in popularity as an alternative to selling assets under a Chapter 11 reorganization.⁸³

Thus, we think our examination of section 363 going-concern sales does directly address the asserted benefits of going-concern sales generally.

A second reason our samples may not be representative of all sale and reorganization cases is that our samples are drawn from a single, recent period (2000–04). Sales and reorganizations prior to that period or subsequent to it may differ.⁸⁴

The reorganization cases in our sample may not be entirely representative because they include only companies that elected fresh-start accounting upon emergence. The small minority of emerging companies that did not elect fresh-start accounting may differ. This restriction probably excluded princi-

81. The differences were not statistically significant.

82. Plan sales may bring lower prices because they include a larger proportion of piecemeal sales. Entries in the NameEmerging and AfterEmerging fields of the Bankruptcy Research Database for the 80 companies that confirmed plans but did not emerge mention “liquidation” far more frequently than “merger” or “acquisition.” Those fields generally reflect the terms that the parties used.

83. Jason Brege, Note, *An Efficiency Model of Section 363(b) Sales*, 92 VA. L. REV. 1639 (2006). The praise for section 363 sales has, however, been far from unanimous. See, e.g., George W. Kuney, *Hijacking Chapter 11*, 21 EMORY BANKR. DEV. J. 19, 111 (2004) (“[Section 363 sales are] a massive, federally funded, unified foreclosure system for corporate lenders that primarily serves the interests of secured creditors and their assistants—insiders and the insolvency professionals at the center of the case.”). Other examples of praise for section 363 sales include Bernstein, *supra* note 27, at 6 (“It was once believed that some insolvent enterprises would be difficult to sell for full value. . . . The breadth and depth of today’s M&A and financing markets means the size of the distressed business no longer operates as a constraint on sale”); Rose, *supra* note 52, at 283 (“The benefits offered to debtors through § 363 sales are too alluring to expect a decrease in its abuse without action.”).

84. Only seventy-seven large public companies have been sold in section 363 sales since October 1, 1979, the effective date of the Bankruptcy Code. Fifty-one of those sales (66%) occurred during the period of our study and thirty (39%) were included in our study. Thus, there is not a substantial unstudied population.

pally solvent companies, leaving weaker reorganizing companies in our sample.⁸⁵ Thus, the restriction tended to bias the results against our thesis.

Lastly, our reorganization sample included only companies that emerged as public companies. Companies that emerged as private companies may differ.

B. Research Design

We initially sought to compare the recoveries in thirty liquidation cases with the recoveries in thirty reorganization cases. The “recovery” in a case is the percentage of firm value realized by liquidation or reorganization. We use “total assets” as reported on Exhibit A to the bankruptcy petition as a proxy for firm value.⁸⁶ Exhibit A implies that the asset figure furnished should be a book-accounting figure, but does not expressly require it.⁸⁷

The book value of a firm is often substantially different from the firm’s intrinsic value. But our design does not depend upon book value to accurately reflect intrinsic value for particular firms. Rather, it is sufficient for our design if the average relationship between book value and intrinsic value, whatever it may be, is the same for our sample of sale cases as for our sample of reorganization cases, or differs solely as a result of factors for which we could control. The principal such factor is the firm’s earnings.

We refer to the amount realized from liquidation as the “recovery.” The recovery is the implicit value the sale price placed on the assets the debtor owned at filing. We gathered data regarding the recovery from a variety of sources. The principal source was the asset purchase agreements available in

85. The rule governing fresh-start election that was in effect during the period covered by our study provided as follows:

If the reorganization value of the assets of the emerging entity immediately before the date of confirmation is less than the total of all postpetition liabilities and allowed claims, and if holders of existing voting shares immediately before confirmation receive less than 50 percent of the voting shares of the emerging entity, the entity should adopt fresh-start reporting upon its emergence from Chapter 11. The loss of control contemplated by the plan must be substantive and not temporary.

SOP 90-7, *supra* note 18, at 19,277.

86. Exhibit A of Bankruptcy Form B1 provides as follows:

If debtor is required to file periodic reports (e.g., forms 10K and 10Q) with the Securities and Exchange Commission pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 and is requesting relief under chapter 11 of the Bankruptcy Code, this Exhibit “A” shall be completed and attached to the petition.

Bankr. Forms Manual, Form B1, Exh.A (9/97), http://www.uscourts.gov/rules/Revised_Rules_and_Forms/exhibita.pdf.

87. The specific request that elicited the assets and liability figures read as follows:

2. The following financial data is the latest available information and refers to the debtor’s condition on _____.

a. Total assets \$ _____.

b. Total debts (including debts listed in 2.c., below) \$ _____.

Id.

the court files. We also examined the transcripts of the hearings on motions to approve sales, news accounts of the sales, and Mergerstat Review sale reports.⁸⁸ To calculate the recovery from the nominal sale price, we added liabilities assumed by the buyers to the cash and other consideration paid by the buyers. If the consideration paid included securities, we valued the securities at market prices. If market prices were not available, we used the values asserted by the parties to the transactions.

In some cases, a single debtor disposed of its assets in multiple sales. If we were able to obtain information on all substantial sales, we calculated the recovery as the total price received for all of the assets. In some cases, this was the total of all of the sales. In others, the consideration received in an early sale was sold in a later sale.⁸⁹ In such a case, we omitted the consideration received in the early sale and included only that received in the later sale.

If the debtor borrowed money during the case on a DIP loan, but did not pay it back prior to the sale, we deducted it in the recovery calculation. Our goal was to determine the value the buyer and seller placed on the assets the debtor owned at the time it filed Exhibit A. We did not adjust for ordinary operating profits and losses during the bankruptcy case, reasoning that those amounts should be part of a valid comparison of the two means of realizing value from the underlying assets. That is, we treated profits and losses during the sale or reorganization case as endogenous to the procedure chosen.

For each reorganization case, we calculated the recovery two ways. The first was based on the fresh-start accounting value the debtor assigned to its assets upon emergence. An emerging company's accountants determine the fresh-start accounting value of the assets of the emerging company as of the confirmation date of the plan.⁹⁰ The accepted accounting practice is to set the fresh-start accounting value on the basis of the "reorganization value." The reorganization value is the value the plan negotiators placed on the emerging company, or if the negotiators did not reach agreement as to a

88. Mergerstat Review is a database of mergers and acquisitions activity maintained by FactSet Research Systems, Inc. It is available online at <http://www.mergerstat.com>. To determine whether we could rely on Mergerstat Review sale reports to the exclusion of other sources, we compared several of those reports with our own detailed analyses of the sales. We concluded that the Mergerstat Review sale reports were not adequate for our purposes because they were, at bottom, calculations of deal size, not asset price. In some cases, Mergerstat Review ignored assumed liabilities. In others, it reported numbers that seemed to us to be flatly contrary to the terms of the asset purchase agreements. Mergerstat's numbers were sometimes higher than ours and sometimes lower. Our comparison is available at <http://www.law.ucla.edu/erg/pubs>.

89. For example, in the Polaroid bankruptcy, the debtor sold its Identification Systems Division for \$60 million and retained the cash proceeds of the sale. Polaroid later sold all its assets, including \$200 million in cash. We counted only the final sale.

90. SOP 90-7, *supra* note 18, at 19,282 ("The effects of a plan should be included in the entity's financial statements as of the date the plan is confirmed. However, inclusion should be delayed to a date not later than the effective date if there is a material unsatisfied condition precedent to the plan's becoming binding . . ."). We found that the fresh-start accounting date was sometimes a date before the effective date, sometimes after the effective date, and often the same as the effective date. We made our adjustments to fresh start values accordingly.

value, the value determined by the court.⁹¹ We obtained the fresh-start value from the companies' postconfirmation financial statements contained in the annual reports filed with the Securities and Exchange Commission.

Anticipating that some readers will be skeptical of fresh-start values,⁹² we also computed the market capitalizations of the emerging companies. We did so by adding the amount of the reorganized company's liabilities as shown on its financial statements as of the effective date of the plan⁹³ to the market value of the reorganized company's shares. We obtained the latter value by multiplying the number of shares outstanding by the market price on the first trading date after the plan's effective date.⁹⁴

We adjusted both of these values to reflect only the assets owned when the debtor filed Exhibit A at the commencement of the bankruptcy case. Those adjustments included adding to reorganization value any substantial amounts paid to creditors during the bankruptcy case and subtracting from reorganization value any substantial amounts borrowed during the bankruptcy case as DIP lending or exit financing. Such payments and borrowings were usually reflected in the companies' disclosure statements or later financial statements.⁹⁵

In our regression analysis, we tested several measures of the strength and value of the businesses being sold or reorganized. By controlling for that strength and value, we sought to isolate the effect of the sale process itself on the recovery. We drew the data for several of these measures from

91. *Id.* at 19,283 ("That is, assets should be recorded on the basis of reorganization value . . ."). SOP 90-7 states as follows:

Reorganization value and the terms of the plan are determined only after extensive arms-length negotiations or litigation between the interested parties. . . . Several methods are used to determine the reorganization value; however, generally it is determined by discounting future cash flows for the reconstituted business that will emerge from Chapter 11 . . . at rates reflecting the business and financial risks involved.

Id. at 19,273.

92. Fresh-start values are negotiated partly in the shadow of judicial valuation. Scholars working from an economic perspective tend to have little respect for those valuations. See *supra* text accompanying notes 33–38.

93. Because all of the reorganized companies studied adopted fresh-start accounting methods, all presumably complied with SOP 9-07, which states, "[e]ntities that adopt fresh-start reporting . . . should apply the following principles: . . . Each liability existing at the plan confirmation date, other than deferred taxes, should be stated at present values of amounts to be paid determined at appropriate current interest rates." SOP 90-7, *supra* note 18, at 19,278. Thus, the liabilities shown probably do not differ substantially from the market values of those liabilities. Trading prices were available for few, if any, of the liabilities of the reorganized companies in the period immediately after confirmation.

94. We obtained trading prices from CRSP—The Center for Research in Security Prices, <http://www.crsp.chicagogsb.edu/> (last visited July 14, 2007); BigCharts: Stock Charts, Screeners, Interactive Charting and Research Tools, <http://bigcharts.marketwatch.com/> (last visited July 14, 2007); and EuroInvestor.co.uk—Stock search, <http://www.euroinvestor.co.uk/Stock/StockSearch.aspx?Char=a&Country=11> (last visited July 14, 2007).

95. We did not adjust for changes in the amount of trade debt outstanding. Such changes were generally insubstantial.

Compustat⁹⁶ for the year prior to the year in which the bankruptcy case was filed.⁹⁷ In seven of the sale cases, no financial statement data were available for the year prior to filing, so we used data from the second year prior to filing. The measures tested were (1) the ratio of net income⁹⁸ to total assets,⁹⁹ (2) the ratio of EBIT¹⁰⁰ to total assets, (3) the ratio of EBITDA¹⁰¹ to total assets, and (4) the ratio of cash¹⁰² to total assets. For reasons we explain below, we also compiled a postfiling EBITDA variable from monthly operating reports filed by the companies during their bankruptcy cases.¹⁰³

III. FINDINGS

We estimated two regression models. In the first, the dependent variable was the sale or reorganization recovery ratio using the adjusted fresh-start valuation for reorganization cases. In the second, the dependent variable was the sale or reorganization recovery ratio using the market capitalization valuation for reorganization cases. The results for these two models were similar, so we report only the results based on the market capitalization valuation.

A. *The Regression Models*

The purpose of our regression analysis was to identify the determinants of higher recoveries, and in particular to discover whether the choice between reorganization and going-concern sale was among them. We consider an adjusted sale price or reorganization value (the “recovery”) to be higher when it is larger in relation to the book value of the debtor’s assets reported at the filing of the bankruptcy case. Accordingly, the ratio of the recovery to the book value of the debtor’s assets (the “recovery ratio”) is the dependent variable in our analysis. We use the natural log of that ratio because the ratio is not normally distributed. Logging the variable prevents outliers from driving the results while retaining the underlying structure of the data.

96. The Compustat database, maintained by Standard & Poor’s, contains fundamental company and market information on a vast number of public companies worldwide. It is available at <http://www.compustat.com>. Compustat compiles information in 350 categories, which it calls Data Items. For a full list of the Data Items, see <http://www.wooster.edu/economics/archive/cstatitems.html> (last visited July 17, 2007).

97. The debtor’s fiscal year prior to the fiscal year of bankruptcy ends, on average, about six months prior to filing. The studied sales occurred an average of seven months after filing. The strength and value of these businesses could have changed significantly during the period from the prior fiscal year end to the confirmation of the sale. Based, however, on subsequent empirical investigation of that possibility, we concluded that the changes that occurred did not affect our findings. That further investigation is discussed in Part III.A.1 below.

98. Net Income (Loss), Compustat Data Item 172.

99. Assets—Total/Liabilities and Stockholders’ Equity—Total, Compustat Data Item 6.

100. Operating Income After Depreciation, Compustat Data Item 178.

101. Operating Income Before Depreciation, Compustat Data Item 13.

102. Cash and Short Term Investments, Compustat Data Item 1.

103. The data are available at <http://www.law.ucla.edu/erg/pubs>.

By making the recovery ratio—which includes book value—our dependent variable, we have already controlled, in a rough sense, for differences in the values of the companies sold and reorganized. But controlling for book value alone may not be adequate, because the book value of assets might not adequately reflect the earnings associated with those assets. To control for differences in earnings, we added three pre-filing earnings measures to the model as independent variables, one at a time: (1) net-income-to-assets ratio, (2) EBIT-to-assets ratio, (3) and EBITDA-to-assets ratio.

The net-income-to-assets ratio was not a significant correlate ($p = .52$)¹⁰⁴ of the dependent variable. The EBIT-to-assets ratio and the EBITDA-to-assets ratio were nearly indistinguishable in the regression.

TABLE I
DETERMINANTS OF RECOVERY RATIO

Cell entries are ordinary least squares coefficients (robust standard errors in parentheses)

	I	II	III	IV	V
Prefiling EBITDA/Assets ratio natural log mean = 0.033 sd = 0.109	2.805* (1.104)	2.208* (0.922)	2.164* (0.840)	2.813** (0.981)	3.007** (0.948)
Sale (0 = Reorg, 1 = Sale) mean = 0.54		-0.897*** (0.190)	-10.497** (3.462)	-9.115** (3.130)	-9.685** (2.896)
Days In natural log mean = 16.552 sd = 0.879			-0.280* (0.114)	-0.299** (0.100)	-0.366*** (0.088)
Days In * Sale natural log mean = 8.835 sd = 8.259			0.580** (0.205)	0.495* (0.186)	0.528** (0.173)
S&P 500 mean = 1.041 sd = 0.138				-0.324 (0.566)	-0.601 (0.555)
Net Merger residuals mean = 0.142 sd = 0.643				0.309* (0.144)	0.332* (0.158)
Industry Interest Coverage mean = 0.426 sd = 0.157					0.841† (0.485)
Telecom mean = 0.18					-0.615* (0.252)
Constant	0.894*** (0.122)	0.400** (0.147)	4.298* (1.954)	4.934* (2.028)	6.094** (1.780)
R-Square	.13	.41	.50	.55	.63
N	49	49	49	49	49
†p < .10, *p < .05, **p < .01, ***p < .001					

104. The p-value of a statistical analysis is the probability of a Type I Error. In plain English, it is the probability that a finding is generated by random variation in the data. The conventional standard for whether a result is significant is $p < .05$.

That is not an unexpected finding given their high correlation with each other (Pearson's $r = .91$).¹⁰⁵ Between the two, the EBITDA-to-assets ratio is a slightly better predictor of the dependent variable, and so we use it in our model (Table I, Model I). It is significant and positive, indicating that companies with higher earnings have higher recovery ratios, even controlling for the book value of assets.¹⁰⁶

To determine whether illiquidity might also have played a role, we added to the model as an independent variable the debtor's cash-to-assets ratio as of the end of its last fiscal year prior to bankruptcy. Whether or not EBITDA was included in the model, the cash-to-assets ratio was not significant.¹⁰⁷ Apparently, debtors who enter bankruptcy with lower cash-to-assets ratios do not end with lower recovery ratios.

1. *The Choice between Sale and Reorganization*

We next tested the effect of the sale-reorganization choice on recovery ratios. We found that debtors who reorganize have substantially higher recovery ratios than debtors who sell (Model II). Controlling for the company's earnings, reorganized companies recover about 75% of their book value, compared to a 29% recovery ratio for those that sell.¹⁰⁸

Whether a company is sold or reorganized explains far more of the variance in recovery ratios than do the company's earnings. The EBITDA-to-asset ratio accounts for only 13% of the variance in the dependent variable; adding the Sale variable increases the variance explained to 41%, thus accounting for an additional 29% of the variance in the recovery ratio. The sale-reorganization choice explains more than twice as much of the variance in recovery ratios as do earnings.

Our Prefiling EBITDA figure for each company is from the company's last annual reporting period ending prior to bankruptcy. In seven sale cases, that period was not available and we used data from the prior reporting period. About one to three years elapsed between the ends of the reporting periods from which we took our data and the sales or reorganizations we valued. The average elapsed time was 1.3 years for sale cases and 1.4 years for reorganization cases.¹⁰⁹

105. Pearson's r is a measure of the linear relationship between two variables. The statistic is bounded by -1 and 1. If two variables are completely unrelated then $r = 0$. If two variables rise and fall together then $r > 0$, and if one rises while the other falls then $r < 0$.

106. We validated the regressions in Table 1 by submitting each variable in the full model (Model V) to a Monte Carlo Permutation Test with 1000 repetitions. The p-values for all variables in the test are consistent with those reported in Table 1. All are $p < .05$, except the Industry Interest Coverage variable, which is $p < .10$.

107. $p = .704$ with EBITDA in the model, $p = .203$ without EBITDA in the model.

108. These ratios differ from the ratios reported in note 7 above because here we controlled for EBITDA.

109. We compiled the variable EstDaysBefSale by assuming that all bankruptcies were filed at the midpoint of the fiscal year. We added (1) the 180-day half year and (2) the days from the end

To investigate the possibility that later changes in the companies' earnings might account for the large difference in sale and reorganization recoveries observed, we compiled an additional measure of earnings, the ratio of postfiling EBITDA to assets ("Postfiling EBITDA/Assets"). That measure is based on the earnings and assets reported by the companies in the last three months prior to sale or reorganization.¹¹⁰

When we substituted Postfiling EBITDA/Assets for the pre-filing measure in a regression equation similar to Model II in Table I, the Sale variable remained by far the most significant predictor of the recovery ratio.¹¹¹ We conclude that changes in the ratio of EBITDA-to-assets from the period before filing to the period immediately before sale or reorganization cannot explain the difference in recoveries in sale and reorganization cases.

The pre- and postfiling EBITDA-to-assets-ratio variables are correlated with each other ($r = .43$, $p = .01$). No obvious systematic differences exist between them, and they are reasonable substitutes for each other. We use the pre-filing EBITDA-to-assets ratio in subsequent analyses because that variable was calculated by a third party, exists for a larger number of cases, and is less noisy.

2. Timing

A possible bias against the sale-to-recovery ratio is built into our dependent variable. The average time elapsed between the events referenced in the variable's denominator (bankruptcy filing) and in its numerator (sale or reorganization) differs for sales and reorganizations. Sales occurred an average of 223 days after the filing of the bankruptcy case, while reorganizations

of the fiscal year of the last financial statement to the bankruptcy filing to (3) the days from the bankruptcy filing to the sale order in sale cases or from the bankruptcy filing to the confirmation order in reorganization cases.

110. The large majority of companies studied did not report annual earnings for the year immediately prior to sale or reorganization. A large number of them did, however, file monthly operating reports ("MORs") during their bankruptcy cases. MORs were generally available for the three months immediately prior to the month in which the sale or reorganization occurred. Although few of those reports presented a value specifically for EBITDA, we were usually able to calculate one with a reasonable degree of confidence. Our goal was to track Compustat's method of calculating EBITDA. We used net sales or revenues in preference to gross sales or revenues when both were available. From that figure we deducted cost of goods sold and selling, general, and administrative expenses. If the debtors had expressly included depreciation, amortization, reorganization, restructuring, or interest expenses in either of those two figures, we removed it.

In several instances, data were available for at least one month, but not for all three. In those instances, we used the month or months available and assumed that the missing months were the same as the months we had. In other instances, monthly data were not available, but quarterly data were available for a period that overlapped the three month period that was the subject of our study. In those instances, we used the quarterly data. (None of the quarterly data used included postsale or postreorganization EBITDA.) Using these methods, we were able to calculate the ratio of annualized EBITDA to assets for twenty-two sale cases and eighteen reorganization cases—in total, forty of the sixty cases studied. The data are available at <http://www.law.ucla.edu/erg/pubs>.

111. The results indicate that there is no relationship between Post-filing EBITDA/Assets and recovery ($b = 0.006$, $p = .99$). Sale remains a highly significant covariate of recovery in the regression ($b = -0.66$, $p < .01$, $r^2 = .20$, $n = 34$). We interpret these findings to mean that the EBITDA-to-assets ratio is a minor covariate of the recovery ratio in bankruptcy.

occurred an average of 314 days after filing. If it were true that recovery ratios increased as the length of the bankruptcy case increased, the effect of our variable design would have been to discriminate against sale-to-recovery ratios. To address that possibility, we control for the difference in case lengths by including a time variable in our model. The variable Days In is the number of days from filing to reorganization in reorganization cases and filing to sale order in sale cases.

We anticipated that time would affect sales and reorganizations differently. Specifically, a quick sale might bring a low price and a lingering reorganization might reflect a company's underlying poor health. To capture this effect we introduced the interaction term Days In*Sale. The resulting coefficients (which should be read as a group) validate our expectations; they suggest that the recovery ratio for a reorganized company decreases with time in bankruptcy, but that the recovery ratio of a sold company increases with time in bankruptcy (Model III). We interpret the finding with respect to reorganizations to mean that high-recovery-ratio reorganization cases resolve more quickly.¹¹² We interpret the finding with respect to sales to mean that low-recovery-ratio sale cases resolve more quickly.¹¹³ Most importantly, our findings with respect to the importance of the sale-reorganization choice were not affected by the controls.

In reorganization cases, the distribution of cash and securities takes place after confirmation. The same is ordinarily true in section 363 sale cases. But the fact that section 363 sales often reduce the estates to cash early in the cases led some commentators, including James J. White, to assume that section 363 sales result in quicker payouts to creditors:

So what does [a section 363 sale] offer to the secured creditors? Well, it gives them the same benefit that everyone else enjoys, a lower priced reorganization. Part of that comes from reduced administrative fees, but more of it comes from the shortening of the term of their non interest-bearing loan. Presumably the ultimate payout in these cases comes sooner than in other chapter 11s and that payout can be put to use.¹¹⁴

Our data suggest that White's presumption may be wrong. In the sale cases we studied, confirmation did not occur until an average of 611 days

112. The finding could be interpreted to mean that lingering in reorganization *causes* recovery ratios to decline. We are skeptical of this interpretation because we found in another study that longer reorganizations were correlated with *lower* refiling rates. Lynn M. LoPucki & Joseph W. Doherty, *Why Are Delaware and New York Bankruptcy Reorganizations Failing?*, 55 VAND. L. REV. 1933, 1976-77 (2002).

113. The finding could be interpreted to mean that greater patience or greater ability to wait results in sale at a higher price. We are skeptical of both these interpretations. First, for nearly all of the companies sold, the sale process began with the hiring of a financial advisor prior to bankruptcy, so the time from bankruptcy to sale is not a good measure of patience or ability to wait. Second, we found no relationship between recovery and our best indicator of a debtor's ability to wait—assertions of nonviability. *See infra* Section B.1.

114. James J. White, *Death and Resurrection of Secured Credit*, 12 AM. BANKR. INST. L. REV. 139, 164 (2004).

after the filing of the case, as compared with only 314 days for reorganization cases.¹¹⁵

Delayed confirmation does not necessarily equate to delayed distribution. Probably some parties in interest, particularly secured creditors, were paid directly from the sale proceeds upon closing of the sales. But probably some secured creditors, most unsecured creditors, and all shareholders had to wait for their money until plan confirmation.¹¹⁶ Because the section 363 sale cases took nearly twice as long as the reorganization cases to reach plan confirmation, it is not at all clear that, on average, payouts came sooner in sale cases. To the extent that payouts in sale cases actually came later, the resulting reductions in actual recoveries have not been taken into account in our findings; the sale process performed worse than we report. Further study is needed to determine the extent of—and reasons for—the long postsale delays.

3. Stock Market and Merger Market Conditions

We next tested whether stock market or merger market conditions influenced recoveries. We expected that higher stock prices generally would be correlated with higher recoveries, in part because we assume the same companies are worth more in higher markets, but also more specifically because we used the stock prices of the reorganized companies as our means of valuing them.¹¹⁷ Higher stock prices might also make it easier to raise the money necessary for acquisitions and so increase sale prices.¹¹⁸

The level of merger and acquisition activity varies widely over time.¹¹⁹ We hypothesized that the conditions that caused high levels of mergers and acquisitions would lead to higher recoveries because debtors would have a ready market for companies they wished to sell either before or after plan confirmation. We also hypothesized that high stock prices and high levels of mergers and acquisitions would be correlated with each other.

115. Compare *infra* Appendix A-2: Sale/Reorganization Comparison: Reorganization Cases, col. 4 (averaging 314 days from filing to confirmation), with *infra* Appendix A-1: Sale/Reorganization Comparison: Sale Cases, col. 6 (averaging 611 days from filing to sale).

116. With Impath, the sale proceeds were sufficient to pay all unsecured creditors in full, with interest. The court ordered that the payment be made prior to plan confirmation, but noted the lack of precedent for such a payment. Terry Brennan, *Impath creditors to be fully paid*, DAILY DEAL (N.Y.), Nov. 19, 2004 (“Judge Beatty said from the bench that it was unprecedented that all creditors would be paid before a plan has been confirmed,” said creditors’ counsel, Schuyler Carroll of Arent Fox PLLC. “She also said that there is no case law to support her decision.”).

117. One who began with the belief that stock prices reflect the intrinsic values of companies might not share our expectation. But data, not expectations, determined our findings.

118. We anticipated that this relationship might be weaker because little of the purchase price in the sales we studied was paid in stock. On average, 71% of the sale price was paid in cash. In only six of thirty cases (20%), did the buyer pay part of the purchase price in securities.

119. FACTSET MERGERSTAT, L.L.C., MERGERSTAT REVIEW 2 (2006) (showing that the numbers of mergers rose from 1877 in 1991 to 9566 in 2000, fell to 7303 in 2002, and then rose to 10,332 in 2005).

We used the Standard & Poor's 500 Index ("S&P 500")—measured at its closing price on the day the court entered its sale order in sale cases or its confirmation order in reorganization cases—as our measure of stock prices. We used the number of mergers and acquisitions that occurred in the United States in the year of the bankruptcy sale or reorganization—as reported by Mergerstat Review—as our measure of merger and acquisition activity.¹²⁰ We named the variable Net Mergers.

We assume that high stock prices are a principal cause of high levels of mergers and acquisitions, an assumption supported by the bivariate correlation ($r = .56, p < .001$). That is, the level of merger and acquisition activity is higher when stock prices are higher. Because they are correlated with each other, inclusion of the S&P 500 and Net Mergers variables in the same model would result in inflated standard errors for the coefficients and lead to invalid inferences about the relationships among the variables. To solve this problem, we conducted a path analysis in which we regressed the S&P 500 variable on the Net Mergers variable in order to construct a new variable, Net Merger residuals. The Net Merger residuals variable is the difference between the S&P 500 and Net Mergers variables. It is the part of the Net Mergers variable that is not directly correlated with the S&P 500 variable. Thus the coefficient on this variable is a clean estimate of the effect of the Net Mergers variable on the recovery ratio.

We find no evidence that stock prices affect recovery rates, but strong evidence that the Net Merger residuals variable is positively correlated with recovery rates (Model IV). We conclude that bankruptcy recoveries do not increase when merger and acquisition activity is high as a result of high stock prices, but do increase when merger and acquisition activity is high for other reasons.

We think this finding, that bankruptcy recoveries are to some extent independent of stock prices, alone justifies the existence of reorganization. Even if the recoveries from bankruptcy sales were equal to the recoveries from reorganizations at any given time, debtors could still gain by reorganizing when conditions were not conducive to sale and then selling when those conditions improve. If, as seems more likely, the recoveries from sales and reorganizations vary independently over time, reorganization sometimes provides a valuable alternative when sale conditions are poor.

4. *Industry Distress*

In a landmark article,¹²¹ Andrei Schleifer and Robert Vishny theorized that bankruptcy sale prices would be depressed in distressed industries be-

120. The underlying theory is that the bankruptcy sales we observed were, in relevant respects, the same kinds of transactions as the mergers and acquisitions Mergerstat Review counts. Mergerstat Review counts "net merger and acquisition announcements." *Id.* at 2. The sale cases in our study would have been counted as acquisitions. At the closing of such a sale, the usual procedure is for the buyer to merge the debtor entities into a newly formed subsidiary of the buyer.

121. Andrei Shleifer & Robert W. Vishny, *Liquidation Values and Debt Capacity: A Market Equilibrium Approach*, 47 J. FIN. 1343 (1992).

cause the debtors' competitors—the most likely purchasers—would be illiquid and so unable to bid at the sales. Our data confirm their intuition that companies from within the debtor's industry would be the most likely purchasers at bankruptcy sales. We found that two-thirds of buyers were "strategic" in that they planned to use the assets in conjunction with their own businesses; only one-third were "financial" investors seeking a profit on the purchase.¹²²

To test Schleifer and Vishny's theory with respect to the effect of industry distress on sale prices, we compiled a variable to reflect the level of distress in a debtor's industry. Following Stromberg and Eckbo and Thorburn¹²³ we calculate "industry distress" as the fraction of the firms in an industry whose income is insufficient to cover the firm's interest expense.¹²⁴ Our industry distress variable, "Industry Interest Coverage," was only marginally significant when added to the regression (Model V) and positive. The positive coefficient indicates that when industry distress is high, recovery ratios are high—the opposite of the Schleifer and Vishny hypothesis. Consistent with our results, and contrary to Schleifer and Vishny's hypothesis, the proportion of strategic buyers does not appear to vary with the level of distress in the industry. Strategic buyers were, if anything, a little more common when industry distress was high.¹²⁵

We doubt that industry distress causes strategic buyers to bid more for their ailing competitors. Nor is there any substantial reason to believe that industry distress forces debtors to reorganize rather than sell, thus producing higher recoveries.¹²⁶ One plausible interpretation is that sick companies in sick industries get better recoveries than sick companies in healthy industries because the problems of the former are exogenous while the problems of the latter are endogenous. In any event, our data provide no support for Schleifer and Vishny's theory. Regardless of the controls we employed, we found no negative correlation between industry health and recovery ratios.

122. We classified the buyer as "strategic" in nineteen cases (63%), as "financial" in ten cases (33%), and as a mix of financial and strategic buyers in one case (3%). See *infra* Appendix C-2.

123. Stromberg, *supra* note 65, at 2665; Eckbo & Thorburn, *Fire Sales*, *supra* note 65, at 8.

124. Our variable is defined as the percentage of firms in the industry with an interest coverage ratio less than one in the year of the bankruptcy sale or reorganization. Sale is the date of the sale order; reorganization is the date of the confirmation order. A firm is considered to be in the industry if it has the same three-digit Standard Industrial Classification ("SIC") code as the debtor in the year of bankruptcy sale or reorganization, or the same two-digit SIC code if Compustat shows no firms in the industry that year. In calculating his variable, Stromberg added firms filing bankruptcy in the year after the debtor because "[Swedish] firms that go bankrupt do not report any financial statements for the period immediately preceding bankruptcy." *Id.* American public companies generally do report such statements.

125. The data are posted at <http://www.law.ucla.edu/erg/pubs>.

126. We hesitate to imply a causal relationship between industry distress and the decision to sell. We can, at best, say that we controlled for the decision to sell or reorganize in Models II–V, and that the addition of the Industry Interest Coverage variable to the model both increases the fit of the model and reifies the coefficients associated with the reorganization-sale decision.

B. Negative Findings

We made two negative findings of importance. First, selling debtors' assertions of nonviability did not correlate with reduced recoveries. Second, larger debtors tended to choose reorganization over sale. When we controlled for that choice, however, we found that larger debtors did not have higher recovery ratios.

1. Asserted Nonviability Did Not Correlate with Low-Sale Recoveries

To sell their businesses, the debtors we studied had to justify their sales to the bankruptcy courts. They did so through the testimony of executives or advisors at sale approval hearings. Narrative excerpts of those justifications appear in Appendix B. As the excerpts reflect, some debtors asserted nonviability—that is, they claimed they could not reorganize. Others claimed only that sale would maximize the value of the estate, which suggests that reorganization was an alternative. We hypothesized that these assertions were valid proxies for viability.

One might expect that nonviability—the future inability to reorganize—would have an adverse effect on sale prices. The absence of a reorganization option would deprive the debtor of the ability to strike a hard bargain in the common, single-bidder sale situation. Such a debtor would also be under pressure to sell quickly, because the debtor's value presumably would be declining with time.

To investigate that possibility, we coded the sale justifications as (1) strong assertions of nonviability, (2) weak assertions of nonviability, and (3) mere assertions that the debtor was maximizing value by selling. We added the resulting variable to the model, first as a dummy variable combining (1) and (2) and then as a dummy variable combining (2) and (3). Neither dummy variable was a significant predictor of the recovery ratio.¹²⁷ Debtors asserting viability did not receive better prices.

To investigate further, we compared these assertions of nonviability with the time the companies were on the market. We considered a company to be “on the market” from the time it retained its financial advisor to the time the court approved the sale. We expected nonviable companies to be on the market for shorter periods of time because their liquidity constraints would force them into quicker sales. We found no significant relationship, however, between asserted viability and time on the market.¹²⁸

In seeking to justify their sales to the bankruptcy court, sixteen of the thirty companies studied (53%) made strong assertions of non-viability. That is, they represented to the court that they were unable to reorganize. These statements ranged from GlobalStar's stark assertion that it would run

127. For both, $p > .50$.

128. The average time elapsed from retention of investment bankers to sale was 351 days. See *infra* Appendix C-2. Among companies who said they were maximizing value, see *infra* Appendix C-1 (providing an explanation for each sale), the average time was shorter (316 days versus 362 days), but the difference of means is not statistically significant ($F = 0.38$, $N = 28$, $p = .54$).

out of cash for administrative expenses “within weeks”¹²⁹ to Polaroid’s catchy metaphor that the company was “a melting ice cube.”¹³⁰ We hypothesize that if the nonviability assertions were true, they would have been reflected in declining cash reserves. Instead, we found that cash reserves were slightly higher for nonviable companies, although the difference was not statistically significant.

In combination, these findings left us suspicious of the debtors’ assertions of nonviability. The assertions were self serving. Debtors made the assertions while seeking court approval of their proposed sales. Absent a compelling reason to sell quickly, some debtors may have feared the court would require that they comply with Chapter 11 plan formalities by making adequate disclosure to creditors and giving creditors the opportunity to vote on the sale. We suspect that the assertions were made opportunistically, to maximize the likelihood of sale approval. The strength of the assertions may have reflected debtors’ levels of concern regarding sale approval or debtors’ willingness to exaggerate, rather than debtors’ actual nonviability.

2. Larger Firms Did Not Have Higher Recovery Ratios

Measured by book asset values at filing, the companies sold were smaller than the companies reorganized. The difference was marginally significant ($p = .069$). But when we added company size, measured by asset book value, to the regression, it was not statistically significant ($p = .488$). We conclude that smaller companies did not have lower recovery ratios. Thus, the smaller sizes of the companies sold cannot explain the lower recovery ratios for those companies.

Considering the foregoing analyses together, we reach the following conclusions. Our model explains 63% of the variance in recovery ratios in the forty-nine going-concern sale and reorganization cases studied. The company’s earnings, the choice between sale and reorganization, the length of time from filing to case resolution, whether market factors were conducive to mergers when the case is resolved, and the level of financial distress in the debtors’ industries each played a role. But the choice between sale and reorganization was by far the most important factor. Recovery ratios are higher when companies reorganize than when they sell as a going concern.

IV. EXPLAINING THE MARKET’S FAILURE

That reorganizations yield higher recovery ratios than going-concern sales raises two issues. First, why did debtors, advised by leading professionals,

129. Motion of Debtors (I) to Approve the (A) Sale of Substantially All of Their Assets Free and Clear of Interests and (B) Assumption and Assignment of Contracts and Leases in Connection Therewith, or (II) Alternatively, for Authority to Wind Down Their Operations at 8, *In re Globalstar Capital Corp.*, No. 02-10499, (Bankr. D. Del. Oct. 31, 2003).

130. Transcript of Sale Hearing Before Honorable Peter J. Walsh United States Chief Bankruptcy Judge at 177, *In re Polaroid Corp.*, No. 01-10864 (Bankr. D. Del. July 3, 2002) (“The testimony is undisputed by both witnesses that the revenues of this company are falling off and both of them analogized to . . . a melting ice cube.”).

increasingly choose the worse of two options? Second, why didn't creditors or courts stop them?

A. *Why Do Companies Sell Rather Than Reorganize?*

The reasons undoubtedly vary from case to case, but certain factors are pervasive. First, the participants in these cases, including managers, financial advisors, creditors, and judges, are pursuing their own interests, not those of the debtor companies.¹³¹ Economists and finance theorists refer to such pursuit as an agency problem, but we consider corruption a clearer description.

1. *Managers*

In eleven of thirty sale cases, we were able to identify specific benefits to CEOs resulting directly from the decision to sell. In four cases, the sale triggered severance payments to the CEOs ranging from \$662,000 to \$1.55 million.¹³² In four additional cases, the buyer hired the CEO of the seller to

131. Kunej, *supra* note 83, at 109 (“[I]nsiders may benefit from these sales, especially when the majority of their postpetition compensation is tied to the sale of the corporation or where they expect to be employed by the purchaser post sale.”).

132. These four companies are ABC-NACO Inc., *see* ABC-NACO Inc., Proxy Statement Pursuant to Section 14(a) of the Securities Exchange Act of 1934 (Form Def 14A) at 6, 8 (May 22, 2001), *available at* <http://www.sec.gov/Archives/edgar/data/913364/000095013101501596/0000950131-01-501596.txt> (last visited July 14, 2007) (indicating that CEO Vaughn Makary would be paid \$760,320 upon the sale of ABC-NACO Inc.), Casual Male Corp., *see* Casual Male Corp., Annual Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 (Form 10-K), at 56, 59 (Dec. 14, 2001), *available at* <http://www.sec.gov/Archives/edgar/data/792570/000092701601504321/0000927016-01-504321.txt> (last visited July 14, 2007) (indicating that CEO Alan Weinstein would be paid \$661,538 upon the sale of Casual Male Corp.), Einstein/Noah Bagel Corp., *see* Stipulation and Agreed Order for Allowance and Immediate Payment of Administrative Severance Claim at 3–4, *In re* Einstein/Noah Bagel Corp., Nos. 00-04447 and 00-04448 (Bankr. D. Ariz. July 10, 2001) (reporting that CEO Robert Hartnett would receive \$1,324,658 upon the sale of Einstein/Noah Bagel Corp.), and Phar-Mor, Inc., *see* Phar-Mor, Inc., Annual Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 (Form 10-K), at 21, 32 (Oct. 15, 2002), *available at* <http://www.sec.gov/Archives/edgar/data/764960/000095015202007569/0000950152-02-007569.txt> (last visited July 14, 2007) (reporting that co-CEOs Abbey J. Butler and Melvyn J. Estrin were paid a combined total of \$3.1 million upon the sale of Phar-Mor, Inc.); Transcript of Hearing Before the Honorable William T. Bodoh United States Bankruptcy Judge at 7, *In re* Phar-Mor, Inc., No. 01-44007 (Bankr. N.D. Ohio June 27, 2002) (stating that Butler and Melvyn were also “included within the [buyer] Phar-Mor Acquisitions LLC”).

work for the buyer after the sale.¹³³ In three others, the sellers' CEOs became paid consultants to the buyers after the sale.¹³⁴

Of course, legitimate reasons may exist for the buyer of a bankrupt company to hire the seller's CEO. That in no way, however, changes the fact that the expectation of such hiring provides the CEO with an incentive to sell.

Even the CEO who could stay on to run the reorganizing company might find it safer or more profitable to sell and join the buyer. For example, Polaroid's CEO resigned early in the bankruptcy case and was replaced by two lower-level employees as co-CEOs. One had a base salary as CEO of \$375,000, the other \$390,000.¹³⁵ After they took the job, Polaroid adopted a retention bonus plan that resulted in their being paid \$844,000 and \$878,000 respectively in their final year of work.¹³⁶ They sold Polaroid to the sole bidder, One Equity Partners Imaging Corp. ("OEP"), for a price that was widely condemned by the financial press as too low.¹³⁷ Immediately upon closing the sale, OEP hired them to continue running the company as co-CEOs. The two swore under oath that they had no contract to work for OEP before they closed the sale. But they may not have needed one. The custom appears to be that if the buyer hires the selling managers, the selling managers get a share of the buyer's equity in the company.¹³⁸ Indeed, a year after

133. These four companies are Cone Mills Corp., see Scott Malone, *New Textile Behemoth: Ross Forms \$900M International Textile Group, Poised to Take On China*, WWD (N.Y.), Mar. 18, 2004, at 1 (reporting that Cone Mills Corp. CEO John Bakane was retained by buyer International Textile Group as CEO of the Cone Denim division of the company), Genuity Inc., see *Genuity and Level 3 Complete Acquisition*, BUS. WIRE (S.F.), Feb. 4, 2003 (reporting that Genuity Inc. CEO Paul R. Gudonis will be hired by buyer Level 3 Communications as executive vice president), Polaroid, see LoPUCKI, *supra* note 46, at 179 (indicating that co-CEOs William Flaherty and Neal Goldman were hired by the buyer OEP following the sale of the company and received stock in OEP "probably worth \$3 million to \$4 million"), and Rouge Industries, Inc., see Jeff Bennett, *Severstal Mill Is Making Changes as Prices Jump*, DETROIT FREE-PRESS, Feb. 28, 2004, at 13A (reporting that Rouge Industries, Inc., CEO Carl Valdiserri expects to be retained by buyer Severstal as a member of the executive committee following the sale of Rouge Industries, Inc.).

134. These three companies are ANC Rental Corp., see Tom Stieghorst, *Hedge Company Buys ANC Assets; New Company to Be Called Vanguard*, SUN-SENTINEL (Fort Lauderdale, Fla.), Oct. 16, 2003, at 1D (stating that former ANC Rental Corp. CEO Bill Plamondon would serve as a consultant to the buying company, Vanguard Car Rental USA Inc), Asia Global Crossing Ltd., see Shu-Ching Jean Chen, *Asia Global Crossing sale complete*, DAILY DEAL (N.Y.), Mar. 12, 2003 (stating that Asia Global Crossing Ltd. CEO Jack Scanlon will be retained by buyer Asia Netcom Corp. Ltd. as a consultant following the sale of the company), and Globalstar Capital Corp., see Globalstar, L.P., Quarterly Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 (Form 10-Q), at 46 (Aug. 14, 2003), available at <http://www.sec.gov/Archives/edgar/data/933401/000089161803004420/f92214e10vq.htm> (last visited July 14, 2007) (reporting that CEO Olof Lundberg resigned from his position at Globalstar Capital Corp. and would remain as a consultant throughout the sale process).

135. LoPUCKI, *supra* note 46, at 178.

136. *Id.* at 178-79.

137. See *supra* note 57.

138. Deposition of William L. Flaherty, Exhibit 107 at 162, *In re Polaroid Corp.*, No. 01-10864 (Bankr. D. Del. July 1, 2003) ("Generally, if the new equity owners of the company wish to retain management, it's customary for management to receive some equity participation in the new company.").

the sale closing, Polaroid disclosed that each of the two employees in question owned stock in OEP valued at \$3 million to \$4 million.¹³⁹

We probably have only scratched the surface of managerial corruption in these cases. The companies we studied typically stopped making public disclosures as soon as they decided to sell, making information on management perks difficult to obtain. All thirty were public companies prior to bankruptcy. Each filed at least one annual report with the Securities and Exchange Commission in the two years prior to bankruptcy. But only Polaroid filed such a report for the year of the sale or any subsequent year. Fifteen of the thirty formally terminated their duty to file reports by filing SEC Form 15; the remainder simply stopped filing.¹⁴⁰ Twelve of the thirty buyers were public companies that filed postpurchase annual reports. Eleven of the twelve mention the purchase in those reports.¹⁴¹ But few said more about the purchase than the name of the seller and the amount of the purchase price.¹⁴²

After going dark, the bankrupt companies still typically filed monthly operating reports with the bankruptcy court and sometimes with the SEC.¹⁴³ But those reports contained skeletal financial data and few or no explanations. Thus, if managers received side payments or benefits from the sales of their companies or acquired stock in the purchasers, that information was available to us as researchers only if it happened to be elicited during the sale hearing and a transcript of the sale hearing happened to be placed in the court file.

2. Financial Advisors

The investment bankers who arrange the sales are not an effective check on sale prices either. Formally, the debtors hire the bankers to explore sale or reorganization options. If the companies decide to pursue sales, the investment bankers solicit prospective purchasers. Typically, this means they

139. LoPucki, *supra* note 46, at 179.

140. The filings are available at <http://www.sec.gov/edgar.shtml> (last visited May 14, 2007).

141. Those that filed were the buyers of Allegiance Telecom, Inc. (XO Communications), Bethlehem Steel Corp. (International Steel Group), Budget Group, Inc. (Cendant Corporation), Coho Energy, Inc. (Denbury Resources), Cone Mills Corp. (W.L. Ross & Co.), Einstein/Noah Bagel Corp. (New World Coffee), Genuity Inc. (Level 3 Communications), Impath Inc. (Genzyme), The IT Group, Inc. (Shaw Group), National Steel Corp. (United States Steel), Velocita Corp. (AT&T), and Weirton Steel Corp. (International Steel Group). Those that did not file were the buyers of ABC-NACO, Inc. (Three Cities Railco Acquisition), ANC Rental Corp. (Cerebus/Car Acquisition Company LLC (Vanguard), Asia Global Crossing Ltd. (Asian Netcom Corporation Ltd.), Casual Male Corp. (Designs, Inc.), divine, Inc. (DS&M Newco, Outtask, Saratoga DMS, Bear Investment), DTI Teleport, Inc. (CenturyTel), Flooring America, Inc. (Atlantic National Trust, LLC), Globalstar Capital Corp. (Thermo Capital Partners LLC), The Grand Union Co. (C&S Purchasers), International Fibercom, Inc. (TenX Capital Partners, LLC), Kellstrom Industries, Inc. (KIAC), Network Plus Corp. (Broadview Networks), Phar-Mor, Inc. (Hillco-Ozer), Pillowtex Corp. (GGST LLC), Polaroid Corp. (One Equity Partners), Rouge Industries, Inc. (Severstal OAO), U.S. Aggregates, Inc. (Old-Castle Materials, Inc.), Wherehouse Entertainment, Inc. (TransWorld Entertainment).

142. *See supra* note 141.

143. A spreadsheet listing the monthly reports filed in each case is available at <http://www.law.ucla.edu/erg/pubs>.

structure the sales, prepare brochures, send them to likely purchasers, find “stalking horses” who commit to buy the assets at specific prices if not outbid, and then conduct auctions. Prospective bidders are required to sign confidentiality agreements before they are given access to the “data rooms” in which they can examine the companies’ financial records. On average, eighty prospects are contacted for each sale, and thirty sign confidentiality agreements. But the average number of bidders is only 1.6 per sale. In fifteen of the twenty-six cases for which we have data (58%), there was only one bidder.¹⁴⁴

This thin market, combined with the fire-sale prices obtained, reflects and creates conflicts of interest for the investment bankers. The investment bankers have little reason to maximize the sale prices. Some receive “success fees” equal to one percent of the price. But, as is often the case with real estate brokers and contingency fee lawyers, the increase in the fee resulting from a higher obtainable price is not worth the effort necessary to obtain that higher price. The flat percentage fee creates an incentive to provide the low level of effort necessary to sell at a low price and earn the bulk of the fee, rather than the high level of effort necessary to sell at a high price and earn the maximum fee. The investment bankers have little reason to curry favor with the sellers who hired them; the companies are going out of business so the interests of the managers and professionals tend to dominate the hiring decisions.

The problem may extend beyond lack of incentive to seek the highest price. Investment bankers may even have reason to *minimize* the price. Underpricing creates value that the investment banker can deliver to a grateful buyer. The grateful buyer may, in turn, compensate the investment banker with future business. To avoid complaints from the debtor’s management, the grateful buyer may also be willing to give the managers a cut. The low prices do not diminish the investment bankers’ reputations because the sold companies go dark. Only in rare cases such as Polaroid do outsiders ever come to realize that the price was low in relation to the company’s actual value.

To be chosen as the stalking horse was a crucial advantage. The investment bank advising on the sale had the ability to confer this advantage and the incentive to confer it on someone who would reciprocate the favor. A stalking horse was selected in twenty-six cases and became the buyer in twenty-two (85%).¹⁴⁵ The stalking horses were protected from competitive bids by breakup fees averaging 2.3% of the stalking horse price. In addition, the terms of sale required that a competing bidder’s first bid, on average, be at least 3.7% higher than the stalking horse price. The effect of these “bid protections” was to discriminate against outside bidders. On average, a bidder at the auction sale had to offer 3.7% more than the stalking horse to bid

144. The data are posted at <http://www.law.ucla.edu/erg/pubs>. In an earlier study, Hotchkiss and Mooradian found an even higher percentage of single bidder sales. Edith S. Hotchkiss & Robert M. Mooradian, *Acquisitions as a Means of Restructuring Firms in Chapter 11*, 7 J. FIN. INTERMEDIATION 240, 243 (1998) (finding that only eighteen of fifty-five sales had more than one bidder).

145. The data are posted at <http://www.law.ucla.edu/erg/pubs>.

at all, and the challenger's highest bid would be rejected if it were not at least 2.3% higher than the stalking horse's highest bid.

The investment bank also had the ability and incentive to maximize the advantage conferred by rushing the sale. On average, 351 days elapsed from the debtor's retention of the investment bank to the court's approval of the sale. But from the moment the stalking horse contract was signed, the sale process became rushed. On average, the court entered its order fixing the terms of bidding 14 days after the stalking horse signed, and the auction took place 30 days after entry of the order.¹⁴⁶

The potential for these conflicts to affect sale prices was illustrated in the Polaroid case:

Shortly after Polaroid filed for reorganization in Delaware on October 12, 2001, the company entered into a contract to sell its Identification Systems Division unit to the manager in charge of it for \$32 million. The sale required court approval after a public opportunity to bid. Insisting that the sale was urgent, Polaroid sought to limit the opportunity for outside bidding to the extent it could. Polaroid's investment bankers, Dresdner, Kleinwort, Wasserstein, said they had shopped the Identification Systems Division thoroughly and that \$32 million was the best offer they could get. But when Polaroid tried to get Judge Walsh to approve the sale for \$32 million, several would be bidders appeared in court to protest that they hadn't been solicited, they had difficulty getting bid packages from Dresdner, Kleinwort, Wasserstein, and Polaroid was trying to push the sale through without giving them time to prepare their bids. Judge Walsh extended the bidding period by ten days, and competitive bidding pushed the price to \$60 million. Later, an Identification Systems executive said that in shopping the company, Dresdner, Kleinwort, Wasserstein had been asking for \$75 million to \$125 million, an excessive price that had discouraged bidding. It appears that bidders who came forward on their own thwarted Polaroid management's attempt to sell Polaroid's Identification Systems Division to one of their colleagues at a bargain basement price.¹⁴⁷

Traditionally, bankruptcy auctions have been public. Competing courts, however, usually allow them to take place privately, in the offices of the debtors' attorneys.

As Kenneth Ayotte, David Skeel, Douglas Baird, Robert Rasmussen, Harvey R. Miller, Shai Waisman, and others have noted, DIP lenders also have incentives with respect to section 363 sales that conflict with those of the estate.¹⁴⁸ DIP lenders make high-interest loans to debtors at the begin-

146. The data are posted at <http://www.law.ucla.edu/erg/pubs>.

147. LoPucki, *supra* note 46, at 173–74.

148. Douglas G. Baird & Robert K. Rasmussen, *Private Debt and the Missing Lever of Corporate Governance*, 154 U. PA. L. REV. 1209, 1249–50 (2006) (expressing concern that the “informational advantage” of a DIP lender that seeks to purchase may cast a pall over the ensuing auction); Harvey R. Miller & Shai Y. Waisman, *Is Chapter 11 Bankrupt?*, 47 B.C. L. REV. 129, 173 (2005) (“Absent a neutral, multiparty forum, secured lenders will likely exert their influence over a debtor and advocate a sale, as their preference is inherently toward the certainty of recovery that a sale can provide.”); Kenneth Ayotte & David A. Skeel, Jr., *An Efficiency-Based Explanation for*

ning of the bankruptcy cases and, assuming the recovery is sufficient—as it almost always is—are paid in full at the end. The DIP lender that will be paid in full from the sale has an incentive to push for a sale, even if the price is substantially below the company’s value. In some cases, the DIP lenders seek to acquire the company at sale. Whether or not the DIP lender is the buyer, the DIP lender may have control over the pace and terms of the sale, and thus also the ability to turn it into a fire sale.¹⁴⁹

For example, in one of the sale cases studied, Budget Group filed for bankruptcy while negotiating a sale of its business.¹⁵⁰ Budget arranged DIP financing from Credit Suisse First Boston under terms that would put Budget in default if it failed to have a “definitive agreement” to sell its business within fifty days of filing.¹⁵¹ The creditors’ committee objected to the financing on the ground that it “threaten[ed] the Debtors’ and the Committee’s ability to conclude negotiations on terms and conditions beneficial to the Debtors.”¹⁵² Budget agreed to sell to Cendant before the drop dead date in the DIP lending agreement, rendering the objection moot. But the very existence of such drop dead dates probably depresses sale prices.

B. Why Don’t Creditors Object?

When companies are sold for less than they are worth, the unsecured creditors are usually the losers. Typically, they will recover less than they would have in reorganization. We did not systematically collect data regarding the committees’ positions on these sales. We did, however, discover that the committees in at least two of the cases, Polaroid and IT Group, opposed the sales.¹⁵³ In both cases, the committees sought to propose their own

Current Corporate Reorganization Practice, 73 U. CHI. L. REV. 425 (2006) (reviewing LOPUCKI, *supra* note 46).

149. See Baird & Rasmussen, *End of Bankruptcy*, *supra* note 3, at 784–85 (“The control that the lender has over cash collateral makes it hard to enter into a financing arrangement without its explicit blessing. Its blessing can be contingent upon many things, including a requirement that the firm be sold as a going concern within a fixed period of time.” (footnote omitted)). Baird and Rasmussen note that “[t]hese revolving credit facilities and the practical control they give lenders over a firm are some of the most striking changes in Chapter 11 practice over the last twenty years.” *Id.* at 785.

150. Limited Objection of the Official Committee of Unsecured Creditors’ to Final Entry of Interim Order Authorizing Debtors to Obtain Postpetition Financing from Credit Suisse First Boston, as Agent at 3–4, *In re Budget Group, Inc.*, No. 02-12152 (Bankr. D. Del. Aug. 19, 2002).

151. *Id.*

152. *Id.* at 5.

153. See Objection by the Official Committee of Unsecured Creditors to Debtors’ Motion for an Order Approving (I) Sale of Substantially All of the Debtors’ Assets to the Shaw Group, Inc., (II) Bidding Procedures, (III) Break-Up Fee and Expense Reimbursement, and (IV) Other Related Relief, *In re IT Group, Inc.*, No. 02-10118 (Bankr. D. Del. Apr. 17, 2002); Order Authorizing the Official Committee of Unsecured Creditors to File Its Objection to the Debtors’ Motion for an Order (I) Authorizing and Approving a Sale of Substantially All of the Debtors’ Assets to OEP Imaging Corporation, (II) Establishing Bidding Procedures in Connection with the Sale and Approving Bid Protections, Including Expense Reimbursement and Termination Payment, and (III) Granting Other Relief Under Seal, *In re Polaroid Corp.*, No. 01-10864 (Bankr. D. Del. May 7, 2002).

reorganization plans but were unable to finance them. In both cases, the courts approved the sales over the committees' continuing objections.¹⁵⁴

In *In re Radnor Holdings Corp.*, a case excluded from our study only because the company did not report the value of its assets at the time of filing, the creditors' committee did more than object. The committee filed suit against the buyer at the sale, Tennenbaum Capital Partners, LLC, accusing Tennenbaum of an "inequitable scheme . . . to acquire the Debtors' operating assets at a grossly inadequate price through the mechanism of [a 363 sale]."¹⁵⁵ The committee alleged a scheme in which Tennenbaum had bought enough stock to give it effective control of Radnor, caused Radnor to borrow more money from Tennenbaum than Radnor could repay, forced Radnor into a bankruptcy sale, made itself the stalking horse, and then structured the bid procedures "in a way that made it virtually impossible for anyone other than Tennenbaum to even consider bidding."¹⁵⁶ The case was tried in the Delaware bankruptcy court, which ruled in favor of Tennenbaum.¹⁵⁷

The existence of cases such as *Polaroid*, *IT Group*, and *Radnor* makes clear that creditors do not always favor the proposed sales. In at least some cases, they go to their fates kicking and screaming.

Several sale process characteristics reduce both the likelihood that unsecured creditors will object and the likelihood that their objections will succeed. First, to know that the sale price is inadequate, a party may need to spend millions of dollars for an independent valuation.¹⁵⁸ Few unsecured creditors have a stake in the sale large enough to warrant such an expense. Creditors' committees are in a position to spend that kind of money because they can charge the cost to the estate.¹⁵⁹ But members of creditors' committees often have private agendas that conflict with the interests of the creditors they represent.¹⁶⁰ Second, even if the committee is faithful to the

154. Transcript of Hearing Before Honorable Mary F. Walrath United States Bankruptcy Court Judge, *In re IT Group, Inc.*, No. 02-10118 (Bankr. D. Del. Apr. 26, 2002).

155. Complaint at 2, Official Comm. of Unsecured Creditors of Radnor Holdings Corp. v. Tennenbaum Capital Partners, LLC (*In re Radnor Holdings Corp.*), 353 B.R. 820 (Bankr. D. Del. 2006) (No. 06-10894).

156. *Id.* at 33.

157. *Tennenbaum Capital Partners*, 353 B.R. 820. Of course, we have no way of knowing whether the court's findings were correct. We cite this case merely to refute the often-made argument that the creditors support the section 363 sales. See, e.g., A. Mechele Dickerson, *Words That Wound: Defining, Discussing, and Defeating Bankruptcy "Corruption"*, 54 BUFF. L. REV. 365, 370 n.14 (2006) ("[C]ourts might also have approved such sales because no one objected to them.").

158. Breakup fees are often justified as reimbursement of the stalking horse's expenses in preparing to bid. In the cases we studied, breakup fees averaged \$5 million per case. The data are available at <http://www.law.ucla.edu/erg/pubs>. A would-be objector might need to go through the same process to know whether the price was adequate.

159. The committees are able to employ attorneys and financial advisors at the estate's expense. Ultimately, much of those costs fall on the unsecured creditors the committee represents, but the estate's obligation to pay makes it possible for the committee to spend the money.

160. See, e.g., LYNN M. LOPUCKI & CHRISTOPHER R. MIRICK, STRATEGIES FOR CREDITORS IN BANKRUPTCY PROCEEDINGS § 10.07(A) (5th ed. 2006) (listing possible conflicts). The authors further note that "[t]he fact that a creditor's primary interest is not collection of the debt does not alone disqualify the creditor from appointment to the committee or constitute grounds for removal." *Id.*

creditors' interests, it is unlikely to be a match for the debtor in a fight over whether to sell or reorganize. Debtors spend about four times as much in professional fees as do all of the committees representing creditors and shareholders combined.¹⁶¹ The greater expenditures, together with the information advantage that accrues from operational control, give debtors the upper hand. Lastly, as is discussed in the next section, the bankruptcy courts are unlikely to rule in the creditors' favor even when their objections are well taken. Efforts to oppose a sale usually produce only conflict and delay, to the unsecured creditors' further disadvantage.

C. Why Do Courts Approve Inadequate-Price Sales?

To sell assets outside the ordinary course of business, a debtor must obtain the approval of the bankruptcy court.¹⁶² A decision of a bankruptcy court approving a sale is final. Appellate courts cannot overturn bankruptcy court sale approvals.¹⁶³

The prevailing case law requires debtors to prove they have "good business reasons" for selling.¹⁶⁴ Our comparison of sale and reorganization recoveries, together with the reasons companies gave for selling, suggests that few of their reasons were good. Eight never claimed lack of a reorganization alternative but rather said they were selling in order to maximize the estate.¹⁶⁵ Our findings suggest such claims are generally false. Another six also seemed to acknowledge that they had a reorganization alternative but asserted that it was riskier and so less desirable than the sale.¹⁶⁶ Sixteen made the self-serving claim that they had no reorganization alternative.¹⁶⁷ The fact that these sixteen companies did not sell for significantly less than the companies that admitted to viability suggests that they may have been exaggerating.¹⁶⁸ The fact that the sales produced far less value than the reorganizations, even after controlling for the financial conditions of firms sold

161. Lynn M. LoPucki & Joseph W. Doherty, Rise of the Financial Advisors: An Empirical Study of the Division of Professional Fees in Large Bankruptcies 3, 5, 6 (July 3, 2006) (unpublished manuscript), available at <http://ssrn.com/abstract=913841> (finding that 79% of court-awarded professional fees and expenses are for services rendered directly to the debtor).

162. 11 U.S.C. § 363(b)(1) (2000) ("The trustee, after notice and a hearing, may . . . sell . . . other than in the ordinary course of business, property of the estate.").

163. 11 U.S.C. § 363(m) provides that "[t]he reversal . . . on appeal of an authorization [to sell] . . . does not affect the validity of a sale . . . to an entity that purchased . . . in good faith . . . unless such [sale was] stayed pending appeal." *Id.* § 363(m). Bankruptcy courts routinely block use of the good faith exception by finding as a fact that the buyer acted in good faith. They routinely block the use of stays by fixing supersedeas bonds in amounts exceeding what objectors can post.

164. Comm. of Equity Sec. Holders v. Lionel Corp. (*In re Lionel Corp.*), 722 F.2d 1063, 1071 (2d Cir. 1983). For a discussion of Lionel, see Rose, *supra* note 52.

165. See *infra* Appendix B.

166. See *infra* Appendix B.

167. See *infra* Appendix B. The claims were made at the hearings in which the debtors sought approval of sales to which the debtors had already agreed.

168. See *supra* Section III.B.1.

and reorganized, suggests that many of these firms could have generated higher recoveries by reorganizing. Nevertheless, we know of no modern case in which a large public company debtor proposed a sale and the court refused to approve it. Hearings are held and arguments made, but in the end the debtor that wants to sell gets its way.¹⁶⁹

We think court competition explains the bankruptcy courts' passivity. Formally, all of the sales were proposed by the debtors. DIP lenders were sometimes the driving force behind the sales, but they came to the court for sale approval in alliance with the debtor. We assume for the purpose of argument that no one objected to many of the sales.

None of this relieved the courts of the obligation to determine that the sales were in compliance with the law.¹⁷⁰ The courts did in fact hold hearings and make the necessary findings before approving the sales. In at least one case, *IT Group*, the court appointed an examiner to investigate the reorganization alternative.¹⁷¹

The courts were not, however, without their own stake in the matter. The period covered by our study included the peak years of the biggest large public company bankruptcy boom in history.¹⁷² The courts were in active competition for the cases.¹⁷³ Two courts—the Manhattan Division of the Southern District of New York and the District of Delaware—together attracted 191 of the 336 cases filed nationally (57%).¹⁷⁴ Those cases produced billions of dollars in fees for local bankruptcy professionals, and substantial industries in New York City and Wilmington.¹⁷⁵ Joseph Biden, senator from Delaware, vehemently defends his state's advantage.¹⁷⁶ Astute commentators assume that the opposition of Senator Biden makes ending the bankruptcy court competition impossible.¹⁷⁷

169. Bernstein, *supra* note 27, at 6 (“Today, however, bankruptcy judges are more willing than ever before to entertain the sale of the debtor’s entire business.”).

170. 11 U.S.C. § 105(a) provides that “[n]o provision of this title . . . shall be construed to preclude the court from, sua sponte, taking any action or making any determination necessary or appropriate to enforce or implement . . . rules.” 11 U.S.C. § 105(a) (2000).

171. *See infra* Appendix B.

172. The boom peaked in 2001 with the filing of ninety-seven large public company cases. *See* LoPucki, *supra* note 68. The query that generates these statistics considers all cases and aggregates them by year filed.

173. LoPUCKI, *supra* note 46, at 124–28.

174. *See* LoPucki, *supra* note 68. The query that generates these statistics considers cases disposed of in 2000–2004 and aggregates them by city filed.

175. LoPUCKI, *supra* note 46, at 128–29, 132 (describing the economic significance of the shift in cases to Delaware and New York City).

176. *See, e.g.*, Joseph R. Biden Jr., *Give Credit to Good Courts*, LEGAL TIMES, June 20, 2005 (attacking Lynn M. LoPucki’s scholarship regarding the Delaware bankruptcy court); Lynn M. LoPucki, *Courting the Big Bankrupts*, LEGAL TIMES, July 18, 2005 (responding to Senator Biden).

177. Brady C. Williamson, former chair of the National Bankruptcy Review Commission, commented as follows:

Whatever the virtues and vices of the venue statute . . . they will not change in our lifetime And the reason is quite simple. It lies primarily in the make-up of the United States

The bankruptcy court competition dates to 1990, when the Delaware bankruptcy court began attracting cases.¹⁷⁸ Prior to that, section 363 sales were rare.¹⁷⁹ The courts constrained the sales¹⁸⁰ and apparently did not approve breakup fees.¹⁸¹ The first reported breakup fee decision was in 1992 and by 1995 section 363 sales were common.¹⁸²

Had courts in any of the competing cities ruled against the case placers by refusing to confirm the sales they proposed, future case placers would have avoided those cities. The offending courts—and the judges sitting on them—would have slipped into the obscurity of managing consumer bankruptcies and chapter 11 cases too small to forum shop.

D. *If Sales Are Bargains, Why Don't Bids Go Higher?*

Bankrupt large public companies are difficult and expensive to evaluate. Each potential bidder must make a substantial investment to put itself in a position to bid.¹⁸³ If it loses the bid, it also loses that investment. To offset so large a risk, a potential bidder must have a substantial chance of being the successful bidder with a bid substantially below the company's value. Absent that, bidding at a sale would not make economic sense.

In most of the sales we examined, the debtors addressed this problem by offering bidding incentives to a stalking horse. In essence, they paid someone to make the first bid. The principal incentives were cash payments, in the form of breakup fees paid to the stalking horses if they were outbid, and bid increment requirements that barred competing bidders from bidding just slightly more than the stalking horse. These incentives likely attracted some stalking horses who would not otherwise have bid. At the same time, they made it even more difficult for second bidders. Second bidders could buy the companies at the substantial discounts necessary to justify the costs of bidding only if the second bidders valued the company substantially more highly than did the stalking horses.

Senate and the membership of the Senate Judiciary Committee. As long as Senator Joseph Biden of Delaware is in the Senate . . . the status quo will not vary.

Brady C. Williamson, *Comments*, 54 BUFF. L. REV. 507, 508 (2006).

178. LoPUCKI, *supra* note 46, at 49–50 (describing the early rise of the Delaware Bankruptcy Court).

179. LoPucki, *supra* note 68 (search for cases reaching these dispositions: 363 sale confirmed; 363 sale converted; 363 sale dismissed; 363 sale No data; 363 sale pending). The search shows three 363 sales from 1980 through 1989, three from 1990 through 1994, and seventy since 1994.

180. For example, the court declined to approve a section 363 sales in Lionel, *supra* note 52.

181. National Bankruptcy Conference, Report of Subcommittee on Section 363(b) Sales in Chapter 11 Cases (March, 2007) (“Under the Bankruptcy Act and the first 10 or so years under the Code, the only benefit accorded a stalking horse bidder was a court approved bid cushion, e.g., a bid of \$1 million required a competing bid at the sale to be at least \$1,025,000. The first reported breakup fee decision was a \$6 million fee approved in 1992 in *In re Integrated Resources, Inc.*, 135 B.R. 746 (Bankr. S.D.N.Y. 1992).”)

182. *Id.*

183. *See supra* note 158 (noting that breakup fees designed to compensate for the cost of preparing bids averaged \$5 million in the cases studied).

The result was that second bidders appeared in only eight of twenty-three stalking horse cases (35%) and were successful in only four of those cases (17%).¹⁸⁴ The rarity with which stalking horses are displaced led us to reconceptualize the selection of the stalking horse as the true sale and the auction as merely a control to prevent the formal exclusion of other prospects.

That reconceptualization makes apparent that, in the absence of effective court oversight, the sale process is vulnerable to subversion. For example, an investment banker who installs a favored customer as stalking horse may be able to defend the apparently weak choice as not determinative because competitors have the opportunity to overbid. But in fact, the ability of outsiders to overbid at the auction is largely illusory. Investment bankers probably have the ability, with some uncertainty, to pass bargains along to favored clients.

E. *Have Sales Been Increasing?*

In *The End of Bankruptcy* and *Chapter 11 at Twilight*, Baird and Rasmussen argued that sales of bankrupt large public companies were increasing¹⁸⁵ and used that increase to argue that the sales were value-maximizing.¹⁸⁶ Later, Baird expanded the claim by writing that “Chapter 11 has morphed into a branch of the law governing mergers and acquisitions.”¹⁸⁷

Figure 1 shows the number and percent of large public company Chapter 11 cases that ended in liquidation for each of the years 1987 through 2006.¹⁸⁸

184. The data are available at <http://www.law.ucla.edu/erg/pubs>.

185. Baird & Rasmussen, *End of Bankruptcy*, *supra* note 3, at 751–52 (“Corporate reorganizations have all but disappeared. Giant corporations make headlines when they file for Chapter 11, but they are no longer using it to rescue a firm from imminent failure.”). The authors then describe several recent, large cases in which companies used Chapter 11 as “a convenient auction block.” *Id.* See also Baird & Rasmussen, *Chapter 11 at Twilight*, *supra* note 3, at 679 (“The large Chapter 11s of 2002 confirm our claim in *The End of Bankruptcy* that going-concern sales and implementation of prenegotiated deals now dominate the scene.”).

186. Baird & Rasmussen, *Chapter 11 at Twilight*, *supra* note 3, at 675 (“[W]hatever value exists is usually best preserved through a sale.”). The authors state further that “across the broad range of cases, asset sales do not destroy going-concern value.” *Id.* at 692. Echoing Baird and Rasmussen, prominent bankruptcy professionals Harvey Miller and Shai Waisman wrote the following:

The prevalence of asset sales under section 363(b) of the Bankruptcy Code . . . is attributable to many factors besides increasingly powerful creditors. Robust capital markets facilitate the pooling of massive amounts of capital by groups of investors, typically in the form of alternative investment vehicles such as private equity and leveraged buyout funds, hedge funds, and vulture funds, in order to purchase or control companies of sizes previously not thought possible

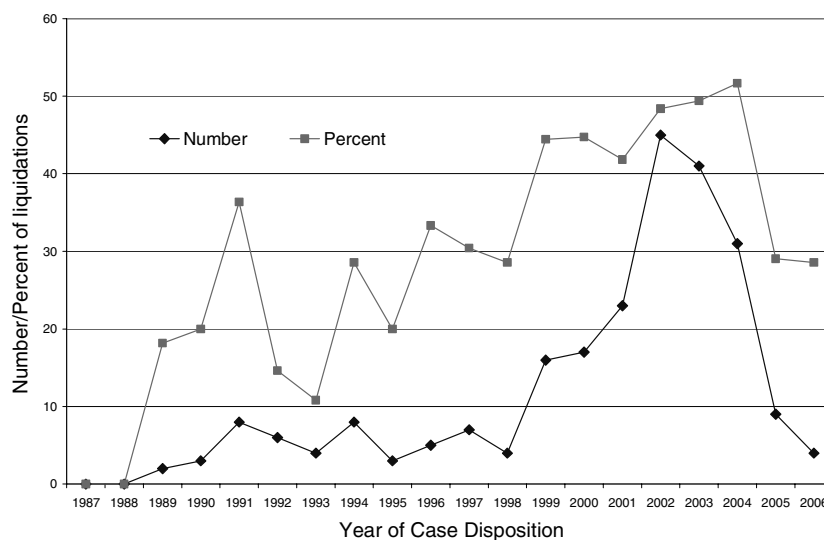
Miller & Waisman, *supra* note 148, at 156.

187. Baird, *supra* note 6, at 75.

188. A liquidation for this purpose is the Chapter 11 case of a large public company from which the debtor did not “emerge” as that term is defined in the Bankruptcy Research Database. See LoPucki, *supra* note 68. Generally speaking, a company emerges if it continues in business as a stand-alone company after confirmation of a Chapter 11 plan. A company does not emerge if it is sold pursuant to section 363 or if it is merged with a purchaser of substantial size under the plan. Lynn M. LoPucki, Protocols for the Bankruptcy Research Database (on file with the authors).

Both the number and percent increased substantially from 1988 to 2002—when Baird and Rasmussen initially declared the end of traditional reorganizations. But the number of liquidations began a steep decline the following year, and the percentage of liquidations crashed in 2005. By 2006, both the number and percentage of bankruptcy liquidations had returned to mid-1990s levels. The number and percentage of section 363 sales—*not* shown on the Figure—declined even more precipitously.¹⁸⁹

FIGURE I
NUMBER AND PERCENTAGE OF LARGE PUBLIC COMPANY CHAPTER 11
CASES ENDING IN LIQUIDATION, 1987–2006



We interpret these recent reversals as proof that increasing market efficiency was not the principal force behind the earlier upward trends. Market efficiency has suffered no recent setback that might account for the trend's sharp reversal.

Instead, we see the number and proportion of liquidating bankruptcies as the product of numerous, constantly changing factors. They include debt levels, secured debt levels, interest rates, money supply, availability of bankruptcy alternatives such as assignments for the benefit of creditors, managerial attitudes, court competition, technology, fads, and a cyclical component. In the buildup to the boom that peaked in 2001 and 2002, reorganizations increased along with liquidations, suggesting that some of the

189. The numbers of section 363 sales of large public companies fell from seventeen in 2003 to five in 2004, and one in 2005. In 2006 there were two. Lynn M. LoPucki, Bankruptcy Research Database (on file with the authors). This version of the database is larger than the online version cited in note 68 above. Because some cases filed in these years remain pending, the number liquidating the business in section 363 sales may increase.

new liquidations were companies that would not have filed either kind of case in an earlier era rather than companies that would have filed reorganizations.¹⁹⁰ Only through a regression analysis that controlled for other kinds of changes could one credibly attribute some portion of the increase in sales to supposed improvements in the market for large public companies. The simple increase in the number and proportion of bankruptcy going-concern sales prior to 2004 does not warrant the conclusion that the market for large public companies has improved.

CONCLUSION

Bankruptcy going-concern sales can provide a substitute for bankruptcy reorganization only if, for a given company, the sale can realize at least as much value as a reorganization. Otherwise, reorganization should continue in order to maximize value.

We found that, on average, reorganizations yielded 80% or 91% of book value, while sales yielded only 35% of book value. Those findings warrant the conclusion that, on average, companies sell for less than would be realized in their reorganizations. To reach a contrary conclusion, one might suppose that the best and strongest companies were reorganized while the worst and weakest were sold. But if debtors could sell their companies for as much as they would bring in reorganization, the statistically significant difference in sale and reorganization recoveries would never have arisen. Sale or reorganization would have been equally likely for each company and the pattern of sale or reorganization choices random. That the difference arose demonstrates at minimum that reorganization was sufficiently preferable to sale in high-recovery cases to warrant the cost of sorting the cases. If the reorganized companies had to be sold in some new regime, whatever reorganization advantage caused them to sort themselves under the old regime would be lost.

Our finding that the choice between sale and reorganization remains highly significant, even when we control for the financial condition of the company, suggests considerably more. It is theoretically possible that large differences in value existed among the companies studied; that those differences were not reflected in either book values or EBITDA; and that, for some reason not yet explained, those differences were highly correlated with the choice between sale and reorganization, with the weaker companies choosing sale. But barring such unlikely, unidentified differences, our findings demonstrate that large public companies were sold in bankruptcy going-concern sales for less than half what they would have been worth in reorganization.

Possible explanations for this market failure are not in short supply. The managers who decided to sell these companies rather than reorganize them

190. For example, in *Esopus Creek Value LP v. Hauf*, 913 A.2d 593 (Del. Ch. 2006), a corporation not in financial difficulty filed a bankruptcy case and sought to sell all or substantially all of its assets under section 363. The purpose of the filing was to avoid Delaware's requirement of a shareholder vote as a prerequisite to sale.

frequently had conflicts of interest. So did the investment bankers who advised the managers and solicited bids. The stalking-horse bidders received protections in the form of breakup fees and substantial minimum bid increments that discouraged other bidders. The costs of participating in the bidding were high because the companies' situations were complex and changed rapidly. Bidders other than the stalking horse had little chance of winning. As a result, only a single bidder appeared at most bankruptcy auctions. The process from the hiring of the financial advisor to the court's order approving the sale was generally leisurely, averaging just under a year. In only five of twenty-nine cases (17%) did it take less than 180 days. But once the stalking horse was selected, the cases were fast tracked. The average time from execution of the stalking horse contract to the auction was only 41 days, giving competing bidders little time to organize. Together, these findings demonstrate, and at least partially explain, the failure of going-concern sales as an alternative to reorganization.

The bankruptcy courts have an obligation to ensure that debtors in possession and their professionals act in the best interests of the debtors' estates when choosing between going-concern sale and reorganization. Our findings show that the bankruptcy courts are not fulfilling that obligation.

APPENDIX A-I: SALE/REORGANIZATION COMPARISON
SALE CASES

Debtor name	Filing date	Sale order date	Confirmation date	Days filing to sale	Days filing to confirmation	Book value at filing (millions)	Sale price (millions)	Ratio of sale price to book value (millions)	Sale type	Ratio of EBITDA to total assets
Impath Inc.	9/28/2003	4/7/2004	3/21/2005	192	540	193	237	123%	Going concern	21%
Budget Group, Inc.	7/29/2002	11/8/2002	4/20/2004	102	631	4,047	3,529	87%	Going concern	16%
Casual Male Corp.	5/18/2001	5/7/2002	11/19/2003	354	915	299	222	74%	Going concern	15%
Rouge Industries, Inc.	10/23/2003	12/22/2003	Pending	60		558	370	66%	Going concern	-8%
Coho Energy, Inc.	2/6/2002	8/14/2002	2/3/2003	189	362	351	222	63%	Not classified	11%
Einstein/Noah Bagel Corp.	4/27/2000	6/1/2001	3/27/2002	400	699	361	209	58%	Going concern	7%
National Steel Corp.	3/6/2002	4/21/2003	10/23/2003	411	596	2,308	1,050	46%	Going concern	-13%
U.S. Aggregates, Inc.	3/11/2002	5/23/2002	9/25/2002	73	198	333	141	42%	Going concern	5%
The Grand Union Co.	10/3/2000	12/8/2000	10/8/2002	66	735	750	302	40%	Going concern	10%
Polaroid Corp.	10/12/2001	7/5/2002	11/21/2003	266	770	1,810	715	40%	Going concern	11%
Phar-Mor, Inc.	9/24/2001	7/18/2002	3/12/2003	297	534	345	134	39%	Piecemeal	2%
Weirton Steel Corp.	5/19/2003	4/22/2004	8/24/2004	339	463	654	238	36%	Going concern	-5%
Asia Global Crossing Ltd.	11/17/2002	1/29/2003	Converted	73		2,280	791	35%	Going concern	-2%
Alliance Telecom, Inc.	5/14/2003	2/20/2004	6/10/2004	282	393	1,441	492	34%	Going concern	-5%
Beitlehem Steel Corp.	10/15/2001	4/22/2003	10/23/2003	554	738	4,200	1,297	31%	Going concern	3%
ANC Rental Corp.	11/13/2001	8/21/2003	4/15/2004	646	884	6,498	1,864	29%	Going concern	18%
Cone Mills Corp.	9/24/2003	2/10/2004	4/17/2005	139	571	318	90	28%	Going concern	16%
Kellstrom Industries, Inc.	2/20/2002	6/13/2002	8/5/2003	113	531	371	101	27%	Going concern	10%
divine, Inc.	2/25/2003	5/12/2003	12/8/2004	76	652	271	60	22%	Going concern	-24%
Pillowtex Corp.	7/30/2003	10/7/2003	Pending	69		548	121	22%	Piecemeal	-1%
Wherehouse Entertainment, Inc.	1/21/2003	9/29/2003	3/12/2004	251	416	228	45	20%	Going concern	5%
ABC-NACO Inc.	10/18/2001	12/11/2001	Dismissed	54		383	67	17%	Going concern	1%
Flooring America, Inc.	6/15/2000	12/15/2000	5/12/2003	183	1,061	343	59	17%	Piecemeal	-9%

Debtor name	Filing date	Sale order date	Confirmation date	Days filing to sale	Days filing to confirmation	Book value at filing (millions)	Sale price (millions)	Ratio of sale price to book value (millions)	Sale type	Ratio of EBITDA to total assets
The IT Group, Inc.	1/16/2002	4/25/2002	4/5/2004	99	810	1,345	156	12%	Going concern	11%
International Fibercom, Inc.	2/13/2002	4/16/2002	Converted	62		177	20	11%	Going concern	14%
DTI Teleport, Inc.	12/31/2001	2/13/2003	6/11/2003	409	527	393	39	10%	Going concern	
Velocity Corp.	5/30/2002	11/7/2002	7/21/2003	161	417	483	37	8%	Piecemeal	
Genuity Inc.	11/27/2002	1/24/2003	11/28/2003	58	366	1,944	137	7%	Going concern	-34%
Globalstar Capital Corp.	2/15/2002	12/2/2003	6/17/2004	655	853	573	34	6%	Going concern	-13%
Network Plus Corp.	2/5/2002	3/20/2002	Converted	43	223	433	16	4%	Going concern	
AVERAGE					611	1,141	427	35%		2%

APPENDIX A-2: SALE/REORGANIZATION COMPARISON
REORGANIZATION CASES

Debtor name	Filing date	Confirmation date	Days filing to confirmation	Book asset value at filing (millions)	Fresh start asset value (millions)	Ratio of fresh start to book asset value	Market-cap value (millions)	Ratio of market-cap to book asset value	Ratio of EBITDA to total assets
SpectraSite Holdings, Inc.	11/15/2002	1/28/2003	74	742	1,681	227%	1,645	222%	3%
Tokheim Corp.	8/28/2000	10/4/2000	37	250	446	179%	470	188%	8%
DDI Corp.	8/20/2003	12/2/2003	104	203	291	144%	549	271%	0%
Sterling Chemicals Holdings, Inc.	7/16/2001	11/20/2002	492	621	887	143%	701	113%	23%
Chart Industries Inc.	7/8/2003	9/4/2003	58	268	313	117%	339	127%	8%
Exide Technologies	4/15/2002	4/21/2004	737	2,073	2,229	108%	1,774	86%	5%
GenTek, Inc.	10/11/2002	10/7/2003	361	1,220	1,180	97%	1,224	100%	7%
Paragon Trade Brands, Inc.	1/6/1998	1/13/2000	737	377	347	92%	7,386	95%	16%
US Airways, Inc.	8/11/2002	3/18/2003	219	7,807	7,153	92%	1,749	102%	-8%
Vencor, Inc.	9/13/1999	3/16/2001	550	1,718	1,514	88%	8,354	81%	9%
NRG Energy, Inc.	5/14/2003	11/25/2003	195	10,310	8,492	82%	140	63%	4%
Vista Eyecare, Inc.	4/5/2000	5/18/2001	408	220	178	81%	445	64%	10%
Neenah Foundry Company	8/5/2003	9/26/2003	52	494	394	80%	478	62%	10%
Arch Wireless Inc.	11/9/2001	5/15/2002	187	696	540	77%	566	54%	-1%
Purina Mills, Inc.	10/28/1999	4/5/2000	160	774	575	74%	637	74%	10%
Sunterra Corp	5/31/2000	6/21/2002	751	1,058	734	69%	764	68%	12%
Superior Telecom, Inc.	3/3/2003	10/22/2003	233	862	580	67%	7,829	47%	8%
Polymer Group, Inc.	5/11/2002	1/3/2003	237	1,129	759	67%	893	74%	4%
NTL, Inc.	5/8/2002	9/5/2002	120	16,834	10,851	64%	28,670	55%	3%
Wheeling Pittsburgh Corp.	11/16/2000	6/18/2003	944	1,200	764	64%	1,544	154%	3%
Assisted Living Concepts, Inc.	10/1/2001	12/5/2001	65	331	200	60%	378	64%	0%
Conseco, Inc.	12/17/2002	9/9/2003	266	52,286	30,668	59%	568	34%	-16%
Pinnacle Holdings, Inc.	5/21/2002	10/10/2002	142	1,003	557	56%	568	34%	5%
Redback Networks Inc.	11/3/2003	12/22/2003	49	592	291	49%	568	34%	5%
AMF Bowling, Inc.	7/3/2001	2/1/2002	213	1,683	786	47%	568	34%	5%

Debtor name	Filing date	Confirmation date	Days filing to confirmation	Book asset value at filing (millions)	Fresh start asset value (millions)	Ratio of fresh start to book asset value	Market-cap value (millions)	Ratio of market-cap to book asset value	Ratio of EBITDA to total assets
Williams Communications Group	4/22/2002	9/30/2002	161	5,992	2,610	44%	2,335	39%	-2%
Sun HealthCare Group, Inc.	10/15/1999	2/6/2002	845	1,800	769	43%	679	38%	9%
XO Communications, Inc.	6/17/2002	11/15/2002	151	8,700	1,371	16%	1,250	14%	-4%
American Homestar Corp.	1/11/2001	8/16/2001	217	363	57	16%			3%
Applied Magnetics Corporation	1/7/2000	11/5/2001	668	227	27	12%			
AVERAGE			314	4,061	2,575	80%	2,863	91%	5%

APPENDIX B: REASONS DEBTORS GAVE FOR SALES

Company Name	Reason given for sale	Code	Source
ABC-NACO Inc.	"Debtors are unable to fund a restructuring of their operations"	No	Order Authorizing and Approving (1) Asset Purchase Agreement, (2) Sale of Certain of the Debtor's Assets Free and Clear of Liens, Claims, and Interests, and (3) Assumption and Assignment of Certain Executory Contracts and Unexpired Leases at 4. <i>In re</i> ABC-NACO Inc., No. 01-36484 (Bankr. N.D. Ill. Dec. 12, 2001).
Allegiance Telecom, Inc.	"[T]he Debtors have determined that the Sale Transaction would maximize the value of their estates."	Maximize	Debtors' Motion for Orders Pursuant to Sections 105(a), 363, 365 and 1146(c) of the Bankruptcy Code: (A) (i) Fixing the Time, Date and Place for the Bidding Procedures Hearing and (ii) Approving the No-Shop Provisions Set Forth in the Asset Purchase Agreement with Qwest Communications International Inc.; (B) (i) Establishing Bidding Procedures and Bid Protections in Connection with the Sale of Substantially All of the Assets of the Debtors, (ii) Approving the Form and Manner of Notices, (iii) Approving the Asset Purchase Agreement Subject to Higher and Better Offers and (iv) Settling a Sale Approval Hearing Date; and (C) (i) Approving the Sale to Qwest Communications International Inc. Free and Clear of All Liens, Claims, and Encumbrances, (ii) Authorizing the Assumption and Assignment of Certain Executory Contracts and Unexpired Leases and (iii) Granting Related Relief at 29. <i>In re</i> Allegiance Telecom, Inc., No. 03-13057 (Bankr. S.D.N.Y. Dec. 18, 2003).
ANC Rental Corp.	Debtor attempted reorganization but there was "substantial uncertainty about [its] ability to continue as a going concern" ¹ and "sale was the best way to go." ²	Weak no	¹ ANC Rental Corp., Annual Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 (Form 10-K), at 2 (May 21, 2003), available at http://www.sec.gov/Archives/edgar/data/1097523/000095014403007776/g83011e10vk.htm (last visited July 14, 2007). ² Transcript of Omnibus Sale Hearing Before Honorable Mary F. Wairath United States Bankruptcy Judge at 34, <i>In re</i> ANC Rental Corp., No 01-11200 (Bankr. D. Del. Aug. 6, 2003).
Asia Global Crossing Ltd.	"[A] stand alone business plan [would be] infeasible."	No	Order Pursuant to Sections 105(a), 363(b), (f) and (m), 365 and 1146(c) of the Bankruptcy Code and Fed. R. Bankr. P. 6004 and 6006, (1) Approving the Terms and Conditions of Agreement Providing for the Sale of Substantially All of the Debtor's Assets Free and Clear of Liens, Claims, Encumbrances and Other Interests, (2) Authorizing and Approving the Assumption and Assignment of Related Executory Contracts, (3) Authorizing Debtor to Consume the Transactions Contemplated in Sale Agreement and (4) Determining That Sale is Exempt from Stamp Taxes Under Section 1146(c) of the Bankruptcy Code at 6. <i>In re</i> Asia Global Crossing Ltd., Nos. 02-15749 (Bankr. S.D.N.Y. Jan. 29, 2003).
Bethlehem Steel Corp.	"The Sale must be approved and consummated promptly in order to preserve the viability of the business to which the Acquired Assets relate as a going concern."	No	Order Authorizing (i) Sale of Certain of the Debtors' Assets Free and Clear of Liens, Claims and Encumbrances, (ii) Assumption and Assignment of Certain Executory Contracts, and (iii) Assumption of Certain Liabilities at 6, <i>In re</i> Bethlehem Steel Corp., No. 01-15288 (Bankr. S.D.N.Y. Apr. 23 2003).

Company Name	Reason given for sale	Code	Source
Budget Group, Inc.	"The Debtors were unable to craft a stand alone reorganization plan . . ."	No	Order Under 11 U.S.C. §§ 105(a), 363(b), (f), (m) and (n), 364, 365 and 1146 (c) and Fed. R. Bankr. P. 2002, 6004, 6006 and 9014 (A) Approving the Asset and Stock Purchase Agreement with Cherokee Acquisition Corporation, (B) Authorizing (i) the Sale of Certain Debtors' Assets Free and Clear of Liens, Claims, Encumbrances and Interests, (ii) Assumption and Assignment of Certain Executory Contracts and Unexpired Leases, and (iii) Assumption of Certain Debts, (C) Determining that Such Sale is Exempt from Any Stamp, Transfer, Recording or Similar Taxes, and (D) Granting Related Relief at 7, <i>In re Budget Group, Inc.</i> , No. 02-12162 (Bankr. D. Del. Nov. 8, 2002).
Casual Male Corp.	A study of feasibility showed "stand-alone reorganization was neither in the Debtors' nor their Creditors' best interests."	Maximize	Motion of Debtors for (I) Authority to Enter into an Asset Purchase Agreement Relating to the Sale of Debtors' Businesses, (II) Approval of the Auction Procedures Related Thereto, (III) Authority to Sell All or Substantially All of the Debtors' Assets Related Thereto, (IV) Authority to Assume and Assign Executory Contracts and Unexpired Leases Related Thereto, and (V) Other Related Relief at 3, <i>In re Casual Male Corp.</i> , No. 01-41404 (Bankr. S.D.N.Y. Mar. 25, 2002).
Coho Energy, Inc.	"[T]he creation of a viable reorganized entity was not feasible . . ."	No	Disclosure Statement Regarding Debtors' Consolidated Plan of Liquidation at 8, <i>In re Coho Energy, Inc.</i> , No 02-31189 (Bankr. N.D. Tex. Nov. 15, 2002).
Cone Mills Corp.	"Cone has . . . no ability to operate independently as a going concern . . ."	No	Transcript of Omnibus Hearing Before Honorable Mary F. Walrath United States Bankruptcy Court Judge at 60, <i>In re Cone Mills Corp.</i> , No. 03-12944 (Bankr. D. Del. Feb. 25, 2004).
divine, Inc.	"Divine did not believe it had any reasonable prospect of obtaining sufficient additional capital within the time it would become necessary" to survive without selling	Weak no	Motion of Debtors with Respect to the Proposed Sale of Certain Assets for an Order (I) (A) Establishing Bidding and Auction Procedures, Including Break-Up Fee Provisions, (B) Approving Form and Manner of Notices (C), Scheduling a Hearing Date to Consider Final Approval of Sale and (D) Granting Related Relief, (II) (A) Approving Sale Free and Clear of All Liens, Claims and Encumbrances and (B) Authorizing the Assumption and Assignment of Certain Executory Contracts and Unexpired Leases at 5-6, <i>In re divine, Inc.</i> , No. 03-11472 (Bankr. D. Mass. Mar. 6, 2003).
DTI Teleport, Inc.	"The major creditors constituencies of the Debtor support this sale. . . . Efforts to fund a stand-alone plan of reorganization have been difficult in the market and such a plan will not provide as much liquidity for creditors as an asset sale."	Maximize	Order Approving Asset Purchase Agreement with CenturyTel Fiber Company II, LLC and Authorizing Sale of Assets Free and Clear of Liens, Interests, and Encumbrances, and Approving Assignment of Certain Executory Contracts and Unexpired Leases Pursuant to Sections 363 and 365 of the Bankruptcy Code at 4, <i>In re Digital Teleport, Inc.</i> , No. 01-54369 (Bankr. E.D. Mo. Feb. 13, 2003).

Company Name	Reason given for sale	Code	Source
Einstern/Noah Bagel Corp.	Debtor had "no immediately apparent means for financing the Business upon emergence from Chapter 11."	No	Order Under 11 U.S.C. §§ 105(a), 363(b), (f), (m) and (n), 365 and 1146(c), and Fed. R. Bankr. P. 2002, 6004, 6006 and 9014, Authorizing (A) Sale of Substantially All Assets of the Debtors Free and Clear of Liens, Claims, Encumbrances and Other Interests; (B) Assumption and Assignment of Certain Non-Residential Real Property Leases and Executory Contracts; (C) Assumption of Certain Debts, and (D) Related Relief at 6, <i>In re Einstern/Noah Bagel Corp.</i> , No. 00-04447 (Bankr. D. Ariz. June 1, 2001).
Flooring America, Inc.	Debtors were "unable to continue to operate the company owned stores."	No	Disclosure Statement in Connection with Joint Chapter 11 Plan of Liquidation for Flooring America, Inc. and Related Debtor Entities Proposed By: Morton P. Levine, the Chapter 11 Trustee for Flooring America, Inc. and Related Debtor Entities, and the Official Committee of Unsecured Creditors for Flooring America, Inc. and Related Debtor Entities at 9, <i>In re Flooring America, Inc.</i> , No. 00-68370 (Bankr. N.D. Ga. Dec. 31, 2002).
Genuity Inc.	Debtor could "not find any stand alone approach that would enable [it] to at least break even with free cash flow."	No	N/M: To approve notice and bidding procedures; to approve bid protections, including break-up fee; to approve proposed sale of substantially all of the Debtors' assets; to approve asset purchase agreement with Level 3 Communications, Inc. and Level 3 Communications LLC Before Hon. Prudence Carter Beatty, Bankruptcy Judge at 27-28, <i>In re Genuity Inc.</i> , Case No. 02-43558 (Bankr. S.D.N.Y. Jan. 24, 2003).
Globalstar Capital Corp.	Debtor "lack[ed] sufficient funding to achieve cash flow break even and [would] run out of cash sufficient to continue the business without compromising the claims of administrative creditors "within weeks"	No	Motion of Debtors (I) To Approve the (A) Sale of Substantially All of Their Assets Free and Clear of Interests and (B) Assumption and Assignment of Contracts and Leases in Connection Therewith, or (II) Alternatively, for Authority to Wind Down Their Operations at 8, <i>In re Globalstar Capital Corp.</i> , No. 02-10499 (Bankr. D. Del. Oct. 31, 2003).
The Grand Union Co.	Debtors had fully drawn under their prepetition lending facility, their prepetition lender refused to extend additional credit, and their prepetition lenders required a sale.	No	Application of Debtors for (I) Authority to Sell All or Substantially All of their Assets; (II) Authority to Assume and Assign Executory Contracts and Unexpired Leases; and (III) Approval of the Auction Procedures Related Thereto at 21, 22, <i>In re The Grand Union Co.</i> , No. 00-39613 (Bankr. D. N.J. Oct. 16, 2000).
Impath Inc.	A sale would result in greater value to creditors and shareholders than would any restructuring alternative	Maximize	Notice of Debtors' Motion Pursuant to Sections 105, 363(b), (f) and (m), 365, and 1146 of the Bankruptcy Code and Bankruptcy Rule 2002 for an Order (i) Scheduling Hearing to Approve Agreement with Genzyme Corporation for (A) Sale of Substantially All the Assets of Impath Inc., Impath Physician Services, Inc., and Analytical Services, a Business Unit of Impath Predictive Oncology, Inc. Free and Clear of All Liens, Claims, Encumbrances and Other Interests and (B) Assumption, Assignment and Sale of Certain Executory Contracts and Unexpired Leases, Subject to Higher or Better Offers; (ii) Approving Bidding Procedures for Submission and Acceptance of Competing Bids (Including a Break-Up Fee and Expense Reimbursement) and (iii) Approving Form and Manner of Notice at 6, <i>In re Impath Inc.</i> , No. 03-16113 (Bankr. S.D.N.Y. Mar. 1, 2004).

Company Name	Reason given for sale	Code	Source
International Fibercom, Inc.	The Debtor's "preliminary exit strategy is to sell its businesses in order to maximize value and recovery."	Maximize	Application by International Fibercom, Inc. and Certain Subsidiaries for an Order Authorizing and Approving the Employment of Gerard Klauer Matison & Co., Inc. As Financial Advisor at 2-3, <i>In re</i> International Fibercom, Inc., No. 02-02143 (Bankr. D. Ariz. Feb. 22, 2002).
The IT Group, Inc.	The examiner found Debtor's "internal reorganization strategy . . . is not viable."	No	First Report of R. Todd Neilson, as Examiner for the IT Group, Inc., et al., Pursuant to Order of Appointment Dated March 11, 2002 at 2, <i>In re</i> The IT Group, Inc., No. 02-10118 (Bankr. D. Del. Apr. 10, 2002).
Kellstrom Industries, Inc.	A sale would be the "best possible opportunity to preserve the going-concern value of the Assets."	Weak no	Debtors' Motion for Order Approving (i) Sale of Certain of the Debtors' Assets Free and Clear of All Liens, Claims and Encumbrances, (ii) Assumption and Assignment of Certain Executory Contracts and Unexpired Leases, and (iii) Exemption of Sale from Stamp of Similar Taxes at 17, <i>In re</i> Kellstrom Industries, Inc., No. 02-10536 (Bankr. D. Del. Feb. 22, 2002).
National Steel Corp.	A sale was necessary to (1) overcome legacy and labor costs, (2) maximize the value of Debtors' assets, and (3) preserve Debtors' operations on a going-concern basis.	Maximize	Motion for Orders Pursuant to 11 U.S.C. §§ 105(a), 363, 365, 1145, and 1146(c) and Fed. R. Bankr. P. 2002. 6004, 6006 and 9014 (A) Authorizing and Approving (i) the Sale of Certain of the Debtors' Assets Free and Clear of Liens, Claims and Encumbrances, (ii) the Assumption and Assignment of Certain Executory Contracts and Unexpired Leases, (iii) the Assumption of Certain Liabilities, (iv) the Form and Manner of Sale Notices, and (v) Certain Sale Procedures, Including the Payment of a Break-Up Fee, and (B) Ordering That (i) the Securities Received by the Debtors Pursuant to the Sale are Exempt from Registration Under 11 U.S.C. § 1145 and (ii) the Sale is Exempt from Certain Taxes Pursuant to 11 U.S.C. § 1146 at 7, <i>In re</i> National Steel Corp., No. 02-08699 (Bankr. N.D. Ill. Jan. 9, 2003).
Network Plus Corp.	Debtors' did not have enough money to continue operating and filed for sale to protect its customers, maintain jobs, and maximize value.	No	Transcript of First Day Motions Before Honorable Peter J. Walsh United States Bankruptcy Judge at 9-10, <i>In re</i> Network Plus Corp., No. 02-10341 (Bankr. D. Del. Feb. 23, 2002).
Phar-Mor, Inc.	"The Debtors suffered a severe restriction of trade credit that prevented inventory replenishment. A sale was in "the best interests of all creditors and shareholders."	Weak no	Disclosure Statement Pursuant to Section 1125 of the Bankruptcy Code for Joint Plan Dated December 20, 2002 Proposed Jointly by the Debtors and the Official Committee of Unsecured Creditors at 21, <i>In re</i> Phar-Mor, Inc., No. 01-44007 (Bankr. N.D. Ohio Dec 20, 2002).

Company Name	Reason given for sale	Code	Source
Pillowtex Corp.	"[T]he Debtors and their advisors have been unable to locate . . . a party that would be willing to enter into a transaction resulting in the continued operation of the Debtors' business on a going-forward basis, and the Debtors have determined that in any event they lack sufficient financing to continue marketing their business operations as going concerns."	Weak no	Declaration of Michael R. Harmon in Support of Chapter 11 Petitions and First Day Motions at 7, <i>In re Pillowtex Corp.</i> , No. 03-12339 (Bankr. D. Del. July 30, 2003).
Polaroid Corp.	"The testimony is undisputed . . . that the revenues of this company are falling off and . . . [the company is like a] melting ice cube."	No	Transcript of Sale Hearing Before Honorable Peter J. Walsh United States Chief Bankruptcy Judge at 177, <i>In re Polaroid Corp.</i> , No. 01-10864 (Bankr. D. Del. July 3, 2002).
Rouge Industries, Inc.	"A sale of [Debtors'] Assets and Businesses was the option most likely to yield the most value for the Debtors' stakeholders."	Maximize	Debtor's Expedited Motion to: (I)(A) Establish Bidding Procedures in Connection With Sale of Substantially All of the Assets of the Debtors, Including Certain Bidding Incentives (B) Approve the Form and Manner of Notices (C) Approve the Form of the Purchase Agreement, (D) Schedule a Hearing to Consider the Sale, and (E) Grant Related Relief; (II) Approve the Sale of Substantially All of the Assets of the Debtors Free and Clear of Liens, Claims and Encumbrances to the Successful Bidder; (III) Authorize the Assumption and Assignment of Certain Executory Contracts and Leases; (IV) Authorize the Assumption of Certain Liabilities and (V) Approve Procedures for the Rejection of Certain Executory Contracts and Leases at 6, <i>In re Rouge Industries, Inc.</i> , No. 03-13272 (Bankr. D. Del. Nov. 6, 2003).
U.S. Aggregates, Inc.	"[A] going concern divestiture of the Acquired Assets would yield substantially more than would a piecemeal liquidation," and "[t]he Debtors and the Lenders were unable to reach such an agreement on a chapter 11 reorganization plan as the Lenders would not support a plan that provided for other creditor constituencies."	No	Motion for Order Pursuant to Sections 105(a), 363, 365 and 1146(c) of the Bankruptcy Code (A) Approving and Confirming the Results of the Auction; (B) Authorizing the Sale of Substantially All of the Assets of U.S. Aggregates, Inc. and Certain Subsidiaries, Free and Clear of All Liens, Claims and Encumbrances; (C) Approving the Asset Purchase Agreement with Oldcastle Materials, Inc.; (D) Authorizing the Rejection, and Assumption and Assignment of Certain Executory Contracts and Unexpired Leases and Certain Procedures Allowing Assignment to Third Parties; and (E) Authorizing the Debtors to Distribute the Proceeds of the APA to. [sic] The DIP Lenders and Lenders at 8-9, <i>In re U.S. Aggregates, Inc.</i> , No. 02-50656 (Bankr. D. Nev. Apr. 17, 2002).
Velocita Corp.	It was "unlikely that Debtors would be able to reorganize" because Debtors were "unable to obtain sufficient postpetition financing."	No	Supplemental Motion of Debtors for (I) Authority to Sell All or Substantially All of their Assets and (II) Authority to Assume and Assign Executory Contracts and Unexpired Leases at 9, <i>In re Velocita Corp.</i> , No. 02-38894 (Bankr. D. N.J. Oct. 31, 2002).

Company Name	Reason given for sale	Code	Source
Weirton Steel Corp.	"The financial status of Weirton on a stand alone basis would remain precarious at best."	Weak no	Debtor's Motion for an Order Pursuant to Sections 105, 363, 365 and 1146 of the Bankruptcy Code and Bankruptcy Rules 2002, 6004, 6006, and 9014; (I) Scheduling Hearing to Approve Asset Purchase Agreement with ISG Weirton Inc., and International Steel Group Inc. Subject to Higher or Better Offers; (II) Approving Bidding Procedures for Submission and Acceptance of Any Competing Bids and Related Bid Protections (Including Break-Up Fee and Expense Reimbursement); (III) Approving the Form and Manner of Sale Notice; (IV) Approving and Authorizing (A) the Sale of Substantially All Assets, Free and Clear of Liens, Claims, Encumbrances and Other Interests, and (B) the Assumption, Assignment and Sale of Certain Executory Contracts and Unexpired Leases at 12, <i>In re Weirton Steel Corp.</i> , No. 03-01802 (Bankr. N.D. W. Va. Feb. 26, 2004).
Wherehouse Entertainment, Inc.	A sale was "the best manner in which to maximize value to creditors, and [was] a superior alternative to pursuing a standalone plan or reorganization."	Maximize	Corrected Motion of Debtors and Debtors in Possession for Entry of an Order Pursuant to Bankruptcy Code Sections 105, 363 and 365 and Federal Rules of Bankruptcy Procedure 6004 and 6006 (A) Authorizing the Sale of Substantially All of the Assets of the Debtors, (B) Approving Procedures for the Assumption and Assignment of Unexpired Leases in Connection Therewith, (C) Extending the Time to Assume or Reject Unexpired Leases, (D) Approving Procedures for the Rejection of Unexpired Leases and Authorizing the Debtors to Conduct Store Closing Sales at Certain Store Locations and (E) Granting Related Relief at 14, <i>In re Wherehouse Entertainment, Inc.</i> , No. 03-10224 (Bankr. D. Del. Sep. 20, 2003).

APPENDIX C-1: SALE CHARACTERISTICS

Debtor name	Sale type	Sale explanation	Stalking horse price (millions)	Sale price (millions)	Percent increase over stalking horse price	Percent of sale price paid in cash	Ratio of sale price to book asset value	Ratio of breakup charges to sale price	Ratio of initial bid increment to sale price	Number of bidders at auction
Impath Inc.	Going concern	Maximize	237	237	0%	100%	123%	2.6%	3.4%	1
Budget Group, Inc.	Going concern	Not viable	3,510	3,529	1%	3%	87%	0.4%	0.1%	1
Casual Male Corp.	Going concern	Maximize	179	222	24%	81%	74%	1.3%	1.9%	2
Rouge Industries, Inc.	Going concern	Maximize	310	370	20%	77%	66%	1.8%	2.4%	2
Coho Energy, Inc.	Not a business	Not viable		222		100%	63%	0.0%		5
Enstein/Noah Bagel Corp.	Going concern	Not viable	168	209	25%	68%	58%	2.4%	3.6%	2
National Steel Corp.	Going concern	Maximize	1,125	1,050	-7%	81%	46%	1.4%	1.5%	2
U.S. Aggregates, Inc.	Going concern	Not viable	141	141	0%	100%	42%	4.3%	0.1%	1
The Grand Union Co.	Going concern	Not viable	302	302	0%	100%	40%	3.4%	7.0%	1
Polaroid Corp.	Going concern	Not viable	465	715	54%	31%	40%	0.7%	0.2%	1
Phar-Mor, Inc.	Piecemeal	Not viable		134		100%	39%	0.0%		2
Weirton Steel Corp.	Going concern	Weak not	255	238	-7%	64%	36%	2.2%	2.4%	2
Asia Global Crossing Ltd.	Going concern	Not viable	782	791	1%	11%	35%	1.5%	2.2%	1
Allegiance Telecom, Inc.	Going concern	Maximize	390	492	26%	65%	34%	2.6%	5.4%	2
Bethlehem Steel Corp.	Going concern	Not viable	1,377	1,297	-6%	67%	31%	2.1%	3.4%	1
ANC Rental Corp	Going concern	Weak not	1,860	1,864	0%	13%	29%	0.6%	0.1%	3
Cone Mills Corp.	Going concern	Not viable	90	90	0%	51%	28%	2.8%	3.1%	1
Kellstrom Industries, Inc.	Going concern	Weak not	96	101	5%	100%	27%	3.3%	4.5%	1
divine, Inc.	Going concern	Weak not	38	60	58%	81%	22%	1.9%	3.3%	1
Pillowtex Corp.	Piecemeal	Weak not	56	121	116%	100%	22%	1.9%	5.8%	3
Wherhouse Entertainment, Inc.	Going concern	Maximize		45		89%	20%	1.9%		2
ABC-NACO Inc.	Going concern	Not viable	78	67	-14%	99%	17%	3.4%	2.9%	1
Flooring America, Inc.	Piecemeal	Not viable		59		100%	17%			1

APPENDIX C-2: SALE CHARACTERISTICS

Debtor name	Stalking horse type	Buyer type	Sale benefit to CEO	Days from retention of financial advisor to filing	Days from retention of financial advisor to sale order	Days from stalking horse contract to order fixing bid procedure	Days from order fixing bid procedure to auction	Court city
Impath Inc.	Strategic	Strategic		19	211	27	1	New York
Budget Group, Inc.	Strategic	Strategic		250	352	19	42	Wilmington, Del.
Casual Male Corp.	Financial	Financial	Severance	60	414	14	33	New York
Rouge Industries, Inc.	Strategic	Strategic	Job	126	186	12	17	Wilmington, Del.
Coho Energy, Inc.	No stalking horse	Strategic		82	271		30	Dallas
Einstein/Noah Bagel Corp.	Financial	Strategic	Equity, severance	0	400	23	88	Phoenix
National Steel Corp.	Strategic	Strategic		62	473	7	69	Chicago
U.S. Aggregates, Inc.	Strategic	Strategic		460	533	32	36	Reno, Nev.
The Grand Union Co.	Strategic	Strategic		40	106	-13	17	Newark, N.J.
Polaroid Corp.	Financial	Financial	Job, equity	93	359	22	47	Wilmington, Del.
Phar-Mor, Inc.	No stalking horse	Financial	Severance, buyer	23	320		19	Youngstown, Ohio
Weirton Steel Corp.	Strategic	Strategic		32	371	12	35	Wheeling, W. Va.
Asia Global Crossing Ltd.	Strategic	Strategic		348	421	23	30	New York
Alliance Telecom, Inc.	Strategic	Strategic	Consulting	206	488	28	28	New York
Bethlehem Steel Corp.	Strategic	Strategic		122	676	15	20	New York
ANC Rental Corp.	Financial	Financial	Consulting	-44	602	14	29	Wilmington, Del.
Cone Mills Corp.	Strategic	Strategic	Job	586	725	17	78	Wilmington, Del.
Kelstrom Industries, Inc.	Financial	Financial		342	455	47	37	Wilmington, Del.
divine, Inc.	Financial	Both		25	101	7	13	Boston
Pillowtex Corp.	Financial	Financial		257	326	30	36	Wilmington, Del.
Wherehouse Entertainment, Inc.	Strategic	Strategic		28	279	-39	32	Wilmington, Del.
ABC-NACO Inc.	Financial	Financial	Severance	5	59	-29	30	Chicago
Flooring America, Inc.	Financial	Financial		128	311	34	1	Atlanta
The IT Group, Inc.	Strategic	Strategic		33	132	64	21	Wilmington, Del.
International Fibercom, Inc.	No auction	Financial		90	152			Phoenix

Debtor name	Stalking horse type	Buyer type	Sale benefit to CEO	Days from retention of financial advisor to filing	Days from retention of financial advisor to sale order	Days from stalking horse contract to order fixing bid procedure	Days from order fixing bid procedure to auction	Court city
DTI Teleport, Inc.	Strategic	Strategic		257	418	3	17	St. Louis
Velocita Corp.	Strategic	Strategic				-36	21	Newark, N.J.
Genuity Inc.	Strategic	Strategic	Job	125	183	19	30	New York
Globalstar Capital Corp.	Financial	Financial	Consulting	-53	602	3	0	Wilmington, Del.
Network Plus Corp.	No stalking horse	Strategic		204	247		15	Wilmington, Del.
AVERAGE				135	351	14	30	

