

BANKRUPTCY VÉRITÉ

Lynn M. LoPucki*
Joseph W. Doherty**

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I didn't do it, no one saw me do it, there's no way you can prove anything!

—Bart Simpson¹

I. INTRODUCTION

In the empirical study we report in *Bankruptcy Fire Sales*,² we compared the recoveries from the going-concern bankruptcy sales of twenty-five large, public companies with the recoveries from the bankruptcy reorganizations of thirty large, public companies. We found that, controlling for the asset size of

* Security Pacific Bank Professor of Law, UCLA School of Law, and Visiting Professor of Law, Washington University School of Law. lopucki@law.ucla.edu.

** Director, Empirical Research Group, UCLA School of Law; Ph.D. (Political Science), UCLA. We thank Iman Anabtawi and Ed Bagdasarian, Managing Director, Barrington Associates, for assistance in formulating our reply and Frances Foster for comments on an earlier draft.

1. *The Simpsons: Moaning Lisa* (Fox television broadcast Feb. 11, 1990) (transcript available at <http://www.snpp.com/episodes/7G06.html> (last visited Nov. 3, 2007)).

2. Lynn M. LoPucki & Joseph W. Doherty, *Bankruptcy Fire Sales*, 106 MICH. L. REV. 1 (2007).

the company and its presale or pre-reorganization earnings (“EBITDA”), reorganization recoveries were more than double sale recoveries.³

We are honored that Professor James J. White has chosen to comment on our study. White is an eloquent defender of the status quo, pulls no punches, and always has something interesting to say. *Bankruptcy Noir*⁴ is no exception.

In his response, White reconstructs portions of our study using some of our data and some data he gathered. He accepts our calculations of the sale prices but otherwise values the companies using a method—Total Enterprise Value—commonly used by investment bankers in valuing companies for takeover. By his use of this method, White has pushed us to situate our findings within the investment bankers’ frame of reference.

White’s findings conflict with ours. Examining the same set of companies, White finds no statistically significant difference between sale prices and reorganization values.⁵ The conflict, however, results entirely from four errors in White’s method. First, White values grossly insolvent companies at filing based on their debts rather than their assets, thus creating billions of dollars in phantom assets. (By phantom assets we mean assets the companies themselves did not claim existed.) Second, in comparing the sale and reorganization recoveries, White deducts current liabilities from the reorganized company recoveries without making the corresponding deduction from the sold company recoveries. Third, after deducting those current liabilities—which are a proxy for cash and other current assets—White deducts the cash a second time. Here too, he makes the deduction from the reorganization recoveries, but not from the sale recoveries. White’s fourth error was to drop from his study the seven telecom sale cases with the lowest recoveries. He attempts to justify their removal on the ground that they were unreorganizable. But he retains three higher-recovery telecom sale cases in the study; and he provides no evidence that the companies dropped could not have been reorganized.

Part I first compares the valuation methods White used with the ones we used and then explains the first three of White’s errors. Part II analyzes White’s removal of “the telecoms” from his sample and responds to his argument that we should have removed them from ours.

In his response, White argued that even if our findings were correct, they do not justify our accusations of systemic corruption. In Part III of this reply, we explain why they do. Ultimately, we conclude that White’s study is fatally flawed, that his exclusion of the lowest recovery telecom sale cases is unjustified, and that our corruption-based explanation for the disastrous sale recoveries remains the best available.

3. *Id.* at 24.

4. James J. White, *Bankruptcy Noir*, 106 MICH. L. REV. 691 (2007).

5. *Id.* at 701 n.24 (“Although the change is not statistically significant, comparison of returns in reorganizations and sales suggests that sales return a larger percentage of entering TEV than reorganizations do.”).

I. THE COMPETING VALUATION METHODS

To understand White's valuation errors, one must first understand the valuation methods used by White and ourselves.

A. *Common Aspects of Methodology*

Similarities dominate. Both studies examine the same sample of sixty cases.⁶ Both employ the same basic approach to comparing the sale and reorganization processes. That approach is to compute a recovery from each bankruptcy. In sale cases, the recovery is the sale price; in reorganizations, the recovery is the surviving firm's value based on market capitalization. Both studies also determine the companies' values at filing, and calculate the ratio of the recoveries to the values at filing.⁷ Both evaluate the sale process by comparing the average ratio of sale recovery to value at filing with the average ratio of reorganization recovery to value at filing. Table 1 shows the common structure of the two studies:

TABLE I
COMMON ASPECTS OF VALUATION METHODS

Sale Recovery	Reorganization Recovery
Sale Price	Firm value at confirmation
Firm value at filing	Firm value at filing

To investigate further, both studies log all four values to reduce the influence of outliers and use regression analysis to control for differences in the companies' earnings.⁸ Both evaluate the sale process by noting whether the sale recovery ratios are statistically significantly lower than the reorganization recovery ratios.⁹

B. *Our Valuation Method*

For the firm's value at filing, we used the "Total Assets" reported by the debtor on Exhibit A of the bankruptcy petition.¹⁰

6. White states that he "compared the returns of the thirty reorganized firms with the returns of the 363 sales firms after substituting TEV at date of filing for book asset value and then running the LoPucki comparison." *Id.* at 9.

7. White describes his comparison as "Sales: Ratio of sale price to TEV[,] Reorg: Ratio of Exit TEV to Filing TEV." *Id.* at 714 app. A-4.

8. White describes his findings as "from regression model on the logged ratio." *Id.* at 713 app. A-3.

9. White states that "[a]fter the TEV is recalculated to remove non-interest bearing debt from the evaluation formula . . . [t]he sale/no sale variable does not have statistical significance even at the 90% confidence level." *Id.* at 8-9.

10. LoPucki & Doherty, *supra* note 2, at 19.

TABLE 2
LOPUCKI-DOHERTY VALUATION METHOD

Sale Recovery	Reorganization Recovery
Sale Price	Market capitalization at confirmation
—————	—————
Book asset value at filing	Book asset value at filing

We calculated the Market Capitalization by adding the face amount of the emerging company's debt to the market value of the emerging company's equity.¹¹ We determined the Sale Price by totaling the consideration paid by the purchaser, whether in the form of cash, the assumption of debt, or the delivery of securities.¹²

Because our purpose was to isolate that portion of the recovery attributable to the assets existing at filing, we adjusted both the Sale Prices and the Market Capitalizations for substantial changes during the bankruptcy case. For example, if the company borrowed money from a DIP lender after filing and continued to owe it at the time of sale or reorganization, we deducted it from the sale or reorganization value. If the company distributed cash to creditors prior to the sale or reorganization, we counted that cash as part of the recovery.¹³

C. White's Valuation Method

White used Total Enterprise Values ("TEV") as the values of all companies at filing and for the reorganized companies at confirmation.¹⁴ For the Sale Price, he used the Sale Price variable we calculated.¹⁵ A comparison of Tables 2 and 3 shows White's substitutions:

TABLE 3
WHITE VALUATION METHOD

Sale Recovery	Reorganization Recovery
Sale Price	Total enterprise value at confirmation
—————	—————
Total enterprise value at filing	Total enterprise value at filing

11. We also calculated an alternative value based on the company's "fresh-start" accounting value generated during the bankruptcy case, but we discuss only the market capitalization value here. *Id.* at 22.

12. *Id.* at 19–20.

13. *E.g., id.* at 21.

14. White, *supra* note 4, at 714 app. A-4 ("Reorg: Ratio of Exit TEV to Filing TEV").

15. White, *supra* note 4, at 715 n.

White defines TEV as equaling “the face value . . . of interest-bearing debt, and the market value of common stock.”¹⁶ White provides no operational definition of “interest-bearing debt” in *Bankruptcy Noir* and does not explain the source of his figures. But a comparison of some of his data to the companies’ financial statements indicates that he used the amount of long-term debt shown on the companies’ balance sheets.¹⁷

D. Three Errors in White’s Valuation Method

TEV based on the book value of long-term debt is, in general, an accepted method for valuing solvent companies, including companies emerging from bankruptcy. White has, however, used it improperly in at least two respects. First, he used it to value insolvent companies. Second, he compared TEVs that value only the core assets of reorganized companies to Sale Prices that value both the core and non-core assets of sold companies.

1. The Overvaluation of Reorganizing Companies at Filing

White uses the amount of long-term debt shown on the balance sheet plus the market value of equity to value the companies at filing.¹⁸ White provides no examples of scholars or investment bankers who have used balance sheet debt to value insolvent companies and no authorities approving this aspect of his method. His use is erroneous. In discussing enterprise valuation, Stephen Moyer states:

Debt typically should be valued as shown on the GAAP balance sheet. There are at least three exceptions to this rule. . . . Finally . . . if the firm is in financial distress, then it may be more appropriate to value the debt using market prices as opposed to its balance sheet value. Thus, if there is \$200 in debt but it is trading at 40, then it may be more appropriate to value it at \$80 instead of \$200.¹⁹

To see why balance sheet debt should not be used, assume that a company owes long-term debt of \$1 billion, but has no assets whatsoever. White’s method would value the nonexistent assets at \$1 billion.

White did essentially that in his valuation of Arch Wireless. On the last financial statement Arch Wireless issued before filing, the company listed assets of \$696 million and long-term liabilities of \$1,726 million.²⁰ (White

16. *Id.* at 696 (quoting Stuart C. Gilson et al., *Valuation of Bankrupt Firms*, 13 REV. FIN. STUD. 43, 71 (2000)).

17. In addition, White prefaces his regression results with the statement: “Removing the *current liabilities* from the LoPucki and Doherty calculation and the Gilson valuation gets the regression results . . .” *Id.* at 699 n.20 (emphasis added).

18. White never directly states the formula he uses to compute TEV. Our characterization here is based on the formulas in spreadsheets White furnished to us.

19. STEPHEN G. MOYER, DISTRESSED DEBT ANALYSIS 106–07 (2005).

20. Arch Wireless, Inc., Quarterly Report (Form 10-Q), at 3 (Nov. 14, 2001) [hereinafter Arch Wireless Quarterly Report] (showing “Current maturities of long-term debt” of \$1,662,805,000 and “Other long-term liabilities” of \$63,410,000).

takes his long-term liabilities figure, \$1.802 billion from a different source which he does not identify, but the difference is immaterial for current purposes.)²¹ Despite the firm's balance sheet negative equity of \$1.106 billion (using White's long-term debt figure), White included the entire amount of Arch Wireless' long-term liabilities in his valuation.²² The effect was to create more than \$1 billion in phantom assets.

Compounding that error, White added another \$71 million—the trading value of Arch Wireless's stock.²³ How could the stock of such a grossly insolvent company trade for \$71 million at the time of bankruptcy? The answer is that it didn't. White used the last trading value available prior to filing—that value was as of a date seven months prior to filing²⁴—apparently before the market knew the depth of Arch Wireless's financial distress. Thus, White valued Arch Wireless—a company that claimed assets of only \$696 million²⁵—at \$1.802 billion plus \$71 million, for a total of \$1.873 billion.²⁶

Arch Wireless was not an isolated case. The proportion of TEV that was phantom assets—defined as White's TEV value minus the assets claimed by the companies on Exhibit A at filing—was 63% in Arch Wireless. It was 71% in SpectraSite Holdings, 48% in Tokheim, 38% in Sterling Chemicals, and 37% in DDI.²⁷

White erred by assuming that if a company has long-term debt, it has assets of a value equal to that debt. That error distorted the values of all companies with total debt exceeding assets, not just those with long-term debt exceeding assets. Because White does not report the current liabilities he deducted from assets to calculate his TEVs, his data do not show precisely the number of values distorted. However, the average ratio of current liabilities to assets for large public companies during the period 2000–2004 was 23%.²⁸ If the current liabilities White deducted were of that magnitude,

21. White, *supra* note 4, at 715 app. B (containing a column titled “Total Debt at Filing”). By that title, White must mean “Long-term Debt at Filing,” because he adds that number to the column “Market Value (if reported)” to produce “TEV at Filing date.” *Id.*

22. *Id.* (containing a column titled “TEV at filing date” and showing TEV at filing date for Arch Wireless, Inc. to be \$1,873.17 million).

23. *Id.*

24. *Id.* (indicating, in the column titled “Market Value (if reported),” 71.1 for Arch Wireless, Inc.).

25. Arch Wireless Quarterly Report, *supra* note 20, at 3 (showing total assets of \$696,449,000).

26. White, *supra* note 4, at 711 app. A-1 (indicating, in the column titled “TEV at filing date,” \$1,873,170,000 for Arch Wireless, Inc.).

27. *See infra* Appendix.

28. We calculated this average by downloading the current liabilities Total (Data Item 5) and Assets Total (Data Item 6) from Compustat for all companies with assets greater than \$220 million, computing the ratio of current liabilities to assets for each company, and then averaging the ratios.

his deductions created phantom assets in nine more reorganization cases, for a total of fourteen.²⁹

Like Bart Simpson, White defends at three levels. First he claims that despite its obvious shortcoming, “face value [of debt is] the best alternative.”³⁰ Second, he claims it “does not distort the findings” because he used it for both the sold and reorganized companies.³¹ Third, he claims that even if it did distort his findings, the distortion wasn’t in his favor because “the 363 firms are a different and weaker subset of firms,” so “use of debt’s face value exaggerates [the sold firms’] entering TEV (and so reduces the apparent return from their 363 sales) more than the use of face value exaggerates the apparent TEV of the reorganized firms.”³²

White is wrong at each level. First, White had two better alternatives for valuing the companies at filing. He could have used total assets reported by the companies at filing (as we did) or he could have used TEV, ignoring debt that exceeded the companies’ reported assets. Neither method would have generated phantom assets.

Second, the mere fact that White applied his erroneous valuation standard to both sale and reorganization cases does not prevent it from distorting findings. Even if the distortions in sale cases precisely matched the distortions in reorganization cases, the distortions would still have added noise to the data. Finding statistical significance is more difficult in noisy data than in non-noisy but otherwise identical data. Thus, White’s error may have contributed to the finding White trumpets most—the lack of statistically significant difference between sale and reorganization recoveries when using his data.³³

Third, White offers no support for his hypothesis that “363 firms are a different and weaker subset of firms” such that TEV would exaggerate their values and so understate their recoveries.³⁴ The data suggest precisely the opposite. In reorganization cases, White’s TEV averaged 93% of total assets.³⁵ In sale cases, it averaged 79% of total assets.³⁶ Thus the effect of using TEV was to minimize the values of sold firms and so to exaggerate sale recoveries.

29. The phantom equity calculation for those nine cases were Polymer Group (-2%), NRG Energy (-6%), Applied Magnetics (-6%), Williams Communications (-7%), Pinnacle Holdings (-11%), Neenah Foundry (-11%), GenTek (-12%), Redback Networks (-15%), and Sun HealthCare Group (-18%).

30. White, *supra* note 4, at 695 n.11.

31. *Id.*

32. *Id.*

33. *Id.* at 699 (“The decision to sell or to reorganize made no difference in the potential recovery—the difference between the returns was not statistically significant.”).

We assume that the perturbations in the data introduced by these factors are randomly distributed. But whether they are random or quasi-random, the effect will be to diminish the power of statistical tests to detect the underlying relationships.

34. *Id.* at 695 n.11.

35. *See infra* Appendix col. (4).

36. White, *supra* note 4, at 715 app B.

White's use of TEV to value the companies *at confirmation* was not in itself an error. Because the excess debt had been discharged, the emerging companies were generally solvent. Thus, the method probably generated no significant phantom asset value. White's error was to compare his accurate TEVs at confirmation to his inflated TEVs at filing. This comparison understated reorganization recoveries by treating reorganization's principal benefit—elimination of debt overhang—as if it were the destruction of value. In fact, the value White reported destroyed was generated by his own error.

2. *The Deduction of Current Liabilities from Reorganization Recoveries*

Both our method and White's valued the reorganized companies using the right side of the balance sheet. The logic is that of the balance sheet itself. By definition, liabilities plus equity equal assets. Thus, one can calculate assets from liabilities and equity. Like White, we also substituted market equity value for book equity value in that calculation.

Our method differs from White's in that his excludes current liabilities from the right side of the balance sheet,³⁷ thus deducting them from his valuation of assets. We consider the exclusion erroneous. White explains it as follows:

Why is non-interest-bearing liability (such as accounts payable) excluded in estimating the firm's enterprise value? It is because holders of trade payables are not in any sense "investors or owners." Remember, we are trying to determine the value of the firm by totaling certain amounts that may be only proxies for value; we are trying to determine what a prospective buyer would pay to the firm's "owners" to acquire the entire firm.³⁸

The theoretical problem with this explanation is that we are not "trying to determine what a prospective buyer would pay to the firm's 'owners' to acquire the entire firm." We are trying to compute reorganization values to compare with sale values. White chose to use our Sale Prices on one side of the comparison. Those Sale Prices are not the net amounts paid to the firm's "owners," but the total amounts paid to *all creditors* and owners—including creditors classified as current liabilities.³⁹ An additional practical problem with White's explanation is that he deducted all short-term debt, not just the trade payables his explanation purports to support.

White acknowledges that he is comparing Sale Prices that include the value paid to short-term creditors with TEV values that exclude the value paid to short-term creditors.

37. See *supra* note 17 and accompanying text.

38. White, *supra* note 4, at 696.

39. LoPucki & Doherty, *supra* note 2, at 20 ("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.").

In their reply, Messrs. LoPucki and Doherty complain that I include all payments, even those to trade creditors, as part of the payment in a 363 sale, (and so treat all of the amounts paid as a return in such a sale), but that I do not add non-interest-bearing debt to stock equity and interest-bearing debt to value reorganized companies. They correctly describe what I have done but are otherwise wrong.⁴⁰

This is his explanation:

What goes to the creditors in a 363 sale is the price. What goes to the creditors in reorganization is the firm. To say that one must add non-interest-bearing debt here because creditors holding non-interest-bearing debt might receive a payment in liquidation is a nonsequitur. Deriving the value of an enterprise by adding the value of equity and the value of certain of its debt is a way to approximate the value of the enterprise, not a way to measure the value that goes to any particular claimant.⁴¹

To see the error in White's view, consider the example of a company with 30 in short-term debt, 70 in long-term debt, and no equity. If this company sold its business and distributed cash proceeds of 30 to short-term debt holders and cash proceeds of 70 to long-term debt holders, White's method—using our Sale Price—would value the company at 100. But if this company reorganized and distributed shares worth 30 to short-term debt holders and shares worth 70 to long-term debt holders, White's method would value the company at 70. He would ignore the shares worth 30 because they represent short-term debt. The company in this example produced precisely the same value in sale and reorganization, but White's method places a higher value on it in sale than in reorganization.

This is not to say that TEV is not a useful concept. The exclusion of current liabilities from *both* sides of a value comparison is sometimes helpful, particularly where current assets and current liabilities are fluctuating rapidly in tandem. But if one seeks to determine the total value of a company's assets, one should not exclude short-term debt. The leading authority on corporate finance makes this point with respect to the calculation of weighted average cost of capital ("WACC"):

What about short-term debt? Many companies consider only long-term financing when calculating WACC. They leave out the cost of short-term debt. In principle this is incorrect. The lenders who hold short-term debt are investors who can claim their share of operating earnings. A company that ignores this claim will misstate the required return on capital investments.⁴²

White uses a later portion of this same discussion in the Brealey and Myers's book to claim that authority "endorses the omission of current

40. White, *supra* note 4, at 697.

41. *Id.*

42. RICHARD A. BREALEY & STEWART C. MYERS, PRINCIPLES OF CORPORATE FINANCE 513 (8th ed. 2006).

non-interest-bearing liabilities in finding firm value.”⁴³ Brealey and Myers’s discussion, however, isn’t about “finding firm value.” It is about finding the firm’s Weighted Average Cost of Capital.

White’s method erroneously ignored reorganization value in an amount equal to current liabilities. The effect on his findings was substantial. Arch Wireless, for example, emerged from bankruptcy with \$149 million in current liabilities.⁴⁴ That amount was 36% of the company’s total debt. By ignoring those liabilities, White’s TEV calculation understated Arch Wireless’s reorganization value by \$149 million or 21%.⁴⁵

Arch Wireless was typical in this respect. White’s values for reorganized companies were on average 40% lower than ours.⁴⁶

White’s error in using TEV at confirmation adds to, rather than duplicates, his error in using TEV at filing. To illustrate, White valued Arch Wireless at \$1,873 billion at filing and \$300 million at confirmation, for a recovery of 16%. We valued Arch Wireless at \$696 million at filing and \$445 million at confirmation for a reorganization recovery of 64%.

In defense of using TEV, White points out that if a company borrows money to purchase inventory the total asset value of the company would increase by the amount of the inventory.⁴⁷ If such a loan were repaid, the total asset value of the company would decline by the amount of the assets so applied.⁴⁸ White charges that our method would treat such illusory increases and declines in company value as real.⁴⁹ What he misses is that purchases of assets using long-term debt and repayments of long-term debts create the same illusory increases and declines. We anticipated both effects and specifically adjusted both our sale and reorganization values to take account of such changes.⁵⁰ White does not make such adjustments in his application of TEV.

43. White, *supra* note 4, at 696.

44. Arch Wireless, Inc., Annual Report (Form 10-K), at F-16 (Dec. 31, 2002).

45. The \$149 million in current liabilities divided by Arch Wireless’s \$696 million in assets is 0.214.

46. See *infra* Appendix.

47. White, *supra* note 4, at 698 (“Ignoring current liabilities, both have enterprise values of \$10 million at time 1; adding current liabilities, as LoPucki and Doherty have done, would show each to be worth \$11 million at time 1.”).

48. *Id.* (“To further see the perversity inherent in the LoPucki/Doherty model, assume that at time 3, B has retired its payable and A has incurred a \$1 million payable. Now the LoPucki/Doherty model shows A to have an enterprise value of \$1 million more than B has.”).

49. See, e.g., *supra* notes 47 and 48.

50. With respect to sales we stated:

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.

LoPucki & Doherty, *supra* note 2, at 20. With respect to reorganizations we stated:

We adjusted [reorganization] 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

3. The Deduction of Cash from Reorganization Value

White's third error was to deduct the cash of the reorganizing companies from the values of those companies.⁵¹ In support of the deduction, White provides this formula:

$$\text{TEV} = \text{Market Capitalization} + \text{Interest-Bearing Debt} + \text{Preferred Stock} - \text{Excess Cash}^{52}$$

That is a correct formula for calculating TEV. What the formula shows, however, is not that analysts should deduct cash when calculating a company's total asset value. What it shows is that Total Enterprise Value—despite its name—is not a measure of a company's total asset value. TEV is a measure of the value of one part of the company—the enterprise—as distinguished from the value of the company's working capital and other cash.⁵³

To understand the point, imagine a company with \$100 million in assets, all in the form of cash. That company would be worth \$100 million, not zero—the value White's formula yields. If the company spent \$10 million of its cash to buy an enterprise, the company would have \$90 million in cash and an enterprise. The market capitalization of the company's stock would still be \$100 million. But if one sought to determine the value of the *enterprise*, one properly would deduct the \$90 million in cash.

The Motley Fool Staff uses this example to explain why an investor would deduct cash in calculating enterprise value:

[I]magine that you have two companies with equal market caps of \$50 billion and no debt. One has negligible cash and cash equivalents on hand, and the other has \$5 billion in cash in its coffers. If you bought the first company for \$50 billion, you'd have a company worth, presumably, \$50 billion. But if you bought the second company for \$50 billion, it would have cost you just \$45 billion, since you instantly have \$5 billion in cash. These are the kinds of things enterprise value takes into account.⁵⁴

Our method would value the company in this example at \$50 billion; White's would value it at \$45 billion. Again, neither method is inherently incorrect. White's error was in using one method to value the reorganizations and the other to value the sales.

case and subtracting from reorganization value any substantial amounts borrowed during the bankruptcy case as DIP lending or exit financing.

Id. at 21.

51. White, *supra* note 4, at 700 ("If one follows the Wall Street practice of subtracting cash from the firm's debt and equity capitalization, *mirabile dictu* sales show a larger average return than reorganizations in every possible combination . . .").

52. *Id.* at 700 n.23 (quoting Investopedia, Total Enterprise Value, <http://www.investopedia.com/terms/t/tev.asp> (last visited Nov. 2, 2007)). White deducts all the cash, not just the excess cash. *E.g.*, *id.* at 10 (referring to "TEV - Cash").

53. See MOYER, *supra* note 19, at 108–09 (explaining that the reason for deducting the cash is to facilitate comparison of the values of the remaining enterprises).

54. *Foolish Fundamentals: Enterprise Value*, MOTLEY FOOL, Aug. 25, 2006, <http://www.fool.com/investing/dividends-income/2006/08/25/foolish-fundamentals-enterprise-value.aspx> (last visited Nov. 3, 2007).

The error's effect on White's findings was substantial. The sale prices we calculated were for going concerns. The assets sold usually included substantial amounts of cash. For example, Polaroid sold its business, along with \$200 million in cash,⁵⁵ for \$715 million. We calculated the sale price of Polaroid at \$715 million and White used that figure. Had White applied his method to both the sales and reorganizations, White would have valued the Polaroid recovery at \$515 million and the recoveries in sale cases would have been that much lower.

II. SELECTION BIAS

In *Bankruptcy Fire Sales*, we reported a high correlation between sales and low recoveries. We interpreted our finding to show that choosing the sale option caused low recoveries.

In Part III of his response, White argues that the causation runs the opposite way: "[S]ection 363 sales do not cause low value, but low value might cause 363 sales. Put another way, the firms that find their way into 363 sales are weaker from the outset and that difference, not the process, explains lower returns."⁵⁶

White acknowledges that we controlled for two possible sources of weakness that might have caused sale recoveries to be lower: company earnings reflected in EBITDA and whether the company was in the telecommunications business.⁵⁷ He suggests no additional source of weakness for which we might control.

Instead, White asserts that "five of the 363 sale cases with the lowest return were telecoms, mostly competitive local exchange carriers ("CLECs")"⁵⁸ and proceeds to drop the seven lowest-recovery telecom sale cases from his study.⁵⁹ He retains the three highest-recovery telecoms.⁶⁰

Confusing matters further, the reason White gives for the drop is not about telecoms, but about CLECs, a subclass of telecoms. White first correctly states that "five of the 363 sale cases with the lowest returns were

55. Kris Frieswick, *What's Wrong With This Picture?*, CFO, Jan. 2003, at 41, 45 ("Neither [the buyer] nor Polaroid has revealed how much cash was transferred in the deal (the judge allowed a filing of many sale disclosures under seal), but unsecured-creditor estimates show the company having at least \$200 million in cash at closing.").

56. White, *supra* note 4, at 702.

57. *Id.* White states as follows:

To their credit Messrs. LoPucki and Doherty have tested the two data sets for certain differences. Chief among those is a comparison of the firms' EBITDA. . . . They also take into account (in a way that I cannot quite understand) the fact that many of the weakest companies in the 363 sales sample were telecommunication companies.

Id.

58. *Id.*

59. *Id.* at 715, app. B.

60. *Id.*

telecoms, mostly competitive local exchange carriers (“CLECs”).⁶¹ The emphasis should be on “mostly” however, as two of the five were not CLECs.⁶² White then claims that “when the CLECs failed, there was no business to reorganize and, in most cases, trivial value in their assets,”⁶³ but he cites nothing that even remotely supports that claim.

White claims to exclude “only those [telecoms] that appear to be not capable of reorganization.”⁶⁴ He provides no clue as to how he determined which telecoms had that appearance. The source he cites says CLECs were in severe financial difficulty in the period covered by our study, but it says nothing about whether the companies were capable of reorganization.⁶⁵ Of the five CLECs in the study, only three claimed inability to reorganize.⁶⁶ One CLEC successfully reorganized.⁶⁷ Ironically, two CLECs that claimed inability to reorganize themselves were reorganized by their purchasers and remain in business as CLECs today.⁶⁸ Thus, the method by which White chose

61. White, *supra* note 4, at 702.

62. International Fibercom, Inc., Annual Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 (Form 10-K), at 1–2 (Apr. 2, 2001), available at <http://www.sec.gov/Archives/edgar/data/924632/000095014701500678/0000950147-01-500678.txt> (last visited Dec. 21, 2007) (describing International FiberCom’s business as “an end-to-end, independent solutions provider serving the telecommunications industry” and mentioning CLECs only as one among several classes of customers they serve). Globalstar, L.P., Annual Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 (Form 10-K), at 2 (Apr. 16, 2002), available at <http://www.sec.gov/Archives/edgar/data/933401/000095012302003826/y59129ae10-k.txt> (last visited Dec. 21, 2007) (describing Globalstar’s business as “Globalstar currently provides satellite-based telephony and narrow band data services through 25 gateways. These gateways provide coverage to 133 countries, including all of North and South America (excluding northwestern Alaska and portions of Canada above 70 degrees North latitude), Europe, Australia, Russia, the Middle East, China, and South Korea.”). Only a tiny portion of a third company’s operations were as a CLEC. Velocita Corp., Annual Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 (Form 10-K), at 5 (Apr. 16, 2002), available at <http://www.sec.gov/Archives/edgar/data/1116563/000091205702015322/a2076686z10-k.txt> (last visited Dec. 21, 2007) (describing Velocita’s business as “developing a 14,050 route mile, nationwide fiber-optic network”); *id.* at 24 (“We have obtained certification in some states and are contemplating becoming certificated as a CLEC in additional states in order to provide such services and take advantage of certain beneficial pricing arrangements.”).

63. The two are Allegiance Telecom and XO Communications.

64. White, *supra* note 4, at 702.

65. See Elise A. Couper et al., *Boom and Bust in Telecommunications*, 89 FED. RES. BANK OF RICHMOND ECON. Q., Fall 2003, at 1 (source cited by White).

66. The three were DTI, Network Plus, and Velocita. See *infra* Table 4.

67. XO Communications, Inc., Annual Report (Form 10-K), at 1 (Dec. 31, 2003) (“On November 15, 2002, the Bankruptcy Court confirmed XO Parent’s plan of reorganization, and, on January 16, 2003, XO Parent consummated the plan of reorganization and emerged from its Chapter 11 reorganization proceedings with a significantly restructured balance sheet.”).

68. CenturyTel purchased DTI Holdings and its operating subsidiary Digital Teleport. Digital Teleport “is now operated as LightCore.” *Q4 2003 CenturyTel, Inc. Earnings Conference Call—Final*, FD (FAIR DISCLOSURE) WIRE, Jan. 29, 2004 (LEXIS, Legal News Library, Allnws File).

Broadview Networks (Acquisition corp.) purchased Network Plus, Inc. Nina Koulakova, *CLEC Finds \$40M For Acquisition*, PRIVATE EQUITY WEEK, Jun. 17, 2002 (“Broadview bought more than 200,000 local lines, thousands of long-distance accounts and about 370 employees for \$15.75 million from Networks Plus.”). For a directory of CLECs, see Consumer & Governmental Affairs Bureau, Fed. Comm’n’s Comm’n, Telecommunications Reporting Worksheet Form 499-A, <http://fjallfoss.fcc.gov/cib/form499/499a.cfm> (search for Principal Communications Type

the seven cases he dropped—28% of the twenty-five sales studied—was opportunistic. Reduced to its essence, White’s argument is that using his valuation methods and ignoring the seven worst telecom sale recoveries, sale recoveries are not significantly different from reorganization recoveries.

To buttress his claim that the worst sale cases should be excluded as incapable of reorganization, White seizes on the fact that financial data were unavailable for the year end immediately prior to filing in seven sale cases. (The seven for which financial data were unavailable are not the dropped seven.) From that fact he deduces that the seven with missing data “were failing so rapidly that their accountants could not keep up.”⁶⁹ To investigate, we used the Bankruptcy Research Database to compare the rate of reorganization for the 114 cases in which a total assets figure was unavailable for the year before bankruptcy with the rate in the 339 cases in which a total assets figure was available for that year.⁷⁰ The reorganization rate in the former cases (46%) was considerably lower than the reorganization rate in the latter (72%). The difference (26%) is worth further investigation, but on the surface it does not suggest a cause. It could be that some portion of the difference is due to overtaxed accountants, as White suggests. But it seems at least equally plausible that the managers and investment bankers of those seven firms stopped filing in order to cut off the information flow to outsiders as the first step in diverting value to themselves through sale. They could have accomplished that by reallocating resources and personnel within the company to make sure that “their accountants could not keep up.”

Table 4 below summarizes the differences between our telecom classifications and White’s. We classified as “telecoms” all twelve companies whose two-digit SIC codes at bankruptcy were “48 Communications.”⁷¹ We found that telecom recoveries were significantly lower than other company recoveries, but controlling for whether the companies were telecoms, the choice between sale and reorganization remained highly statistically significant in our regression model.⁷²

White also argues that union strike threats depressed sale prices in two cases by foreclosing potentially higher bids by parties who intended to abrogate the labor contracts. He offers no evidence, however, to show that strike threats did not reduce the market values of the reorganization cases.

“CAP/CLEC”; then follow “Broadview Networks, Inc.” and “CenturyTel” hyperlinks) (last visited Nov. 3, 2007).

69. White, *supra* note 4, at 704.

70. The presence of a total assets figure for a given company in a given year in the Bankruptcy Research Database indicates that the company made financial data public for that year.

71. Two companies listed four-digit SIC codes as “4812 Radio Telephone Communications,” nine companies listed “4813 Telephone Communications, Except Radiophones,” and one company listed “4899 Communication Services, Not Elsewhere Classified.”

72. LoPucki & Doherty, *supra* note 2, at 23 (regression analysis controlling for telecom status).

TABLE 4
CLASSIFICATION AS “TELECOM”

Company	Two-digit SIC Code CLEC Status	Four-digit SIC Code	LoPucki Doherty	White
Allegiance Telecom, Inc.	48 Communications CLEC	4813 Telephone Communications, Except Radiophones	Yes	Yes
Arch Wireless Inc.	48 Communications Not CLEC	4812 Radiotelephone Communications	Yes	No
Asia Global Crossing, Ltd.	48 Communications Now CLEC Asia Netcom	4813 Telephone Communications, Except Radiophones	Yes	Yes
DTI Holdings, Inc.	48 Communications CLEC now CenturyTel	4813 Telephone Communications, Except Radiophones	Yes	Yes
Globalstar LP	48 Communications Not CLEC	4812 Radiotelephone Communications	Yes	Yes
International Fibercom, Inc.	48 Communications Not CLEC	4813 Telephone Communications, Except Radiophones	Yes	Yes
NTL, Inc.	48 Communications Not CLEC	4813 Telephone Communications, Except Radiophones	Yes	No
Network Plus Corp.	48 Communications CLEC Now Broadview	4813 Telephone Communications, Except Radiophones	Yes	Yes
SpectraSite Holdings, Inc.	48 Communications Not CLEC	4899 Communication Services, Not Elsewhere Classified	Yes	No
Velocita Corp.	48 Communications Some CLEC operations	4813 Telephone Communications, Except Radiophones	Yes	Yes
Williams Communications Group	48 Communications Now CLEC Witel	4813 Telephone Communications, Except Radiophones	Yes	No
XO Communications	48 Communications CLEC	4813 Telephone Communications, Except Radiophones	Yes	No

Finally, White claims that the sold companies might have had some “congenital heart defect” that explains their lower recoveries. That is merely a generic claim that can be lodged against any empirical study.⁷³ The technical term is “lurking variable”—a variable for which the researcher has not controlled and which would explain away the researcher’s findings.⁷⁴ The claim of a lurking variable rings hollow, however, when, as here, the critic cannot even suggest what that variable might be.

III. EXPLANATIONS

In the study we reported in *Bankruptcy Fire Sales*, we found that the bankruptcy system was selling large public companies at prices less than half the companies’ reorganization values. The finding is surprising because the bankruptcy system has redundancies designed to prevent such sales. First, the estates pay managers and investment bankers each millions of dollars to maximize recoveries. Second, the estates pay additional millions for creditors committees to organize, review proposed sales, and oppose sales that are for inadequate prices. Third, the bankruptcy courts have established a strong tradition of requiring that proposed sales be exposed to the market, thus giving anyone the opportunity to top an inadequate bid.⁷⁵ Finally, the law requires that a bankruptcy judge approve the terms of sale after notice and a hearing.⁷⁶ If our findings are correct, all those mechanisms are failing.

After presenting our findings, we sought to explain *how* all those mechanisms could fail. The explanation is one White—a strong advocate of market solutions—would approve in other circumstances: participants in the cases are acting in their own self interests.⁷⁷ Managers are maximizing their personal compensation;⁷⁸ investment bankers are maximizing their fee to effort ratios;⁷⁹ bankruptcy judges are seeking to attract cases by giving case

73. E.g., Kenneth Ayotte & David A. Skeel, Jr., *An Efficiency-Based Explanation for Current Corporate Reorganization Practice*, 73 U. CHI. L. REV. 425, 449 n.54 (2006) (“[T]he failure to find obvious observable differences driving both the filing decision and refile does not rule out the presence of selection. In most empirical studies of this kind, researchers recognize the possibility of unobservable differences . . .”).

74. E.g., iSixSigma.com, *Lurking Variable*, http://www.isixsigma.com/dictionary/Lurking_Variable-272.htm (last visited Nov. 3, 2007) (“A lurking variable is an unknown, uncontrolled variable that influences the output of an experiment.”).

75. See, e.g., *In re Dura Auto. Sys., Inc.*, No. 06-11202, 2007 Bankr. LEXIS 2764, at *254 (Bankr. D. Del. Aug. 15, 2007) (“[C]ourts recognize that procedures intended to enhance competitive bidding are consistent with the goal of maximizing the value received by the estate and therefore are appropriate in the context of bankruptcy sales.”).

76. 11 U.S.C. § 363(b)(1) (2000).

77. E.g., James J. White, Essay, *Corporate Judgment Proofing: A Response to Lynn LoPucki’s The Death of Liability*, 107 YALE L.J. 1363, 1396 (1998) (“Without intending to do so, the contract creditors’ pursuit of their own interest also protects the interests of the nonadjusting creditors about whom Professor LoPucki is concerned.”).

78. LoPucki & Doherty, *supra* note 2, at 32–34.

79. *Id.* at 35 (“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.”).

placers free reign;⁸⁰ and creditors' committees—knowing what the judges are up to—are not wasting their money investigating the advisability of sales they are powerless to prevent.⁸¹

Of course, if our data or analysis had been wrong, our explanations would have fallen with them. But White argues that *even if our data and analysis were right*, we shouldn't promote an explanation that reflects badly on actors in the bankruptcy process because we don't have sufficient evidence of specific wrongdoing.⁸² To paraphrase Bart Simpson, "those actors didn't do it, no one saw them do it, LoPucki and Doherty can't prove anything."⁸³ The principal problem with that defense is that if those actors didn't do it, no explanation remains at all for the massive failure of a four-times redundant system. To put it another way, if the managers, investment bankers, creditors' committees, and judges did their jobs and the market worked, how is it that the bankruptcy system sold twenty-five large public companies for half what they would have returned in reorganization?

A. *Thin Soup*

White is correct that the evidence of specific acts of corruption in these cases is thin. Corruption by its nature is hidden. Empiricists are unlikely to discover specific instances. Instead, we identify surprising patterns of activity and seek innocent explanations for them. When, as in large public company bankruptcies today, no innocent explanations remain plausible, we conclude that corruption exists.

Because of the method by which we derive it, our conclusion that corruption is present in a population of cases applies only to the population as a whole. It does not apply to any particular case within the population. For example, in *Bankruptcy Fire Sales*, we described Polaroid's effort to sell its Identification Systems unit to one of its own managers for \$32 million.⁸⁴ The effort was thwarted only because excluded bidders complained in open court.⁸⁵ White complains that we "give no credence to the possibility that the bankers merely made a mistake."⁸⁶ In fact we agree with him that the sale *may* have gone forward as the result of an innocent mistake. Our complaint is that White gives no credence to the possibility the bankers and the manager *may* have been trying to steal the company. Viewing the pattern of activity in large public company bankruptcy as a whole, we have no doubt

80. *Id.* at 39–41.

81. *Id.* at 37–39.

82. White, *supra* note 4, at 710 ("Finally, even if their analysis were right, their assertions and insinuation about bankruptcy actors' deceit and misbehavior are not justified by their evidence.").

83. *See supra* note 1 and accompanying text.

84. LYNN M. LOPUCKI, *COURTING FAILURE: HOW COMPETITION FOR BIG CASES IS CORRUPTING THE BANKRUPTCY COURTS* 173–74 (2005).

85. *Id.*

86. White, *supra* note 4, at 705.

that corruption—defined to include only wrongful action taken in bad faith—is sometimes present.

The thinness of our soup does not begin to compare with the thinness of White's. He complains that we provide only four examples of buyers hiring the sellers' CEOs.⁸⁷ But he provides no examples of cases in which CEOs lost their jobs.⁸⁸ He complains that we provide only three examples of creditors' committee objections to sales.⁸⁹ But he provides no examples of creditors' committees' support for sales.⁹⁰

B. Investment Bankers' Reputations

In *Bankruptcy Fire Sales*, we argued that “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.”⁹¹ White responds that the investment bankers have fiduciary duties to the sellers and that the professionals and creditors are repeat players. He concludes:

[A]ny investment banker who courts a buyer by arranging a low sale price will not only anger potential clients among the firms' creditors, lawyers, and other agents, but also will taint any claim to be a faithful advocate in his quest for appointment in a future bankruptcy where his reputation has preceded him.⁹²

White is, of course, correct that an investment banker with a reputation for arranging low sale prices for its clients would not be viable in the marketplace.

Our thinking, however, differs from White's in two respects. First, we do not think that arranging sales at low prices automatically results in a reputation for arranging sales at low prices. Values are highly subjective, and sales

87. *Id.* White states:

Four of the eleven went to work for the buyer and three became consultants. Messrs. LoPucki and Doherty correctly state that such payments give the CEOs an “incentive” to do the sale. But I do not believe that the presence of this incentive justifies the inference that the eleven acted improperly, or the conclusion that “[w]e probably have only scratched the surface of managerial corruption in these cases.” Apparently twenty-six of the thirty CEOs lost their jobs.

Id. (quoting LoPucki & Doherty, *supra* note 2, at 34).

88. White asserts that “[a]pparently twenty-six of thirty CEOs lost their jobs.” *Id.* But the lack of citation makes clear White did not research those cases, but merely deducted our four examples from the total number of sale cases in the study.

89. *Id.* at 707. White maintains:

This is thin soup. Out of thirty sales—each, in their eyes, apparently at an objectionably low price—LoPucki and Doherty give us only a couple of anecdotes with unsuccessful objections. These are offset by one successful objection. Unanswered is the question why creditors did not object in the other twenty-seven cases.

Id.

90. White asserts that “creditors did not object in the other twenty-seven cases,” *id.*, but he does not identify even a single case in which creditors did not object.

91. LoPucki & Doherty, *supra* note 2, at 35.

92. *White, supra* note 4, at 706.

do not come with labels indicating that the price is high or low. Other parties to the case have no direct means of knowing the value of the company. They, like nearly everyone else, look to the process for reassurance. If the brochures are sent, the bidding is open, and no one bids more, they assume the price was the best that could be obtained. From the investment banker's perspective, the trick is to create the appearance of open bidding without the substance. In fact, no one but the stalking horse bid in most of the sale cases.⁹³ White and the professionals' continuing belief—despite our findings—that the bidding was open and the sales were for fair prices⁹⁴ shows the power of the appearances created.

Our second difference is that we do not share White's view that the managers of bankrupt companies—and bankruptcy professionals as their surrogates—judge investment bankers on the basis of the bankers' loyalty to disappearing companies.⁹⁵ Bankruptcy professionals owe fiduciary duties to entities, but are hired by people. The professionals' incentives are to keep the people happy, not the entities. That is precisely what they do when they arrange a low-price sale with side benefits for willing managers. We think that the next bankrupt company managers who search for “good” professionals will concern themselves more with how the last bankrupt company's *managers* came out than with how its *entity*, and hence its creditors, came out. The creditors, of course, won't be participating in the choice of the next debtor's professionals at all.

C. Auction Process

Bankrupt companies employ essentially the same auction process as healthy companies outside bankruptcy. We do not claim that there is anything inherently wrong with the auction process. Our complaint goes to the manner in which the process is implemented in bankruptcy.

To the extent auctions work for healthy companies, they work because the markets for those companies are sufficiently thick to generate adequate prices and the markets for the agents and professionals who conduct the auctions are adequate to discipline those agents and professionals. Neither condition exists in large, public company bankruptcy. For that reason, the bankruptcy system adds two safeguards not present outside bankruptcy: a voice for creditors through committees and a requirement that the sale be approved by the bankruptcy court “after notice and a hearing.”⁹⁶

93. LoPucki & Doherty, *supra* note 2, at 42 (“[S]econd bidders appeared in only eight of twenty-three stalking horse cases (35%) and were successful in only four of those cases (17%).”).

94. Before *Bankruptcy Fire Sales* was even published, members of the American Bankruptcy Institute, an advocacy organization for bankruptcy professionals, apparently voted our findings incorrect by a margin of 46% to 31%. *Do 363 sales gyp creditors?*, BANKR. CT. DECISIONS, Aug. 7, 2007, at 2.

95. White, *supra* note 4, at 706.

96. 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.”).

For the reasons we described in *Bankruptcy Fire Sales*, neither safeguard functions adequately.⁹⁷ As a result, the same procedures used outside bankruptcy yield different dynamics and worse results in bankruptcy.

White supposes that, although the part of the sale process that is visible in the courts is not competitive, the part that is invisible—the selection of stalking horses—must be competitive.⁹⁸ Again, he cites no evidence in support of his assertion. But even if potential buyers do compete in “mini auctions”⁹⁹ to become the stalking horse, they do so without legal rights in a completely unregulated environment. The risk that the investment bankers are playing favorites persists, and the need for regulation that prompted Congress to require court approval of the sale procedure remains unmet.

CONCLUSION

White’s effort to reconstitute our study using the Total Enterprise Valuation method was doomed by its design. First, TEV is not a proper valuation method for financially distressed companies. By its use, White converted bare debt into phantom assets and consequently overstated the values of both selling and reorganizing companies. The phantom assets disappeared when the debts were discharged at confirmation, making it appear that the reorganization process had destroyed them. Second, White compared his reorganization TEV recoveries to our Sale Prices. The former excluded assets equal to short-term debt while the latter included all assets. Third, White compared reorganization recoveries that he calculated exclusive of cash with Sale Prices that we calculated including cash. The effect of each error was to understate reorganization recoveries relative to sale recoveries.

White alleges selection bias in our study and purports to correct for it by calculating separate statistics without telecoms.¹⁰⁰ But the companies he removes from the sample are not the telecoms. They are merely the seven telecoms whose sales that produced the lowest recoveries. White argues that the “telecoms” he removes are mostly CLECs that were unable to reorganize. But only four of the seven companies he removed were CLECs and one of the companies he did not remove was a CLEC that reorganized with a relatively low recovery. Only three CLECs claimed inability to reorganize, and two of the three were successfully reorganized by their purchasers. By cherry-picking the cases he dropped, White biased his study in favor of the sales.

The explanation we have offered for our findings are highly critical of the managers, professionals, and judges who are active in large, public company bankruptcy cases as a group. We reiterate that we accuse no specific

97. LoPucki & Doherty, *supra* note 2, at 37–41.

98. White, *supra* note 4, at 709.

99. *Id.* (“Because of the advantages given to the stalking horse interested buyers often submit competing bids during the selection process in effect turning the selection of the stalking horse into a mini auction.”).

100. *Id.* at 702–04.

individual of improper action. But the overall pattern of outcomes in these cases—sales of companies for half what they apparently would have returned in reorganization—suggest that some individuals must have been acting improperly.

APPENDIX
COMPARISON OF MARKET CAPITALIZATION REORGANIZATION RECOVERIES

Company	Value at filing				Value at confirmation				Recovery	
	(1) LoPucki Doherty Total Assets	(2) White TEV (market cap plus long term debt)	(3) Phantom assets (column (2) minus column (1))	(4) White TEV as a percent of Total Assets	(5) LoPucki Doherty (market cap plus all debt)	(6) White TEV (market cap plus long term debt)	(7) White as a percent of LoPucki Doherty	(8) LoPucki Doherty value at confirmation as a percent of value at filing	(9) White value at confirmation as a percent of value at filing	
1. DDI Corp.	203	322.97	120	159%	549	344.5	63%	270%	107%	
2. SpectraSite Holdings	742	2,526.58	1,785	341%	1,645	1,044.8	64%	222%	41%	
3. Tokheim	250	485.12	235	194%	470	258.0	55%	188%	53%	
4. Pinnacle Holdings	1,003	904.69		90%	1,544.			154%		
5. Chart Industries Inc.	268	142.42		53%	339	120.0	35%	126%	84%	
6. Sterling Chemicals Holdings	621	998.17	377	161%	701	147.7	21%	113%	15%	
7. Vencor, Inc.	1,718	1,188.53		69%	1,749	1,064.2	61%	102%	90%	
8. GenTek, Inc.	1,220	1,093.38		90%	1,224	640.0	52%	100%	59%	
9. US Airways, Inc.	7,807	3,998.74		51%	7,386	8,050.0	109%	95%	201%	
10. Exide Technologies	2,073	1,318.95		64%	1,774	540.0	30%	86%	41%	
11. NRG Energy, Inc.	10,310	9,723.67		94%	8,354	5,262.0	63%	81%	54%	
12. Wheeling Pittsburgh	1,200	492.24		41%	893	465.8	52%	74%	95%	
13. Superior Telecom	862	204.80		24%	637	397.8	62%	74%	194%	
14. Polymer Group	1,129	1,111.24		98%	764	532.5	70%	68%	48%	
15. Arch Wireless	696	1,873.17	1,177	269%	445	300.0	67%	64%	16%	
16. Redback Networks	592	516.29		87%	378	404.0	107%	64%	78%	
17. Vista Eyecare	220	162.94		74%	140	120.0	86%	64%	74%	

Amounts are stated in millions of dollars

Company	Value at filing			Value at confirmation			Recovery		
	(1) LoPucki Doherty Total Assets	(2) White TEV (market cap plus long term debt)	(3) Phantom assets (column (2) minus column (1))	(4) White TEV as a percent of Total Assets	(5) LoPucki Doherty (market cap plus all debt)	(6) White TEV (market cap plus long term debt)	(7) White as a percent of LoPucki Doherty	(8) LoPucki Doherty value at confirmation as a percent of value at filing	(9) White value at confirmation as a percent of value at filing
18. Purina Mills	774	630.65		81%	478	289.0	60%	62%	46%
19. Conesco	52,286	4,174.74		8%	28,870	3,577.1	12%	55%	86%
20. Sunterra	1,058	652.18		62%	566	390.3	69%	53%	60%
21. NTL	16,834	6,246.83		37%	7,829	5,800.0	74%	47%	93%
22. Williams Communications	5,992	5,577.09		93%	2,335	767.5	33%	39%	14%
23. Sun HealthCare Group	1,800	1,521.79		85%	679	236.6	35%	38%	16%
24. AMF Bowling	1,683	1,153.71		69%	568	453.0	80%	34%	39%
25. XO Communications	8,700	6,213.41		71%	1,250	1,046.3	84%	14%	17%
26. Paragon Trade Brands	377	224.27		59%		272.4			121%
27. Neenah Foundry	494	443.57		90%					
28. Assisted Living Concepts	331	165.62		50%					
29. American Homestar	363	120.35		33%					
30. Applied Magnetics	227	213.86		94%					
AVERAGE				93%			60%	91%	70%

Why White's reorganization values are 40% lower than ours. White's improper use of TEV at filing (column 2) overstated those values relative to reorganization values at confirmation (column 6). White's TEV at filing (column 2) and confirmation (column 6) both tended to understate reorganization values because White deducted an amount equal to current liabilities. The former effect nearly offset the latter in TEV at filing, resulting in TEVs at filing that averaged 93% of total assets (column 4). But the former effect was not present in White's TEVs at confirmation, with the result that White's TEVs at confirmation averaged only 60% of the companies' total debt plus market capitalization of equity at confirmation (column 7).