Could Vulture Investment Funds Influence the Fresh Start Accounting of Firms Emerging From Chapter 11?

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Abstract:

Historically creditors of firms filing for Chapter 11 Bankruptcy adopted strategies to try and maximise the probability of return of their initial (often pre-Chapter 11) positions. However more recently Vulture funds that specifically seek out the purchase of the debt of distressed firms at a discount, have taken a more activist approach. If they succeed in purchasing the fulcrum debt of distressed firms (often during Chapter 11) they can find themselves in a position to do far more than simply get their initial investment refunded with interest. Purchasing the fulcrum debt may allow them to take control of the distressed firm and swap their original debt for securities such as new equity in an emerged firm which can be sold for a large capital gain far in excess of any reasonably imputed interest rates on the original debt. One hypothesis for why such returns are possible assumes that the Vulture funds are simply earning a return for their expertise at strategic restructuring of the operational and financing problems of distressed firms. Put simply they may weed out poor management and put things right. However a competing hypothesis is that when they take control of fulcrum debt they may disenfranchise existing equity holders by exploiting how fresh start accounting valuations are used to determine residual allocations between various claimants. Put simply this competing hypothesis assumes they gain control on the cheap. This research is the first systematic study of a comprehensive sample of fresh start accounting reports. An analysis of fresh start, book to market performance and a new ratio, return on new and old equity (ROONE) is conducted to simulate the returns if original equity holders had not been disenfranchised. In addition, another bank of tests looks at how reliable fresh start valuations are when Vulture funds are present. Particular attention is paid to fresh start valuation practices which decrease values leading up to emergence only for them to increase shortly afterwards. We comment on one high profile case in which the application of "market based" fresh start accounting resulted in the firm's property portfolio being downgraded in value to such an extent that existing equity holders were left with zero claims (since remaining assets only covered a fraction of debt holders claims) but that upon emergence the same property portfolio was re-valued significantly upwards generating huge returns for the Vulture fund loan to own equity holders.

1. Introduction

In his survey of the market for distressed debt investing Gilson (1995; p8) comments that during his decade of study, which was characterised by a record period for bankruptcies and restructuring, "One of the most important and enduring legacies of this period has been the development of an active secondary market for trading in the financial claims of these companies". The growth in investors who target the purchase of distressed debt – often called vulture funds – has and continues to grow dramatically. In a thought provoking piece Harner (2011-12; p155) argues that these activist debt investors are the new corporate raiders and she suggests "that some regulation of strategic debt acquisitions is warranted". To date research on the involvement of vulture fund has reported mixed results. Some finance research has reported on the positive net effect of hedge funds while other legal research has questioned how vulture finds have aggressively reduced the legal claims of original equity investors. While the evidence seems to be quite clear that vulture finds improve the likelihood of a company emerging from Chapter 11, the issue that has not been resolved is whether the vulture funds are able to take control at too low a cost. Thus issues of accounting valuation take center stage in such a debate. The principal accounting rule that governs valuation of firms emerging from Chapter 11 are the Fresh Start accounting rules of SOP 90-7 updated in FASB ASC 852. This research considers whether there is any evidence that accounting rules designed originally to specifically assist companies in distress, at a time when it was never anticipated there would be a significant market in traded distressed debt, are being influenced by vulture funds to increase returns from a loan to own strategy.

In section 2 we review how Fresh Start accounting works[1] and why potentially this method of accounting may assist vulture funds in earning super normal returns. We review in detail one specific prominent case which illustrates the issues clearly. In section 3 we review three literatures. In the first the legal literature is covered which focuses upon how residual claims are split between shareholders of the original company and proposed shareholdings in the new company emerging from Chapter 11. Next a review of the finance literature on distressed debt investing is covered which concentrates on the relative performance of emerging companies with or without involvement from vulture funds. We note that this literature has largely missed the role of accounting choices in facilitating / determining returns from this class of investment strategy. Next the accounting literature on accounting choices and self-interest is reviewed plus the small number of accounting research papers that have explicitly studies Fresh Start accounting. These three literatures together motivate our primary hypotheses. In section 4 we provide information on our sample of Fresh Start reporting companies and our database of vulture investors. Section 5 provides initial empirical results and Section 6 the initial conclusions.

[1] . The specific accounting rules that apply are the Fresh Start provisions[1] of SOP 90-7 and updated in FASB ASC 852.

2. The Mechanics of Fresh Start Accounting

There are a number of detailed references on the process of filing for and emerging from Chapter 11 Bankruptcy (see for instance Newton Vol. 1 & 2 (2010)). After filing for Chapter 11 the debtor has 120 days to file a plan of reorganization unless a trustee is appointed. An extension may also be granted but this is limited to a maximum of 18 months from filing. "This breathing period is intended to permit the debtor to hold lawsuits and foreclosures in status quo, and to determine the economic causes of its financial predicament while developing a plan. Using the schedules of assets and liabilities, the statement of financial affairs, and post and projected financial statements, the debtor and its advisors will examine the liabilities of the debtor and the enterprise value of the business estimated at confirmation. They will explore sources of funding the plan, such as post confirmation cash flows from the reorganized debtor, partial liquidation, issuance of debt securities at exit, or outside capitalization at exit. They will outline the classes of debt that cannot be deferred or compromised and negotiate with the rest" (Newton (2010), Vol. 1, p 500). The negotiations between the debtor and the various classes of creditor and equity holders is constrained by the legal requirement that they can be shown to be in the "best interests" of the creditors and in practice may take some time to complete. When finally a plan of reorganization is agreed and sanctioned by the courts, it is required that the plan should have all assets stated at market values[2] and the new debt and equity positions recorded – this is the Fresh Start. Clearly the existing creditors take the lead in negotiations with the debtor and within the classes of debtors it is the fulcrum creditors which hold the most senior impaired debt. Creditors "who hold a fulcrum position can have a greater say over the negotiation process and the formation of restructuring plans since the restructuring of the fulcrum claim is often at the center of restructuring bargaining". (Lim (2012), p16). The fulcrum level is defined where funds exist to pay creditors who are senior, whereas those junior have a reduced chance of recovery. Thus in practice the fulcrum creditors typically swap debt in the predecessor company for a controlling equity interest in the successor (Chapter 11 emerged) company[3]. The strategy of buying the fulcrum distressed debt is more commonly called a *loan to own* strategy. What equity interest the fulcrum creditors end up with depends critically on the fresh start valuations for the company. At midnight at the end of the day immediately preceding emergence all accounting valuations are updated to market based valuations[4]. Thus at midnight the Chapter 11 *predecessor* company is replaced by the emerged *successor* company. Lehavy and Udpa (2011) present a very clear case study which documents (see particulary their Appendix B) how fresh start accounting was applied in the Kmart Chapter 11 emergence. In Table C (ase) below a summary is presented of the fresh start accounts.

[2] SOP 90-7 sets out a number of requirements that must be satisfied before fresh start accounting can be adopted.

[3] Often the fulcrum creditors may also bring additional funding to the company to help insure it can continue trading.

[4] These market based valuations may be conducted by experts in the area.

First note that using Fresh Start market based accounting the property portfolio and other current assets are written down to M$10 after recognising a revaluation loss of M$4 613. One immediate repercussion of this write down was that the predecessor shareholders lost all claims to their equity interest. This left the company being completely controlled by the fulcrum creditors who then swapped debt for equity. To summarize; mechanically the fresh start market valuations of current assets resulted in the *disenfranchisement* of equity holders in the predecessor company. One may stop at this point to conclude this is simply Fresh Start accounting at work – a new viable successor company emerges without the burden of excessive debt and now has a chance to trade successfully. This was certainly the intention of the original accounting rule makers. However it is interesting to track what happened to Kmart following emergence.

Quote from Lehavy and Upda (2011):

Equipment as having a total value of just $10 million (Appendix B). Beginning in mid-2004, Kmart began selling its valuable real estate holdings. On June 4, 2004, Kmart sold 24 stores to Home Depot for up to $365 million, or roughly $15 million per store. On June 30, 2004, Kmart announced the sale of 54 stores for $621 million cash to Sears Roebuck & Co., with each store fetching an average price of $11.5 million. Again, on September 29, 2004, Kmart announced it had finalized the sale of another 50 stores to Sears Roebuck & Co., for $575 million in cash. Based on these store sales, analysts began to project the value of Kmart's entire real estate portfolio in excess of $18 billion. Kmart stock price closed on September 29, 2004 at $88.06/share or a market capitalization of $7.81 billion.

This case nicely illustrates the main focus for research in this paper. Is there some sort of continuity or consistency in fresh start valuations or is there a "whiplash" effect where fresh start accounting valuations downgrade (or upgrade) predecessor values only for market values established after the firm emerges from Chapter 11 going in the opposite direction upgrading (or downgrading) the previous fresh start valuation changes? We will provide some clear diagrammatic analysis to illustrate this in more detail below. As is clear from the Kmart case, one reason why this whiplash effect may arise is because it has significant wealth implications for successor equity holders.

One remaining issue is why does a freely functioning market not discipline such behaviour? The main issue here is that during Chapter 11 companies no longer file traditional SEC forms – they effectively only report to the court sanctioned judge. In this environment as the quote from Harner earlier makes clear, significant purchases of distressed debt or other financial instruments do not need to be disclosed. This point is particularly nicely illustrated by a recent investigation by the Wall Street Journal of the Chapter 11 emergence of Accuride Corp.

"For Accuride Investors, a Big Payday; Big Bondholders Parlayed Position at Negotiating

Table During Bankruptcy Into $132 Million Gain; A handful of investment firms generated gains of $132 million from their privileged position in a bankruptcy case, according to unsealed court documents, highlighting how big investors have turned Chapter 11 into a lucrative trading game. By owning a large chunk of Accuride Corp.'s bonds during the truck-parts supplier's bankruptcy proceedings last year, these traders got a valuable perk: a prime spot at the bankruptcy negotiating table where they structured a new convertible-bond deal that triggered the big profits this year, according to the documents. The details of the transactions were outlined in bankruptcy-court disclosures unsealed last month. A federal bankruptcy judge in Delaware ordered the papers unsealed after The Wall Street Journal filed a legal motion to make them public. The investment firms had pushed to keep them secret, as outlined in a Journal page-one article in September that examined debt trades in Accuride and other bankruptcy cases."
WSJ, Tom McGinty and Mike Spencer 23 Dec 2010.

This illustrates how difficult it can be to find out who are the claims traders during a Chapter 11 filing and what gains are being realized. With this level of restrictions on information flows it is not hard to see why the market cannot discipline excessive practices if they cannot see them.

Table C

Kmart Reorganization Adjustments

	Predecessor Company April 30, 2003	Fresh Start Adjustments	Recapitalization	Successor Company April 30, 2003
Assets				
Current assets				
Cash and cash equivalents	$1,232	$—	$—	$1,232
Merchandise inventories	4,446	(15)	—	4,431
Other current assets	528	168[a]	195[b]	891
Total current assets	$6,206	$153	$195	$6,554
Property and equipment, net	4,623	(4,613)[a]	—	10
Other assets and deferred charges	212	(154)[a]	38[b]	96
Total assets	$11,041	$(4,614)	$233	$6,660
Liabilities and Shareholders' Equity (Deficit)				
Current Liabilities				
Long-term debt due within one year	$—	$—	$8[b]	$8
Accounts payable	1,151	—	9[b]	1,160
Other current liabilities	915	117[a]	563[b]	1,595
Total Current Liabilities	$2,066	$117	$580	$2,763
Long-term debt	—	—	108[b]	108
Capital lease obligations	415	—	—	415
Other long-term liabilities	174	279[a]	1,208[b]	1,661
Total Liabilities Not Subject to Compromise	2,655	396	1,896	4,947
Liabilities Subject to Compromise	8,896	114[a]	(9,010)[b]	—
Trust convertible securities	387	(387)[a]	—	—
Other comprehensive income	(908)	908[a]	—	—
Common stock	537	(537)[a]	1[c]	1
Other equity	(526)	(5,108)[a]	7,346[d]	1,712
Total Liabilities and Shareholders' Equity (Deficit)	$11,041	$(4,614)	$233	$6,660

3. Literature Review

3.1 The legal institutional literature

Harner (2011) provides a review of the origins of the Williams Act which was established to regulate[5] certain stock purchases and tender offers. She explains that prior to 1968 equity based takeovers were largely unregulated and that hostile takeovers could be mounted in which control of a company could change hands quickly. "Accordingly, a primary purpose of the Williams Act appears to be providing more information and time to investors to facilitate more thoughtful decisions in the context of equity-based takeovers". (p178) The Williams Act introduced requirements for persons acquiring more than 5% of a company's equity securities to disclose their position. These provisions were designed to alert the market of the possibility of changes in corporate control. Additionally the heightened takeover activity during the 1970s prompted many states to enact state-takeover legislation. All this transparency of the build-up of stock positions has led some commentators to argue that as a result equity based takeovers ended up transacting at the fair market value for the stock. Harner explains that this full price with full disclosure scenario, may have encouraged investors' to seek out debt based takeovers as a means for taking control – sometimes called a *loan to own* strategy – because debt "investments" are not subject to the disclosure requirements of the Williams Act and do not trigger state law takeover defensive measures. "This lack of regulation provides a significant advantage to an investor making a control play. Among other things it reinstitutes the element of surprise once prevalent and advantageous to acquirers in the hostile takeover process. Investors generally have no obligation to disclose when they purchase a company's debt. Consequently, management often does not know who holds the company's debt until an investor is already in position to make its move". (p161) The loan to own strategy works best when a company is in financial distress and has to negotiate new terms with its lenders. Harner reviews the "mechanics" of loan to own transactions and details how vulture funds were able to take control of a selection of Chapter 11 companies by purchasing their fulcrum debt. Given the lack of transparency of deals, Harner argues that such debt based takeovers can allow vulture funds to gain control of under-valued companies at bargain prices. A major concern with this sort of transaction is "the treatment of the company's pre-takeover shareholders" (p 191) since their prior equity interest may be cancelled (by the new emerging company) if it is concluded that there is only sufficient assets to pay senior debt holders and swap the fulcrum debt holders position for the new equity in the emerging company. Critical to this allocation of interests is the valuation of the emerging company which is determined by the application of Fresh Start accounting. As Harner explains "A loan-to-own strategy is successful if the investor accurately predicts and purchases the tranche of debt that constitutes the company's fulcrum security. This requires a difficult, sometimes subjective valuation of the company. Once an investor makes this calculation, it has a vested interest in that valuation being adopted by the company and others in the reorganization. That valuation is the means by which the investor acquires the company's stock and extinguishes the rights of all junior shareholders. The question then becomes whether the valuation is a fair representation or a depressed value that benefits the

[5] She also comments on its success p180.

distressed debt investor. A distressed-debt investor may intentionally or unintentionally depress value. For example, if the investor is encouraging a debt-for-equity exchange, the company's value likely will be determined by expert appraisals. These appraisals often are subject to different methodologies, opinions and disputes". (p193) Our principal contribution will be an ex-post attempt to see if evidence exists for depressed valuations being used that unfairly benefit fulcrum investors at the expense of pre-takeover shareholders.

3.2 The finance literature on hedge fund involvement in Chapter 11 restructurings

Jiang, Li and Wang (2012) provide a comprehensive review of data on hedge fund activity[6] in Chapter 11 cases. It is an important paper for at least two reasons. It is the first systematic study of hedge fund involvement in Chapter 11 over the last decade and moreover, particularly pertinent to our hypotheses development, reports a largely positive picture resulting from hedge fund intervention. Jiang et al (2012) has a sample of 474 Chapter 11 cases from 1996 to 2007 and considers hedge fund purchase of equity or debt or what they describe as the hybrid loan to own strategy. They argue that their most salient finding is that there is publicly observable hedge fund involvement in 87% of the Chapter 11 cases. In addition they find that in 61% (53%) of the cases, hedge funds are present on the debt (equity) side and that in total 34% of the cases (including DIP financing) the hedge funds followed a loan to own strategy. Predominantly their findings are suggestive of hedge funds having a favourable effect. They find that hedge fund presence is associated with an increased likelihood of emergence, more favourable distributions of claims, greater CEO turnover, and more frequent adoption of KERPS. In terms of the detailed effects hedge fund presence has, they find a favourable effect on post-emergence firm performance and they find that leverage is reduced although they do not find evidence of improved ex-post operating performance such as industry adjusted return on assets.

Jiang et al (2012) look at the relation between hedge fund involvement and bankruptcy outcomes as measured by nine variables, one of which is particularly pertinent to this study. The variable (v) *DistEquity* measures distributions after emergence from Chapter 11 to existing shareholders. They note that "equity holders in bankrupt firms seldom receive payoffs if the firm is liquidated. Hence, hedge fund equity holders should target firms that are more likely to survive and should exert their influence to favour emergence". They find that the effect of having hedge fund equity holders is associated with distribution to existing shareholders in 21% of cases. "Hedge fund presence on the equity committee is associated with a 43% point increase in the probability of a positive distribution to existing shareholders, controlling for firm and case characteristics". However this effect is not significant when endogeneity controls are added. Leaving aside issues of statistical significance for a moment our main concern is that the paper does not model the strategic choices that hedge funds are

[6] They look at hedge funds which encompasses a larger set of institutions than vulture funds that focus on distressed debt.

so famous for. That is if the hedge fund believes it may be able to influence Fresh Start accounting valuations this may strategically determine whether they choose to invest in the equity or debt of a distressed company. Formally recognising that hedge funds make a range of strategic choices means that one needs to exercise caution before concluding that the presence of hedge funds help existing shareholders achieve a distribution. It may be the case that after doing a careful analysis of strategic possibilities, hedge funds choose to have an equity position. They then for self-interested reasons do have a reason to support distributions to existing shareholders. However the more pertinent point here is that when hedge funds look at a Chapter 11 target they may decide not to take an equity position because they see financial merit in taking a loan to own strategy which typically results in little or no distribution to existing shareholders – that is reporting statistics for the restricted case in which hedge funds do take equity positions does not mean a particular specialist hedge fund; vulture funds, can be described as in general supporting distribution to existing equity holders – whether they do or not depends on the strategic choice of the respective hedge fund. Moreover it is important to recognise for our sample of 140 fresh start filing companies – an explicit requirement of SOP 90-7 is that at least 50% of existing shareholders lose their equity stake.

To summarise the largely positive (average) findings about hedge fund activity in the Jiang et al (2012) paper are derived for a large sample of hedge funds employing a wide mix of strategies. Results are reported on average across all hedge funds, the actions of vulture funds are not separated out. This differs from our approach to just study approximately a third of cases[7] were hedge funds can be described as vulture funds because they purchase distressed debt and whose residual claims are determined by fresh start accounting rules which explicitly require at least 50% of existing equity holders voting interests to be cancelled. To summarise, taken at face value the Jiang et al. paper suggests that it is a choice whether existing shareholders lose their equity interest and hence one should see at a macro level how hedge fund presence affects this choice. However, in the case the hedge fund is a vulture it does not make sense to talk about preserving distribution to existing shareholders because the loan to own strategy is explicitly designed to disenfranchise existing shareholders.

In a related paper Lim (2012) looks at the role of activist hedge funds in 184 financially distressed companies (vultures) during the period 1998 to 2009 and finds that vulture funds were involved in 64.7% of the sample. Based on theoretical work by Gertner and Scharfstein (1991), Lim tests to see whether vulture funds typically target companies that face relatively high contracting problems. For instance when they have more complex debt structures. Her results suggest that vulture fund involvement increases the likelihood of the loan to own strategy being deployed and that exit from distress occurs quicker. Interestingly she develops a means for estimating deal level returns which she reports are as high as 26% per annum.

[7] See their 34% figure on page 530 and our sample size relative to their 474.

Her study differs from Jiang (2012) et al. by adding to our understanding of what are the characteristics of the firms targeted by vulture funds and details of the contracting complexity they face. In addition she does not just restrict her sample to Chapter 11 companies because she also includes financially distressed companies that use voluntary workouts with their creditors (without court intervention). Lim finds that vulture funds tend to prefer firms which have more complex contracting situations. She measures complexity by looking at the number of long-term debt classes and whether the company has both public and private debt. In addition they target fulcrum debt as their instrument of potential control. She estimates that in approximately 70% of cases vulture funds end up with the fulcrum security. Additionally in 41.8% of cases the vulture funds bring new capital to the distressed firm. Her three primary hypotheses for which she finds empirical support are (i) the presence of a vulture fund increases the likelihood that a loan to own strategy will be used (ii) the presence will be associated with a shorter duration of distress and (iii) the presence increases the probability of emergence.

With a view to increasing our understanding of how creditors influence the outcome of restructurings, Ivashina, Iverson and Smith (2011) collect an innovative dataset on trades of debt claims during Chapter 11 restructurings. They are able to collect two snapshots of the list of claimholders, one at the beginning of the Chapter 11 filing and the second comprising a complete list of claim holders eligible to vote at the end of bankruptcy. They classify the institutional claim holders into four groupings; banks, custodians, non-financial corporations and active investors which include asset management firms, hedge funds and private equity affiliated funds. With the two snapshots they are able to produce the first systematic evidence on the trading of claims *during* Chapter 11 and they demonstrate how this "trading has an important impact on ownership and, subsequently, on bankruptcy outcomes" (p2). In particular they show how active investors increase their average holding from 9.7% to roughly 15% of the claims by the time votes are made on the final plan of reorganization. They explain that not all classes of claimants get to vote on a reorganization plan. "In general, two groups of claimants are not allowed to vote on the plan…. Those that are unimpaired …(who are due under the plan to receive a distribution in full satisfaction of their claims) and those impaired claimants expected to receive zero recovery under the plan" (p10) as they are deemed automatically to reject the plan and are not entitled to vote. Ivashina et al (2011) argue that although it could be argued that the claims held by active investors such as vulture funds could be argued to be modest at the time of a Chapter 11 filing, they tend to have a significant involvement when votes are taken for a plan of reorganization since taken together active investors generate nearly a third of all claims purchases during Chapter 11 and sell almost no claims. Consistent with the Gilson et al (2000) findings they find that bargaining by the concentrated voting classes reduces the overall valuation of the firms emerging from Chapter 11 and "Consistent with the idea that fulcrum class owners push for lower recovery rates in order to squeeze out more junior classes, we find that more concentrated fulcrum classes receive significantly lower assessed recovery rates" (p32) although they do not

explain how these lower valuations are achieved given that the fresh start valuations should be market based.

3.3 The literature on Fresh Start accounting.

The two earliest academic papers on Fresh Start accounting are the papers of Lehavy (1998) and Gilson et al (2000). The first published detailed study of Fresh Start accounting is Lehavy (2002).

Lehavy (2002) considers whether the pressures to resolve Chapter 11 negotiations over claims versus pressures to enhance future performance results in Fresh Start accounting valuations being under or overstated relative to market values on the first day of trading of the new emerged company. His research design differs from ours in this respect as were as he looks only at how market valuations relate to fresh start valuations on the first day of emergence we in contrast look at a longer window for reaction and also introduce additional tests to try and detect manipulation.

Lehavy finds that on average that Fresh Start accounting undervalues / misstates company value by 4%. He then investigates the cross sectional variation in misstatement value and shows how it is increasing in the relative bargaining power of junior claimants rather than focusing upon fulcrum debt holders. He explains how managers can make discretionary accounting choices not only in going concerns but also in companies that are reorganising in Chapter 11. He explains how the focus of the discretion may be to influence the way the Chapter 11 issues are resolved and explains how new factors come to bear such as the relative bargaining power of creditors. He provides a brief history of how SOP 90-7 was developed explicitly to prescribe how accounting should be done while in Chapter 11 and the conditions under which fresh start accounting (which he refers to as FSR) could be applied. He explains that a principal reason to use this form of accounting is so that "any negative equity… is eliminated in FSR, this condition also ensures that negotiations lead to write-downs of debt" and the new / successor "fresh start value of equity is recorded as the difference between the fresh start value of assets and liabilities" (p57). He notes that management can influence how fast the company emerges from Chapter 11 "through the values it places on the reorganized entity… Management has the flexibility in determining this value because it typically enjoys a significant information advantage over creditors and the court about the firm's economic operating conditions" (p58). In many cases management lose shares in the predecessor company and hence may be highly incentivised to rebuild up a stock position in the successor company. Typically it will be the creditors committee that will make an approved proposal to the court for new compensation arrangements so to the extent that management believe that fulcrum debt holders will be influential on this they may feel pressurised to agree with valuations that are in the interests of the fulcrum creditors. That is, although the fresh start valuations are supposed to be market based, it is Lehavy's hypothesis, which we also support, that these valuations may be subject to manipulation by management. Further support for this

position comes from the research of Gwilliam and Jackson (2008) which documents how Enron senior management were able to influence the "market for fair value expert valuations". That is there exists contributory evidence that the use of experts to establish so called market values may sometimes be subject to pressures from interested parties.

Lehavy's two hypotheses are that the difference between fresh start valuations and the market trading price on the day of emergence are positively related to claimants bargaining power and secondly that this misstatement is negatively related to the probability of reported losses after emergence. For the first hypothesis for which he finds support he proxies claimants bargaining power by – the number of claimant classes allowed to vote, the firms debt to asset ratio and expost measure of the payout to junior claimants. For the second hypothesis he uses the Zmijewski (1984) probit bankruptcy prediction model to estimate the probability of future losses. While he finds support for the first hypothesis his evidence for support of the second is much weaker.

The main difference between our study and that of Lehavy is that we focus not just upon the market reaction at the date of emergence but also track the changes before and after. In addition we see whether patterns of these changes are associated with the presence of a particular sort of activist creditor; vulture funds.

3.4. Hypothesis Development

Motivated by the above discussion we now state the formal hypotheses. These relate to the reliability properties of Fresh Start accounting values (H1 and H2) and the returns earned (H3).

H1: The probability that Fresh Start values are reduced on emergence but then see an increase shortly afterwards (the whiplash effect) increases with the presence of Vulture fund investment in the fulcrum debt.

H2: The reliability of fresh start valuations decreases with the presence of Vulture fund investment in the fulcrum debt. In other words the net change in valuations after emergence are increasing in the presence of Vulture funds.

H3: Vulture Investors Earn Excess Returns when they follow a Loan to Own Strategy

4. Data set

To identify Vulture funds we start with the Altman-Kuehne (2011) classification which identifies 324 funds. We merge this with the list of 258 distressed debt funds provided by Distressed-Debt-Investing.com and come up with a list of 399 vulture funds. Of the 75 additional vulture funds identified 45 have names similar to those in the Altman classification so for instance Cerebrus Capital Management LP and Cerebus Partners are identified as two vulture funds and we treat them as one. We suggest this shows how comprehensive the Altman-Kuehne list is. In addition the potential for some double counting of funds with similar names as above does not affect our results because in our statistical tests we look at the total holdings of all vulture funds from the list, not the number of vulture funds that have a holding.

To identify firms that report Fresh Start accounts we start with the complete Lo Pucki database of companies that filed under the Chapter 11 or 7 bankruptcy code and had assets worth $100 million or more measured in 1980 dollars as of the last 10-K filing immediately prior to filing for bankruptcy and filed a 10-K for the year ending not less than 3 years prior to the bankruptcy filing. This grand sample comprises 920 companies over the period 1980 - 2011. For the company to be a possible candidate for Fresh Start accounting it must emerge from Chapter 11 rather than be taken over or liquidated in Chapter 7. The Lo Pucki database has a field “Emerged” which records which firms actually emerged from Chapter 11 which leaves us with 588 companies. In order to be able to collect Fresh Start accounts we need to be able to search the SEC EDGAR database which only records companies back to 1994. We search Lo Pucki removing all companies for which “DateEmerged” is pre- 1994 which leaves us with 429 companies. Next since we are going to need to match the data to Compustat filings we require the Lo Pucki field “CmpstYrFiled” to have an entry. This field records the year in which the debtor filed bankruptcy. Adding this requirement leaves us with 375 companies. In the remaining sample we next removed those companies for which the court entered its order approving sale of all or substantially all of the assets of the debtor, without contingency which leaves us with a sample of 337 companies.

We note that Lo Pucki includes a field “FreshStartAccounting” which records if the company made a Fresh Start filing upon emergence. In the protocol notes the commentary for this field is:
“This field is “yes” if the company adopted fresh start accounting upon emerging from bankruptcy; “no” if it did not, and “no information” if we checked but were unable to obtain information on whether it adopted fresh start accounting. The field is blank if we have not sought information. We check the 10-K of the emerging company.

For the sample of 337, we find that LoPucki records yes in this field for 77 companies and no for 16 companies leaving 244 companies unclassified. For this sample of 244 companies we search all the SEC Edgar filings by the company for the phrase “fresh start” around the date of emergence. If we do not find the phrase we exclude the company. If we do find the search phrase for each filing we search through the full filing for the fresh start accounts. This

allows us to add 63 companies to our sample so that our final sample of companies filing fresh start accounts is 140. We excluded GM from our analysis as this involved significant state intervention and lead to some unusually high goodwill adjustments that if included could significantly bias the results.

5. Empirical Results

Before running the formal regressions we report the characteristics of our sample and some related initial stratification statistics about fresh start reliability.

In Table 1 below we report mean and median values of fresh start Balance Sheet items. We see that moving from the predecessor to successor accounts there is a significant decrease in property plant and equipment values, a significant increase in goodwill, a significant decrease in debt and a significant increase in total equity. These last two variables illustrate clearly how the liability side of the Balance sheet is typically reorganized in Chapter 11. Total equity switches from being negative to positive because in Chapter 11 there is typically insufficient assets to cover equity interests which are written down to zero and then some of the previous short debt holders are given equity in the successor entity.

Next in Table 2 we stratify by the directional sign of the fresh start revaluations. That is we look to see whether Total Assets for the successor (Su) are greater or less than for the predecessor (Pr). We then identify what sub-account categories are largely responsible for such directional changes.

In the case of an upward revaluation in Total Assets when adopting fresh start accounting (which d id for half of the sample) the main explanatory variable is a revaluation upwards of Goodwill and Intangibles. In the case of a downward revaluation in Total Assets the main explanatory variable is a revaluation downwards of Property Plant and Equipment.

Thus there seems to be are two distinct types of companies:

1) Cases (50%) where successor total assets increase (mean increase is 888.9 mUSD) – this is mostly done by increasing intangibles & goodwill including the "*reorganization value in excess of amounts allocable to identifiable assets*",

2) Cases (50%) where successor total assets decrease (mean decrease is -740.56 mUSD) – this is done by reducing drastically PPE and at some extent other non-current assets.

These changes reflect revaluations before market trading in the assets commence i.e. before Chapter 11 emergence. Next we will consider how market values change after the emerged companies have traded for some time.

Table 1

		In Million USD		Percentage of Total Assets	
		Predecessor	Sucessor	Predecessor	Sucessor
Cash	Mean	303.53	291.65	0.10	0.08 *
	Median	*50.41*	*52.72*	*0.06*	*0.05*
Inventory	Mean	158.34	182.26 *	0.08	0.09
	Median	*21.38*	*20.20*	*0.02*	*0.01*
Other current assets	Mean	597.37	518.86 *	0.12	0.11 ***
	Median	*78.00*	*73.97*	*0.10*	*0.08*
PPE	Mean	1036.80	839.23 **	0.36	0.31 ***
	Median	*284.28*	*206.54*	*0.36*	*0.29*
GW and Intangibles*	Mean	260.26	721.72 ***	0.12	0.20 ***
	Median	*32.72*	*112.50*	*0.05*	*0.14*
Other non current assets	Mean	313.05	237.95 *	0.10	0.09 **
	Median	*48.28*	*32.20*	*0.05*	*0.03*
Total assets	Mean	3018.24	3111.10		
	Median	*966.12*	*870.68*		
Current liabilities	Mean	548.03	559.18	0.23	0.22
	Median	*180.05*	*182.61*	*0.21*	*0.19*
short term debt	Mean	352.70	54.10 **	0.14	0.02 ***
	Median	*14.67*	*6.74*	*0.03*	*0.01*
Long term debt	Mean	1122.51	1650.49 **	0.26	0.44 ***
	Median	*181.01*	*406.84*	*0.13*	*0.44*
Liabilities subject to compromise	Mean	2056.83		1.09	
	Median	*543.80*			
Total Liabilities	Mean	4080.06	2265.92 ***	1.73	0.68 ***
	Median	*1377.93*	*694.18*	*1.38*	*0.69*
Total equity	Mean	-1425.73	804.55 ***	-0.75	0.31 ***
	Median	*-381.25*	*219.16*	*-0.41*	*0.28*
Retained earnings	Mean	-1972.35		-1.32	
	Median	*-350.44*		*-0.44*	
Nr. Observations =	112				

Table 2

Million USD

	Positive FS adjustment for total assets / Upward FS valuation (Su_tassets - Pr_tassets)>0			Negative FS adjustment for total assets / Downward FS valuation (Su_tassets - Pr_tassets)<0		
Adjustments (Su_ - Pr_)	% cases	Mean	Median	% cases	Mean	Median
	0.50			0.50		
Total assets		888.90	186.82		-740.56	-182.11
GW and Intangibles		852.10	170.00		-1.80	0.00
PPE		0.47	0.51		-382.74	-66.50
Other non current assets		28.37	0.00		-166.22	-3.11

In terms of identifying the range of qualitative outcomes we note that there are 4 distinct possibilities. As we have seen above we can compare successor and predecessor values but now we also want to compare successor fresh start valuations with market values. At issue is at what date. Lehavy used market values at the date of emergence. Since we are interested in the reliability of fresh start valuations we have collected quarterly data on market values from the first SEC 10Q or 10K reports for 5 subsequent years (if the company emerged more than 5 years ago). In the following analysis we denote market values by Mv for company assets and liabilities at the date of the SEC filing closest to 12 months following emergence from Chapter 11. The 4 possibilities that we have are:

Case I: $Su > Pr$ and $Su < Mv$

Case II: $Su > Pr$ and $Su > Mv$

Case III: $Su < Pr$ and $Su < Mv$

Case IV: $Su < Pr$ and $Su > Mv$

In order to try and summarize the strategic nature of these various cases we introduce the following nomenclature.

Case I Conservative Upward Fresh Start revaluations CU_{FS}

Fresh start revaluation of Total Assets is upwards but the market subsequently revalues assets even higher suggesting that fresh start values were in some sense upwardly conservative.

Case II Aggressive Upward Fresh Start revaluations AU_{FS}

Fresh start revaluation of Total Assets is upwards but the market subsequently revalues assets downwards, which suggests upward fresh start revaluations were too upward aggressive.

Case III Aggressive Downward Fresh Start revaluations AD_{FS}

Fresh start revaluation of Total Assets is downwards but the market subsequently revalues assets higher suggesting that fresh start values were in some sense to downwardly aggressive.

Case IV Conservative Downward Fresh Start revaluations CD_{FS}

Fresh start revaluation of Total Assets is downwards but the market subsequently revalues assets even lower suggesting that fresh start values were in some sense downwardly conservative.

Table 3 reports the results in this case of the sample being stratified by the 4 generic strategies. In terms of the potential concerns with vulture funds exerting downward pressures of fresh start valuations which are subsequently found to be not warranted (as evidenced by market movements), Case III is the most interesting case. In this case the fresh start downward revaluation is found to be largely explained by a downward revaluation in property plant and equipment. That is the Kmart case study seems to be representative of the sample of 18 companies that use an Aggressive Downward Fresh Start revaluations which is subsequently reversed by the market.

In additional work we are in the process of following the Tobit regression methodology of Ivashina et al (2011) and seeing whether the type of revaluation experience of the companies (cases I through IV) emerging from Chapter 11 can be explained by the presence of vulture funds. We identify the presence and level of holding of vulture funds in two ways. First we collect all SEC 13D and 13G (plus amendments) filings around the emergence of firms from Chapter 11. This is conducted as if a vulture fund is using a loan to own strategy, and they end up with more than 5% in the new successor company they have to make one of these filings. That is we collect all the data on 13D and G filings and check this against our list of vulture funds. We can thus record whether any vulture fund has a holding of 5% or more in the successor company and record the aggregate level of holdings by vulture funds.

In addition we check to see if the vulture funds provide Debtor in Possession (DIP) finance during the Chapter 11. That is since Chapter 11 companies are often starved of working capital another related strategy of vulture funds is to provide DIP financing. We check for DIP financing by for the period of Chapter 11 search all the companies SEC filings for the phrase “DIP” or “debtor in possession”. In addition we search all news wires in Factiva relating to the company over the same period for any mention of these two search strings.

Table 3

Descriptive statistics for FS valuations by case (in Million USD)

		Upward FS revaluations		Downward FS revaluations	
		Mean	*Median*	*Mean*	*Median*
		Case I CU		Case IV CD	
Conservative	N.obs.	16		32	
	Pr_total assets	2431.47	1215.51	3951.12	973.29
	Su_total assets	2919.62	1585.81	3201.55	812.98
	FS revaluation in:				
	Total assets	488.15	178.85	-749.58	-123.39
	PPE	-108.09	-1.05	-119.22	-28.45
	GW & Intangibles	575.58	199.38	50.66	0.00
	Liab. Subj compromise	3304.73	1001.33	1527.65	427.62
		Case II AU		Case III AD	
Aggressive	N.obs.	36		18	
	Pr_total assets	2632.51	879.48	4201.71	992.34
	Su_total assets	3822.12	1131.00	3323.08	613.62
	FS revaluation in:				
	Total assets	1189.61	192.83	-878.63	-408.51
	PPE	9.99	1.23	-831.40	-201.12
	GW & Intangibles	1127.40	117.22	-38.14	0.00
	Liab. Subj compromise	1804.91	462.11	3376.65	770.46

At issue next is whether the returns that result for participants, in particular vulture funds are in some sense reasonable. In the Table 4 we report returns by case and as before focus upon the potentially contentious Case III. As to be expected we calculate return on equity ROE following emergence using EBIT. However we also introduce a new ratio ROONE. To explain; one principal concern was the vulture funds may gain control of Chapter 11 companies *on the cheap*. In order to try and address this we note that the apparent basis for this claim (see for instance Harner's vocal comments) is that predecessor equity holders are disenfranchised in the fresh start revaluation process – losing all their equity interest. So in response to this concern we calculate an adjusted ROE. In particular we calculate the Return On Old and New Equity:

ROONE = EBIT / (Predecessor Equity + Successor Equity)

The results are reported in Table 4. We report the returns 4 quarters and 8 quarters after emergence from Chapter 11. The returns to vulture funds are above 40% in both cases. Interestingly we also note that the ROONE values are also relatively high at 25% and 16% respectively. At issue then is whether the vulture funds earning only 25% rather than 49% would still provide a reasonable return to them for the risks they have been exposed to?

Similar to Lim (2012) we have attempted to address this issue by considering a sample of firms that rather than following the route of Chapter 11 instead, decide to adopt a strategy of a (voluntary) workout. In work still to be completed and tabulated we conduct a matching analysis to see how ROE from voluntary workouts (where existing / predecessor equity holders do not lose all their claims) compare to those for Chapter 11 fresh start emergence.

Table 4 ROONE returns

Mean values in the post-bankruptcy period by case

		Upward FS revaliations		**Downward FS revaliations**	
		Quarter t+4	*Quarter t+8*	*Quarter t+4*	*Quarter t+8*
		case I CU		case IV CD	
Conservative	Total assets	3,170.74	3,197.60	2,906.82	2,864.57
	PPE	1,139.29	1,135.47	912.40	943.21
	GW & Intangibles	925.47	904.36	265.10	253.15
	Market value	961,081.70	776,777.40	754,159.30	807,428.90
	ROONE	197.56	134.42	4.79	7.84
	ROE	435.16	340.92	8.25	21.99
		Case II AU		Case III AD	
Aggressive	Total assets	3,238.67	3,291.88	3,817.92	4,033.21
	PPE	1,211.59	1,274.96	1,164.17	974.28
	GW & Intangibles	1,245.18	1,216.82	234.86	232.62
	Market value	603,016.40	703,119.20	2,725,364.00	4,463,953.00
	ROONE	284.94	335.25	25.37	16.43
	ROE	714.03	974.27	49.42	43.13

6. Initial Conclusions

When companies go through Chapter 11 restructuring accounting revaluation practices are applied to try and give the company a fresh start. The rules require that market based valuations be applied. However for some asset classes such as property plant and equipment a deep and liquid market may not exist. In this case valuations performed by experts are used. However we know from the dramatic case of Enron that these expert valuations may in some cases be subject to influence by interested parties (see for instance Gwillian and Jackson (2008)).

We have shown how vulture funds following a loan to own strategy may have a vested interest in lower fresh start valuations since this "helps" disenfranchise predecessor equity holders. In addition we have shown what sort of returns they can earn from following such a strategy. At issue is whether vulture funds are using (fresh start) accounting in a reasonable way to further their own interest. Could it be the case that the returns they would earn if predecessor equity holders maintained some claims after emergence from Chapter 11 would still be a reasonable reward for the risks they have been exposed to? We report the magnitudes of ROONE values if predecessor equity holders had not been disenfranchised. These go some way to understanding Harner's (2012) claims that vulture funds are "the new corporate raiders".

Perhaps less contentiously this research raises concerns about the reliability of fresh start valuations produced by so called experts during the Chapter 11 process. Clearly valuation of asset and liability classes for Chapter 11 companies will always be subject to some level of forecasting error. However in the case where this forecasting error leads to a whiplash effect – where fresh start valuations reduce predecessor valuations only for the market to then subsequently increase them – sometimes significantly – this is highly beneficial to vulture funds that are following a loan to own strategy and so we suggest significant attention be given to the basis for estimated market valuations used in fresh start accounting when the said market is not deep and liquid.

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